SESSION ONE:
Introduction to Health Literacy and Disease Prevention & Screening
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HEALTH LITERACY STUDY CIRCLES
HALL/NCSALL 2007

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Notes to Facilitator

Each session in this guide begins with a note to you, the facilitator. As we wrote these notes, we tried to imagine a face-to-face conversation with you in preparation for each session. We have tried to anticipate your questions and provide you with a sense of the planned flow of the session activities.

Every Study Circle+ session has four parts: Introductory Activities, Discussion and Analysis Activities, Planning Activities, and Closure Activities. Each of these parts is designed to engage participants in discussions and activities related to health literacy.

The following information will give you a brief description of the session’s activities and the methods you will use to facilitate group discussions.

About this Session

Session One will set the stage for subsequent sessions, in terms of both the content and the methods used to facilitate discussions. The session activities are intended to introduce the issue of “health literacy” and help you establish a welcoming atmosphere that encourages reflection, discussion and action. This session includes a range of activities designed to engage the group and promote a high level of participation.

Introductory Activities

The introductory activities of Session One are designed to help participants understand the purpose, structure, and content of the Study Circle+. The introductory activities include a focus on the larger context of health literacy.

You can also clarify expectations and acknowledge the questions and concerns that the participants expressed in their Participant Expectation Sheets.
Discussion and Analysis Activities

The Discussion and Analysis Activities shift to a more specific focus on disease prevention and screening. The first activity uses the background readings as the basis for discussion. Then the group views the DVD, *In Plain Language*, which features adult learners from an adult education program and illustrates a variety of health literacy issues. It will trigger discussion about health literacy and prevention issues.

Participants will then reflect on their own experiences and perceptions about prevention, with a focus on screening and early detection. As they move from small group discussions to the full group discussion, participants will identify a range of tasks and barriers that they or those they love have faced when making a decision about participating in preventive and screening activities and when they have been told that they are ‘at risk’.

Public health and medical practitioners often think about three stages of prevention:

- **Primary Prevention**: Activities healthy people undertake to avoid threats to well-being and to avoid disease development. Most often, prevention activities focus on behaviors such as drinking in moderation, avoiding tobacco, using sun screen, and monitoring bodily functions as appropriate for age and development. These monitoring activities generally take place in visits to health professionals, and include measures such as height and weight, hearing and vision, blood pressure and cholesterol, prostate and Pap tests.

- **Secondary Prevention**: Activities healthy people undertake to catch a disease at a very early stage. Secondary prevention includes activities such as a flu shot or other immunizations, as well as screening for a particular disease. People who engage in these activities are generally considered "at risk.” For example, babies and the elderly are at greater risk of dying from the flu than are young adults. Health care workers are more likely to be exposed to the flu than are other people. As a result, they are encouraged to get vaccinated.

- **Tertiary Prevention**: Activities people with a disease undertake to prevent further deterioration. This study circle will not focus on tertiary prevention.
Neither you nor the participants are expected to be experts in any particular screening process, or even to know what is involved. Participants will start from their own experiences and observations. They will look at the types of screening commonly offered. The focus of the work in Session Two will be on problematic concepts such as “risk” and the math skills underlying everyday discussions of risk. The participants will consider how such skills can be addressed in the adult education classroom.

**Planning Activities**

The planning activities are designed to give participants an opportunity to review the needs assessment work they will do in their own classes between Session One and Session Two. During this section, participants will focus on the classroom plans to examine their students’ experiences and perceptions related to prevention and screening.

During Session Two, participants will be asked to discuss the results of their needs assessments and reflect on the information provided by their students related to their own experiences and observations. Note that teachers will also be asked to engage in an on-line health risk assessment and reflect on that experience.

**Closure Activities**

At the end of Session One and all sessions, you will facilitate the closure activities. The “Content Review” provides an opportunity for you and the participants to summarize the session, and to reinforce and clarify the concepts discussed. You will also review the methods you used to present information and facilitate discussions. This “Methods Review” is designed to help participants identify approaches that they might want to try out in their own classrooms with their students.

Finally, please be sure to leave a few minutes for participants to complete and return their session evaluation forms. After the session, review these forms and make use of the feedback as you see fit.
**The Group Discussion Methods**

Throughout this Study Circle, you will use a variety of discussion methods to present information and facilitate activities. We hope that participants will find these methods helpful and consider using them in their own classrooms. Therefore we ask you to keep in mind that as you facilitate the Study Circle activities, you will be modeling these discussion methods for participants to use in the future.

We have given names to these discussion methods in order to highlight the variety of methods used in different activities. These names are also helpful during the summary and evaluation activities at the end of each session.

The discussion methods used in Session One include:

- **Presentation:** Although you should try to avoid a lecture-like approach, there are times when a presentation from you is very important. You will open the session with a presentation on the goals and objectives of the study circle.

- **Small Group Discussions (Dyads and Triads):** Small group discussions enable members of a group to share their thoughts in a comfortable way. Many people, in the company of strangers, are not at ease talking to a large group. Consequently, those who are most comfortable tend to dominate a large group discussion. The Study Circle begins with small group work so that everyone has an early chance to participate and has an opportunity to work with and meet others.

- **Report Out:** Small groups share some part of their discussion. This format provides a structure for sharing in a large group and eases the way for large group discussions.

- **Expanding Discussion (Small group to large group work):** The Expanding Discussion can be used to establish a comfortable environment and is suitable for participants who may not know one another. This discussion expands by the size of the group (from two to four to whole group) and by the type of content (from personal to more general topics).

The Expanding Discussion generally begins with small groups of two people who introduce themselves and share an experience.
This offers a comfortable starting point for people who are not at ease speaking in a large group. Next, two pairs come together and form a small discussion group. Then they address issues that move beyond their personal experiences and they prepare a summary of their discussion to be presented to the larger group.

When all of the groups come together, the smaller groups present their summaries. This enables the entire group to share the same knowledge base. Then the entire group is prepared for a facilitated discussion with a focus on broader issues.

Depending on the size and layout of the room, the small group summaries can be presented orally or posted on newsprints so the participants can briefly walk about and see the notes from all groups.

- **A Trigger:** A discussion trigger may be a picture, a film, a story, or a brief presentation. It is so named because it “triggers discussion”. In addition, a trigger enables all participants to have the same starting point for discussion.

- **The Dance and the Balcony:** This activity is a metaphor for analyzing the methods used during the session to generate group discussions. The purpose of this activity is to highlight the different ways you have structured activities and encourage teachers to consider using some of these methods in their own classes.

You will ask participants to think of the activities they just completed as a “dance”. Next, you will ask them to stop the dance and move up to the balcony to look down on the dance floor. Thus they stop “dancing” and view the dance from a distance. From the “balcony,” participants analyze the dance -- they comment on and react to the discussion methods. Note that you will be conducting similar processes at the end of each session.

**First meetings can be both daunting and exciting. Be prepared, share your enthusiasm, and enjoy!**
Overview: Session One

Objectives
One of the principal goals for this study circle is to prepare participants to help their students develop basic skills related to disease prevention and screening.

During Session One, participants will:
- Develop a shared definition of “health literacy”
- Identify activities people engage in as they attempt to avoid disease or discover a disease at a very early stage
- Identify literacy-related barriers and issues faced by those who want to engage in prevention and screening activities
- Prepare to conduct an assessment of student needs and a personal risk survey

Time
- 3 hours

Session One Agenda

Introductory Activities (40 minutes)
- Welcome and Introductions
- Overview of the Health Literacy Study Circles
- Review the Study Circle Goals, Objectives, and Agenda

Discussion & Analysis Activities (90 minutes including the break)
- Reflect on Health Literacy Readings
- ~ Take a 10-Minute Break ~
- View and Discuss the DVD, *In Plain Language*
- Discuss Experiences and Observations

Planning Activities (30 minutes)
- Prepare for the Dual Assessment Activities

Closure Activities (20 minutes)
- Session Review
Session Evaluation

Materials and Preparation

- The DVD, *In Plain Language*, is located in the front pocket of the study circle binder
- DVD player
- Newsprints (flip charts) and markers
- Overhead projector (optional)

Newsprints (flip charts) or Transparencies (3)

We typically refer to materials as “newsprints,” but feel free to use overhead transparencies instead. Examples of most newsprints are included in this session booklet.

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<td>▪ Challenges and Barriers to Disease Prevention and Screening Activities</td>
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Handouts (7)

Make copies of the following handouts before the session begins. Note that handouts for each session are located after each session booklet.

1. An Overview of the Health Literacy Study Circles +
2. Session One Objectives and Agenda
3. In-Class Needs Assessment Packet, which includes three handouts:
   3.1. Identifying Student Challenges and Barriers in Disease Prevention and Screening
   3.2. After Conducting the Needs Assessment
   3.3. Lesson Plan and Handouts
   3.4. Your Disease Risk: On-line Risk Assessment Assignment
4. Session One Evaluation Form

Sent out before Session One

1. Skills for Disease Prevention and Screening: Goals and Objectives
2. Participant Definition of Health Literacy
3. The Development of the Health Literacy Study Circles +
4. *A Maturing Partnership*
5. The River Parable
Session One: Introduction to Health Literacy and Disease Prevention and Screening
INTRODUCTORY ACTIVITIES (40 minutes)

Welcome and Introductions (15 minutes)

Discussion Methods: Presentation by you, the facilitator
Handouts: Participants’ Expectation Sheets
Study Circle Contact List

Welcome
Welcome participants to the first meeting of the Health Literacy Study Circle on Disease Prevention and Screening. Introduce yourself and state your role as facilitator. Explain how you came to facilitate this study circle and who is sponsoring it. This might be a good time to circulate an address list so participants can keep in touch between sessions for different assignments.

Introductions
Ask participants to introduce themselves briefly by giving their names, roles, and programs. Also, ask them to briefly indicate (1/2 minute) whether they have had any experience teaching health topics or health-related skills in adult education programs.

Comment on Participant Expectations Handouts
- Comment on the responses to the Participant Expectations handouts that were distributed to the participants before Session One and returned to you. (If you did not receive any of the completed forms ahead of time, invite participants to briefly share their expectations now).
- Identify those expectations that will be covered and during which session.
Overview of the Health Literacy Study Circles
(10 minutes)
Discussion Methods: Presentation
Handouts: Health Literacy Study Circles Graphic depiction and description

Introduce and discuss the Study Circle Graphic
Pass out the Overview of the Health Literacy Study Circles handout (graphic and description)

- Take a few minutes to explain the rationale behind the development of the Health Literacy Study Circles.
- Explain to participants that this graphic represents an overview of the Health Literacy Study Circles.
- Briefly describe the parts of this graphic (see handout).
You may want to draw on some of the information included in the handout as you explain the diagram.

Conclude with the following statement:

*Adult educators are NOT expected to become health experts and are certainly not expected to know about specific screening methods or individual risk factors. However, adult educators are experts in literacy skill development and can teach many of the skills adults need to engage in disease prevention and screening activities.*

**Review the Study Circle+ Goals, Objectives, and Agenda**

(15 minutes)

**Discussion Methods:** Presentation by facilitator

**Handouts:** Skills for Disease Prevention and Screening: Goals and Objectives

Session One Objectives and Agenda

**Briefly review the Goals and Objectives for this Study Circle**

- Ask participants to review the handout titled Skills for Disease Prevention and Screening: Goals and Objectives that they received before Session One.
- Note that this Health Literacy Study Circle+ includes a practical component that requires participants to engage in classroom work between sessions. Of course, participants are expected to modify classroom assignments based on their own teaching styles and students’ needs.
- Tell participants that they will explore their students’ needs and interests after this session and before Session Two. Between Sessions Two and Three, they will try out a sample lesson in their classes. Then they will reflect on their class experiences and work with peers to develop their own lessons, units, and strategies for integrating health literacy activities into their programs.
- Ask if anyone has any comments or questions.

**Review the Objectives and Agenda for Session One**

- Distribute and review the Session One Objectives and Agenda.
- Ask if anyone has any comments or questions.
DISCUSSION & ANALYSIS ACTIVITIES
(1 hour, 30 minutes total including a 10-minute break)

Reflections on Health Literacy Readings
(20 minutes)

Discussion Methods: Pair Discussion and Brief Report
Handouts: The Development of the Health Literacy Study Circles+
           A Maturing Partnership
           Participant Definition of Health Literacy

Explain the process to be used for this first activity
- Explain that participants will have an opportunity to share their thoughts about the following readings sent out before Session One:
  - The Development of the Health Literacy Study Circles+
  - A Maturing Partnership
- Ask participants to partner with someone they do not know (if possible) for a 5 to 8 minute discussion about the background readings. Highlight the fact that pair work offers a comfortable way for people to begin working together and sharing their thoughts.
- Let participants know that you will offer a one-minute warning before you ask them to stop their discussion.
- Let participants know that groups will be asked to report some insights gained from the readings.

Provide a discussion outline
- Begin by introducing yourself to each other.
- Briefly share your reactions to the reading and focus on two questions:
  1. How did the readings change or support your own definition of health literacy?
  2. What, if any, new insights did the readings offer?

Time group discussion
- A quiet room generally signals the end of discussion. Monitor the time and bring the pair discussion to a close within 5 to 8 minutes.
Ask pairs to report back (10 minutes)
- Ask volunteers to report to the whole group and offer definitions of health literacy.
- Ask volunteers to report to the whole group and share insights gained.

Summarize
- Provide a brief summary of the comments after all volunteers have reported.

TAKE A 10-MINUTE BREAK

View and Discuss the DVD, In Plain Language
(30 minutes)
Discussion Methods: Use a DVD as a trigger for a large group discussion

Introduce and view the DVD, In Plain Language (20 minutes)
- Explain that the DVD is used as a vehicle to set the stage for an expanded discussion of health and literacy. Thus, the DVD triggers discussion and provides a common context. The DVD deals with the topic of health literacy from several perspectives.
- Before you view the DVD, read or post the following questions to guide participants' viewing.
  1. What are some of the literacy-related challenges people face in everyday life?
  2. What are some of the challenges related to disease prevention and screening issues?
- Ask participants to pay particular attention to the brief story of a learner who is trying to understand the results of her daughter’s screening.
- Play the DVD.

Facilitate full group discussion (10 minutes)
- Ask for brief reactions to the DVD.
- Ask for responses to the questions noted above:
  1. What are some of the literacy-related challenges people face in everyday life?
2. What are some of the challenges related to disease prevention and screening issues?

- Finally, pose the following question:

   If a colleague in your program asked, why would you say that health literacy is important for ABE/ESOL students?

- Note responses on a newsprint.

### Why Health Literacy Is Important for ABE/ESOL Students

**Reflection and Discussion of Our Own Experiences and Observations**

(30 minutes)

**Discussion Methods:** An expanding discussion

Explain that in this next activity, participants will explore their own experiences and observations with disease prevention and screening activities.

**Introduce the Expanding Discussion Method** (5 minutes)

The expanding discussion activity begins with a brief discussion in pairs (about 7 minutes), moves to a four-person discussion as two pairs come together (10 minutes), and then moves to the larger group. Be sure to offer a one-minute warning before asking participants to move on to the next step.

**Participants work in pairs (~7 minutes)**

- Ask participants to assemble in pairs and to choose someone they have not yet worked with. Tell participants to focus on two questions and suggest that they consider “revealing” whether or not they engage in the activities listed:

  1. What are some common activities related to disease prevention?
The list might include working in a safe environment, living in a neighborhood with safe water and clean air, maintaining good nutrition, engaging in daily physical activity, getting 8 hours sleep, no smoking, moderate drinking, etc.

2. *What are some commonly recommended screening tests for people your age?*

**Participant pairs partner with another pair to work in small groups of four (~8 minutes)**
- Ask each group of two to join with another to form groups of four.
- Ask each group to reflect on the background reading labeled “The River Parable”
- After a few minutes, ask each group of four to speculate on why some people do not engage in recommended screening activities.

**Report to the full group to generate a list and add to it (10 minutes)**
- Record: Ask for a volunteer to record group responses and generate a list on newsprint or on an overhead.
- Report: Ask a volunteer from each group to report on their list of “barriers” to preventive activities and screening opportunities.
- General Discussion: Ask participants if they can add barriers to this list.
- Ask participants to think about their current students and speculate about what barriers they might face.
- Note that this Study Circle+ addresses many of these issues.

<table>
<thead>
<tr>
<th>Challenges and Barriers to Disease Prevention and Screening Activities</th>
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</thead>
<tbody>
<tr>
<td><strong>Barriers our Students Might Face</strong></td>
</tr>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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</tbody>
</table>
Introduce the In-Class Needs Assessment activity

- Tell participants that the next activity is structured to help them prepare for work with their students. They will first need to gain some insight into their students’ interests and challenges.
- Point out that, in the next part of this session, you will review a needs assessment activity that facilitates that process.
PLANNING ACTIVITIES (30 minutes total)

Prepare for the Dual Assessment Activities

(30 minutes)

Discussion Methods: Presentation and full group discussion

Handouts: In-Class Needs Assessment Packet, Identifying Student Barriers and Challenges (distributed earlier)

These activities will prepare participants to conduct a needs assessment in their classrooms between Session One and Session Two of this study circle.

Introduce Dual Assessment activities (5 minutes)

- Tell participants that they will carry out two activities before Session Two. They will conduct a needs assessment activity with their students, and they will take an on-line health-risk assessment survey for themselves.
- Tell the participants that they will share the needs assessment findings but that they will NOT share the results of their own risk assessments.

Review classroom-based needs assessment activity (10 minutes)

Explain that the purpose of the needs assessment activity with students is to learn more about students’ perspectives on and experiences with disease prevention and screening activities. The students will discuss what people need to understand, believe, and do to engage in such activities.

- Ask participants to look at the packet titled Needs Assessment Activity: Identifying Student Barriers and Challenges in Disease Prevention and Screening. This packet includes a cover sheet, lesson plan and handouts.
- Explain that you would like participants to use this activity in their classrooms as suggested in the lesson plan (or with some modifications).

Pose the following questions for discussion:

1. Is this activity suited to your students’ skill level, proficiency level, or level of comfort?
2. Where might your students have trouble?
3. How might you modify the lesson for your class?
4. Are there any barriers that would prevent you from trying out this activity with your students?
5. What suggestions do you have for overcoming some of these barriers?
6. What are the benefits of doing this activity?
Problem-solve (5 minutes)

- If a number of participants anticipate difficulties trying out this lesson with their students, ask group members to offer suggestions for other ways to conduct a needs assessment on this topic.
- Remind participants that if their students raise questions that they cannot answer about specific screening tests, they should not feel pressured to “read up”. For example, a student may ask about the risks involved in different immunizations. The teacher may want to suggest that the student explore this question with a doctor or nurse or, perhaps, consider inviting such a person to class. Explain that the work in class will focus on issues about prevention and screening in general and not about a particular test.
- A participant may also want to encourage his or her students to seek out information at the library or on the Internet to address their questions. (Please note that a list of resources for students is provided in the assessment handouts).

Review the Health-Risk Assessment Assignment (5 minutes)

- Distribute the Your Disease Risk On-line Risk Assessment Handout. Explain that this part of the assignment involves going to the Web site listed on the handout, taking the survey, and then answering some questions based on participants’ experience.
- Emphasize the fact that information from the assessment WILL NOT be shared with anyone. Instead, the discussion in Session Two will focus on feelings related to the experience. This discussion will help us understand why people do and do not participate in screening programs and preventive activities.
- Give participants a minute to review the handout and ask any questions.

Review the Dual Assessment Assignment (5 minutes)

- Ask participants to find a partner for this assignment (perhaps someone they worked with in an earlier activity). Ask the pairs to exchange names and phone numbers so that they can speak with each other before and after completing the needs assessment with their students. Encourage them to:
  - Discuss the assignment and any problems they anticipate.
  - Discuss how the assessment went.
  - Share their findings and observations.
CLOSURE ACTIVITIES (20 minutes total)

Session Review
(15 minutes)
**Discussion Methods:** Facilitated full group discussion, The Dance and the Balcony  
**Handouts:** Session One Evaluation Form

**Content Review**
You may want to ask if anyone in the group is willing to summarize key content areas or make a statement about insights or new information. You or the volunteer will likely highlight the following:

- Definitions of “health literacy”
- Issues and barriers people face in engaging in disease prevention and screening activities
- Assessment activity to understand student perceptions about the pros and cons of prevention and screening

**Discussion Methods Review**

- Introduce the Dance and Balcony metaphor. Explain that you would like to take a little time to reflect on the discussion methods – the way in which activities were structured during this session. This activity gives participants a chance to consider how they might use or adapt the different methods used during the Study Circle in their own classes.

- Say to participants:

  *Imagine that we have been dancing on a large open dance floor with a balcony above it. It is time to stop “dancing” and move from the dance floor to the balcony to look down and comment on our dancing.*

  *When we are dancing, we are engaged in the content of this work. When we “look” at the dance, we can analyze the methods that enabled us to be engaged.*

- Describe some of the discussion methods (such as a trigger to set the stage for discussion, an expanding small group discussion) used to facilitate different activities during this session.
Ask participants to identify any of the discussion methods that they feel would be effective in their own classrooms. Use the table below to help you facilitate this discussion.

<table>
<thead>
<tr>
<th>Session One Discussion Methods</th>
<th>Activity Examples</th>
</tr>
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<tbody>
<tr>
<td>Presentation</td>
<td>Introduction and Overview</td>
</tr>
<tr>
<td>Pair Discussion with Brief Report</td>
<td>Review of readings and health literacy</td>
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<tr>
<td>An Expanding Discussion</td>
<td>Our own experiences and observations</td>
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<tr>
<td>Trigger and Facilitated Large Group Discussion</td>
<td>DVD</td>
</tr>
<tr>
<td>Review, Analysis, and Group Discussion</td>
<td>Prepare to conduct the In-Class Needs Assessment and to engage in the on-line risk assessment</td>
</tr>
<tr>
<td>The Dance and the Balcony</td>
<td>Reflect on the study circle discussion methods and structured activities</td>
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**Session Evaluation**

(5 minutes)

**Handouts:** Session One Evaluation Form

**Session Evaluation**

Distribute the Session One Evaluation Forms and ask participants to complete them. Collect the evaluation forms before the participants leave.

**Closing Notes**

- Thank the participants for their contributions during this session.
- Take a minute or two to address any logistical issues related to Session Two.
- Be sure to post date, time, and place for Session Two.
The National Center for the Study of Adult Learning and Literacy (NCSALL) is a collaborative effort between the Harvard Graduate School of Education and World Education. The University of Tennessee, Portland State University, and Rutgers University are NCSALL’s partners. NCSALL is funded by the Educational Research and Development Centers program, Award Number R309B60002, as administered by the Institute of Education Sciences (formerly Office of Educational Research and Improvement), U.S. Department of Education. The contents of this publication do not necessarily represent the positions or policies of the Institute of Education Sciences, or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
Skills for Disease Prevention and Screening
Session One Materials

Materials and Preparation
- DVD - *In Plain Language* (located in the front pocket of the Study Circle binder)
- DVD player
- Newsprints (flip charts) and markers
- Overhead projector (optional)

Newsprints (flip charts) or overhead transparencies (3)
We typically refer to these materials as “newsprints,” but feel free to use overhead transparencies instead. Examples of most newsprints for this session are included in this booklet.

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Make copies of the following handouts before the session begins. Note that handouts for each session are located after each session booklet.
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2. Session One Objectives and Agenda
3. In-Class Needs Assessment Packet, which includes three handouts:
   - Identifying Student Challenges and Barriers in Disease Prevention and Screening
   - After Conducting the Needs Assessment
   - Lesson Plan and Handouts
4. Your Disease Risk: On-line Risk Assessment Assignment
5. Session One Evaluation Form

Sent out before Session One
1. Skills for Disease Prevention and Screening: Goals and Objectives
2. Participant Definition of Health Literacy
3. The Development of the Guides to the Health Literacy Study Circles
4. *A Maturing Partnership* by Rima E. Rudd
5. The River Parable
An Overview of the Health Literacy Study Circles

All Health Literacy Activities

Tasks for Health Care Access and Navigation

Tasks for Disease Prevention and Screening

Tasks for Chronic Disease Management

Literacy Skills

Reading, Writing, Oral Presentation, Oral Comprehension, Numeracy
All Health Literacy Activities: This represents a broad array of health literacy activities that take place at home, at work, in the community, and in health care settings. These activities include tasks and skills related to health promotion, health protection, disease prevention, health care and maintenance, and health care system navigation.

Three Health Literacy Study Circles+: The three smaller circles represent the three areas of critical importance documented in health research.

1. Tasks for Health Care Access and Navigation (with a focus on access to care): Poor people have limited access to health care and minority population groups are more likely to face bias when trying to “navigate” through the health care system.

2. Tasks for Chronic Disease Management (with a focus on care and maintenance): People without a high school diploma are more likely to die from a chronic disease than are those with more education.

3. Tasks for Disease Prevention and Screening (with a focus on early detection): Poor people and those from minority groups are less likely to use preventive services and screening programs.

Three Groups of Activities: These study circles could have addressed many different groups of health activities. These three areas were chosen because they have been highlighted as areas of the greatest health disparities in the U.S. Improvements in each of these areas can help reduce existing disparities and improve the health of those who are poor, those without a high school degree or GED, and those who are from minority populations.

Literacy Skills: The literacy skills include reading, writing, oral presentation, oral comprehension, and numeracy. Disease Prevention and Screening involves concepts such as risk and probability, and awareness of and attention to public health and medical postings in the media, as well as tasks such as filling out forms, reading and signing informed consent documents, and working with numbers illustrating levels of risk.

Adult Educators’ Contributions: To address needed improvements in the areas of health care access and navigation, chronic disease management, and disease prevention and screening, effort is required on the part of both health care professionals and educators. Health professionals often focus on health content and on the actions people need to take; however, they rarely consider the skills that people need in order to understand health care information and to take appropriate actions. Adult educators have both an understanding of the challenges posed by a variety of health materials and health related tasks and the capacity to develop the skills needed to accomplish these tasks.
The Health Literacy Study Circles+ are designed to help adult educators make their contribution to this overall endeavor by focusing on skills that fall within the realm of ABE and ESOL programs in all three critical health areas.
Session One Objectives

One of the principal goals for this study circle is to prepare participants to help their students develop basic skills related to chronic disease management.

During Session One, participants will:

Develop a shared definition of “health literacy”
- Identify activities people engage in as they attempt to avoid disease or discover a disease at a very early stage
- Identify literacy-related barriers and issues faced by those who want to engage in prevention and screening activities
- Prepare to conduct an assessment of student needs and a personal risk survey

Session One Agenda

Introductory Activities (40 minutes)
- Welcome and Introductions
- Overview of the Health Literacy Study Circles+ Goals, Objectives, and Agenda

Discussion & Analysis Activities (90 minutes including the break)
- Reflect on Health Literacy Readings
- ~ Take a 10-Minute Break ~
- View and Discuss the DVD *In Plain Language*
- Discuss Experiences and Observations

Planning Activities (30 minutes)
- Prepare for the Dual Assessment Activities

Closure Activities (20 minutes)
- Session Review
- Session Evaluation
In-Class Needs Assessment Packet

The In-Class Needs Assessment Packet includes the following materials:

- Identifying Student Barriers and Challenges in Disease Prevention and Screening
- After Conducting the Needs Assessment
- Lesson Plan and Handouts

Assignment

Use this activity in your classroom to learn more about your students' experiences with the health care system and to help you identify the challenges and barriers your students encounter.

Talk with your study circle partner between sessions:

- Discuss the assignment and any problems you anticipate.
- Discuss how the assessment went with your students.
- Share your findings and observations.
Identifying Student Barriers and Challenges in Disease Prevention and Screening

Note to participant

You are asked to carry out the attached lesson with your students in the interim between Session One and Session Two of the Study Circle+ on Disease Prevention and Screening. The lesson is meant to serve as a needs assessment tool to enable you to learn more about your students’ experiences with screening, early detection, and prevention, including their challenges and barriers to taking care of themselves and their families.

What is a needs assessment?

A needs assessment identifies needs in relation to an issue or service. Many assessments identify “felt needs” and pose the question: What do you need vis a vis a particular issue? Some assessments identify needs as perceived by an outside observer or professional: Given what I have observed, X is missing in this community or Y is very hard for most people.

In this case, you are asked to conduct a needs assessment to find out “what’s going on” with your students’ experiences with disease prevention and screening activities, specifically their challenges and barriers understanding preventive measures and taking preventive steps in their own health care. The term “needs assessment” typically implies that we are looking for students’ needs or identifying problems in the students’ experiences. Another way to think about this needs assessment activity is to think of yourself as conducting an “inventory” of your students’ experiences with prevention and screening activities to get insights into their strengths and needs in taking care of their own health.

Conducting the needs assessment

In preparing to teach this lesson, we strongly recommend that you carefully review the entire lesson plan and materials. You are encouraged to modify the lesson to suit your classroom needs.

You may also contact your study circle partner to discuss the needs assessment and any questions or issues you have about modifying the lesson plan provided.
After Conducting the Needs Assessment

~ Please bring your notes to Session Two ~

After you teach this lesson, take some time to think about the following questions. Take notes on your responses so that you can share what you learned about students’ understanding of prevention and screening during Session Two.

1. What kind of things related to prevention and screening did your students say they did to take care of themselves? (In other words, what kinds of tests, lifestyle decisions, routine behaviors, and health-related activities did the students say they did or knew how to do to take care of their health?)

2. With what screening activities were your students familiar?

3. What barriers (both personal and logistical) to screening did your students identify?
Identifying Student Barriers and Challenges in Disease Prevention and Screening: Lesson Plan

<table>
<thead>
<tr>
<th>Disease Prevention and Screening Tasks Addressed in This Lesson</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students will increase their understanding of disease prevention and screening in health care.</td>
<td>Students will have the opportunity to talk about what prevention in health care means to them. In analyzing a common saying, “An ounce of prevention is worth a pound of cure,” students will begin to reflect upon and analyze their own experiences and knowledge base about preventive health care, especially screening activities. They will have an opportunity to discuss barriers to screening and contemplate possible strategies to overcome these difficulties. After this lesson, teachers will be able to identify the preventive health care concerns that their students face. This feedback will inform teachers’ subsequent lessons to develop students’ skills for prevention and screening.</td>
</tr>
<tr>
<td>• Students will have an opportunity to talk about the difficulties and barriers to prevention and screening.</td>
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</tr>
</tbody>
</table>

**Time**
1 hour

**Materials**
- Student Handout (1)
- Poster Paper
- Markers

**Steps**

1. **Warm-up Discussion: Explore the meaning of prevention in health care.** Write the quotation, “An ounce of prevention is worth a pound of cure,” on the board, and invite the students to share their thoughts on the message of the quotation. Encourage students to use their dictionaries or ask one another for help in defining key words, such as ounce, prevention, worth, pound, and cure. Use the following questions to guide the discussion.
   - What is the message of this quotation?
   - Do you agree with the message of the quotation? Why or why not?

Next, ask students to think about their own prevention activities by posing the following questions:
- Have you ever done something to prevent yourself from getting sick? How did you know that you might get sick? What did you do to prevent it?
- What other things do you do to protect your health and avoid getting sick?

Use student responses to create a list of preventive actions.
Here is a sample list of things that students may say that they do to protect their health:

- Wear sunscreen
- Eat good foods
- Get a flu shot
- Go to a doctor for a checkup
- Take vitamins
- Exercise regularly
- Avoid stress
- Get kids immunized
- Take the medicines for my diabetes that my doctor prescribes
- Go to a doctor for a special test, like Pap, mammogram, eye test, blood test
- Have my cholesterol levels checked
- Get blood pressure checked regularly

Note to instructor. If students do not mention any screenings, offer one or two examples (annual tests, such as the PAP; cholesterol checks; blood pressure checks). Do not worry if the students do not mention the word screening at this point. The idea of screening will be discussed later in the lesson. After the students have shared their ideas, remind students that health care prevention is something that we have to think about throughout our lives. There are many things that we, as individuals, should learn and do to take good care of our health (and the health of our family). We do things to take care of our health even when we don’t feel sick and don’t have any complaints about our health. In the next small group activity, students will think about people with different health concerns. Students will talk about the things the people should do to take care of their health.

2. Small group work: Discussion of what people do to stay safe and healthy.
Organize the class into five groups and assign each group one of the five situations featured on the handout, Take Steps to Stay Healthy. Students will work in small groups to talk about their assigned situation. They will also create a list of things the people in the situation can do to take care of their health. Ask,

What do you think the people in each situation should do to take care of their health?

Students will record their ideas on large newsprint so they can easily share their ideas with the rest of the class at the end of the small group work.
**Take Steps to Stay Healthy - Possible Responses**

1. Javier is a construction worker. He works outside most of the time and also has to lift heavy things. What things can Javier do to take care of his health?
   - *To protect his skin, he should wear sunscreen, and look for changes in moles on his skin.*
   - *To protect his back, he should know how to lift heavy items safely. He should wear a safety belt.*
   - *He works in the sun a lot so he should drink plenty of water.*

2. Maria has a four-year old daughter named Susanna. Susanna’s preschool is offering eye and ear testing to all children. Should Maria get her daughter tested? Why?
   - *If Susanna has problems seeing or hearing, this may make it hard for her to speak, understand language, and learn in school. It’s good to check her ears and eyes now.*

3. Elsa is 35 years old and just found out she is pregnant with her first child. What things should Elsa do so that she and her baby stay healthy?
   - *See a doctor for regular checkups*
   - *Talk to her doctor about getting tested for a special kind of diabetes that happens to pregnant women*
   - *Take special vitamins*
   - *Avoid smoking and drinking alcohol*
   - *Avoid certain foods, like raw fish*
   - *Do moderate exercise*
   - *Get a flu shot*

4. Patrick is a 65-year-old truck driver. He has poor eating habits because he spends so much time on the road. He usually eats fast food. His wife wants him to see a doctor for a physical checkup. Patrick doesn’t think it’s necessary because he feels healthy. Should Patrick visit a doctor? Why or why not?
   - *Patrick should have his cholesterol checked to make sure he isn’t at risk for heart disease.*
   - *The doctor can check to see if Patrick is overweight.*

5. Eve is a 45-year-old single mother. She is starting menopause and her mother recently passed away from breast cancer. What things should Eve do to take care of her health?
   - *See her doctor for checkup once a year*
   - *Get a mammogram*
   - *Exercise and watch her weight*
   - *Talk to her doctor about her family history with cancer*
3. **Whole group discussion: Sharing of ideas.** Bring the class together as a large group, and invite each small group to present their ideas about their assigned scenario to the rest of the class. As each group presents their ideas, be sure that the large sheet of newsprint on which they recorded the ideas is posted for all to see. After each group has had an opportunity to share their ideas, allow time for the class to add other actions and behaviors that may come to mind not mentioned in the small groups.

4. **Whole group discussion: Focus on screening.** Point out to the students that they have identified many different things that people do for their health when they feel good and may not have any obvious health problems. Write the word *screening* on the board and invite the students to talk about whether they have heard this word used by their doctors and nurses. Use the following questions to guide a class discussion about the word *screening*.

   - What does “screen” mean?
     
     [Note to instructor: In defining the word *screening*, you may wish to talk about the word in other contexts, such as the purpose of a screen door or a fire screen. You may want to invite students to talk about their experiences with “job screening” or with caller ID which can be used to “screen” incoming phone calls.]

   - What is a “screening test”?
     
     [Note to instructor: Be sure to highlight that a screening test is used to find possible health problems in people who may not feel sick or have any clear symptoms.]

   - What types of screening tests did you talk about when you talked about the situations on the worksheet?
     
     [Note to instructor: This question allows you to review the students’ responses to the 5 situations on the worksheet *Take Steps to Stay Healthy* and identify any screening tests that the students identified on their own. Be sure to list any screening tests on the board. Note that it is NOT essential that you or the students provide the technical term for a screening test.]

   - What other screening tests do you know about?
     
     [Note to instructor: Add these tests to the list on the board.]

After the class has identified several screening tests, ask students to indicate which tests they are familiar with by raising their hands. Tally the number of students who are familiar with the tests, or who don’t know about the test but want to learn more. You may wish to create a chart like the one below on newsprint so that you can record student answers and refer to them later:
<table>
<thead>
<tr>
<th>Name of screening test</th>
<th>Purpose of test</th>
<th>Tally of student responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>mammogram</td>
<td>to check for breast cancer</td>
<td>“I know about these tests.”</td>
</tr>
<tr>
<td>eye test</td>
<td>to check if someone has vision problems, like glaucoma</td>
<td>“I don’t know about these tests, but I want to learn more.”</td>
</tr>
<tr>
<td>hearing test</td>
<td>to check if someone has hearing problems</td>
<td></td>
</tr>
<tr>
<td>spine test</td>
<td>to check if someone has a curve in their backbone (to check for scoliosis)</td>
<td></td>
</tr>
<tr>
<td>cholesterol check</td>
<td>to see if cholesterol levels are too high, need to change diet</td>
<td></td>
</tr>
<tr>
<td>blood pressure check</td>
<td>to see if blood pressure is too high</td>
<td></td>
</tr>
<tr>
<td>Pap test</td>
<td>to check for problems in the reproductive parts of the female body, the cervix</td>
<td></td>
</tr>
<tr>
<td>cancer screens</td>
<td>to look for cancers such as in the breast, colon, prostate</td>
<td></td>
</tr>
<tr>
<td>dental check-up</td>
<td>to look for tooth problems, like cavities</td>
<td></td>
</tr>
</tbody>
</table>

Note to instructor. This sample chart lists some common screenings that your students may talk about. If they do not mention these examples, you may wish
to offer them so that students learn about the variety of screenings that doctors and nurses may do. Keep your tallied responses in mind as you prepare to share your findings in Session 2 of the Study Circle.

5. Whole group discussion: Focus on barriers to screening. Point out to the students that doctors often encourage us to get screened for various health conditions. However, many people do not get screened. Why is this? Invite students to generate a list of barriers to screening and record their responses on newsprint so that you can refer to them later. Pose the following questions to prompt the discussion:

- What is difficult about screening?
- Why do you think people don’t get screened?

Record student answers as a list. A sample list of problems is provided here:

- *We don’t know about the kinds of tests that we should get.*
- *Vocabulary about the different tests is too complicated.*
- *The tests might be too expensive. My insurance won’t pay.*
- *I don’t know which tests are right for me (for my kids, etc.)*
- *I am not comfortable talking to my doctor about things like Pap tests. It’s embarrassing.*
- *It’s hard to know what is the right thing to do to stay healthy, like, is red wine good for you or not? Can I eat eggs every day? Can I have bacon once in a while? I am scared to get tested.*
- *What if I get a test and the result is bad? Maybe my insurance will go up. Or they might not cover me after that.*

*Note to teacher.* Keep your students’ list of barriers in mind as you prepare to share your findings in Session 2 of the Study Circle.

**ESOL Teaching Tip**

This needs assessment activity will likely raise issues related to the particular cultural and linguistic needs brought by adult ESL students and their families to the health care context. For example, adult ESL students may not be able to communicate well in English with their doctors nor understand the literature that is provided to them. Adults of Muslim faith, for example, may be required to show modesty during a physical examination. If time allows, ask the students to generate a list of some ways that health practices in the U.S. are different from health practices in their home countries. You can title this list *Cultural differences in health care.* Some possible student responses are provided below.
Cultural differences in health care

- In the U.S., doctors will tell you good and bad news. But in my country, doctors do not tell bad news to the patient.
- In my country, it’s not respectful to ask the doctor too many questions. In the U.S., a patient is supposed to ask questions.
- In my country, you shouldn’t look right at the doctor. It’s rude. If I don’t look at the doctor in the U.S, the doctor might think something is wrong with me.

Advanced ABE and GED Teaching Tips

To make the lesson more challenging for students, use the lesson as a writing exercise. Instead of brainstorming as a large group in Step 1, ask the students to discuss the quotation *An ounce of prevention is worth a pound of cure* in pairs and then begin outlining an essay (descriptive essay or personal narrative) in response to the quotation.

Follow-up Activities

1. Survey activity. Students survey 5 people outside of class about their experiences with screening tests using the survey provided at the end of this lesson. Each student should have 5 copies of the survey. Students can present their responses in class. As a class, students can talk about ways that the survey responses are similar. What screening tests did most people do? Did most people find the tests helpful? Are there common problems that people have with screening tests?

2. Mini-research project about preventive health care. This project may provide the class with an opportunity to develop basic research and library skills. Ask the students to form groups of 3-4 students. Assign each group an area of preventive health care, such as dental care, prenatal care, preventing AIDS, preventing heart disease, preventing skin cancer, or healthy eating. Explain that each group will conduct basic research on their topic and will find answers to the following questions:

   - What is (prenatal care)?
   - Why is (prenatal care) important?
   - What are common (illnesses, or sicknesses) that are associated with prenatal care?
   - What are some steps that people can take to take care of their (unborn baby)? Name at least 5.

   Direct the students to various Web sites on preventive health care (see Technology Tips in this lesson), or ask them to seek out references and other texts at their local library. Ask each group to prepare a poster that summarizes the information they find and present this information to the class.
3. **Writing activity.** Ask students to write an essay in response to the following quotation by Mark Twain (American author, 1835-1910): *The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not.* Students can explain what they think the quotation’s message is, and whether or not they agree. Students can also share a personal experience that relates to the message of the quotation.

4. **Creating a class resource file.** Gather pamphlets, Web resources, and other materials related to preventive health care and screening. Ask the students to rate how clear and informative the materials are. Build a classroom file on screening and preventive health care.
Take Steps to Stay Healthy

Read and discuss each situation. Each situation is about a different health issue. What do you think the people in each situation should do to take care of their health?

1. Javier is a construction worker. He works outside most of the time and also has to lift heavy things. What things can Javier do to take care of his health?

2. Maria has a four-year-old daughter named Susanna. Susanna’s preschool is offering eye and ear testing to all students. Should Maria get her daughter tested? Why?

3. Elsa is 35 years old and just found out she is pregnant with her first child. What things should Elsa do so that she and her baby stay healthy?

4. Patrick is a 65-year-old truck driver. He has poor eating habits because he spends so much time on the road. He usually eats fast food. His wife wants him to see a doctor for a physical checkup. Patrick doesn’t think it’s necessary because he feels healthy. Should Patrick visit a doctor? Why or why not?

5. Eve is a 45-year-old single mother. She is starting menopause and her mother recently passed away from breast cancer. What things should Eve do to take care of her health?
Survey about screening tests

Make 5 copies of this survey. Talk to 5 people outside your class and write down their answers. Ask each person the following questions:

1. Look at this list of screening tests. Have you ever had one of these screening tests? Put a check (✔) next to the tests you have done.

   mammogram  
   eye test  
   hearing test  
   high cholesterol check  
   high blood pressure check  
   Pap test  
   cancer screening test  
   dental check-up  

2. Why did you have the screening test? (Did a doctor tell you to have the test done? Did you decide by yourself to do the screening test?)

3. Was the screening test helpful? Why or why not?

4. What was difficult about the screening test?
Your Disease Risk
On-line Risk Assessment Assignment

As part of your information gathering on individual perceptions related to disease prevention and screening, you are asked to take the on-line “Your Disease Risk” survey developed by the Harvard Center for Cancer Prevention. This Web site features an interactive questionnaire that enables you to assess your personal risk for any one of several well-known diseases, including cancer, diabetes, osteoporosis, and heart disease. Please keep in mind that information from the assessment WILL NOT be shared with anyone. Discussion in Session Two will focus on feelings related to the experience of taking the assessment, which will be important for developing an understanding of why people do and do not participate in screening programs.

The risk assessment can be found at the following Web site:

http://www.yourdiseaserisk.harvard.edu/

For this assignment, you are asked to consider a set of questions both before and after completing a risk assessment for one of the diseases. Please review the reading guide below before beginning one of the disease questionnaires.
Reading Guide for “Your Disease Risk” On-line Tool

Consider these questions before and after you explore the “Your Disease Risk” Web site. Spend some time thinking about questions #1-4 below before you complete one of the interactive questionnaires. After you have completed one of the questionnaires, spend some time thinking about question #5-7. You are encouraged to take notes on your responses (e.g., in a reading journal) as your reactions to this online tool will be addressed in Session Two of the Study Circle.

Before you complete one of the disease questionnaires

1. Click on the link to “prevention” under the heading “What is...?” on the left side of the screen. This section compares “prevention” to “putting in a cross walk at a dangerous intersection. The new cross walk will certainly cut down on the number of pedestrians who get hurt while crossing the street, but it will not totally eliminate the problem because there are many other factors that also come into play.” How is the “cross walk” metaphor useful for thinking about prevention in your own healthcare?

2. What does “risk” mean to you? Take a moment to write down your own definition of “risk.” Then, click on the link to “risk” under the heading “What is...?” on the left side of the screen. How is your definition similar or different to the definition used in on the “Your Disease Risk” Web site?

3. The section “What is... risk?” indicates that “calculating an individual's risk of disease is an inexact science.” How does this statement prepare you to take in the information about your own risk for disease that this Web site is meant to provide?

4. On a scale of 1-5 (with 1 being “not at all confident”, and 5 being “highly confident”), how confident are you about your knowledge of which screening tests are right for you and how often you should have them? Give some possible reasons that can explain your current level of confidence.

At this point, you should select one of the disease options listed. Click on a button corresponding to that disease and complete the questionnaire as instructed. You are free to do questionnaires for more than one disease, but only one is required for this activity.

After you complete one of the disease questionnaires

5. Reflect on your risk results. What, if anything, confirmed what you already knew/suspected? What, perhaps, surprised or even shocked you? What information did you find the most useful or least useful?
6. Be sure to read the two links at the bottom of the results page, “What makes up my risk?” and “What does my risk mean?” What ideas about “risk” on these two links are important for people to understand if they are to appreciate the meaning of their individual risk results?

7. Can you see how this tool be could be used with ABE/ESOL students? Explain. If yes, how would you make use of this tool in your own classroom?
Skills for Disease Prevention and Screening
Session One Evaluation Form

Please complete the following evaluation and turn it in before you leave today.

1. What was the most valuable thing that you gained from today’s session? (For example, an insight, a practical idea, specific information, etc.)

2. How would you improve this session?
Session One Materials
Handout 5: Session One Evaluation Form
SESSION TWO:
Identifying Disease Prevention and Screening Tasks and Underlying Skills
Skills for Disease Prevention and Screening

SESSION TWO:
Identifying Disease Prevention and Screening Tasks and Underlying Skills

HEALTH LITERACY STUDY CIRCLES
A Facilitator's Guide

Rima Rudd, Sc. D.
Lisa Soricone, Ed. D.
Maricel Santos, Ed. D.
Overview: Session Two

The activities in Session One and the dual assessment activities that followed were designed to help Study Circle+ participants gain more understanding of issues related to disease prevention and screening. The following notes provide a brief overview of Session Two and the discussion methods you will use.

About this Session

Participants will share findings from the classroom needs assessment and offer reflections on their own experiences with the notion of risk (on-line assignment). They will identify barriers to disease prevention and screening activities and then consider the skills adults need to reduce those barriers. The discussions should help participants consider health literacy teaching goals designed to meet their students’ needs.

Introductory Activities

The introductory activities of Session Two provide an opportunity for a focused examination of health-related tasks and the underlying skills to be addressed in adult education classrooms. Session Two sets in motion the participants’ consideration of classroom lesson and unit plans.

Discussion and Analysis Activities

Participants will work in groups to generate lists of reading/vocabulary, math, planning, and oral language skills that their students need to master in order to understand and participate in prevention and screening activities. This type of analysis has not yet been done by most health professionals and can be challenging to adult educators. Participants may be able to identify various tasks, but may not be able to identify the skills needed to carry out these tasks effectively. A table listing examples of tasks and skills is provided to help you facilitate this activity. You may want to review an example or two to help the discussion groups. After Session Two is over, you should save the lists so you can refer to them during Session Three.
During the second part of the discussion and analysis activities, participants will review sample lessons that address disease prevention and screening tasks. These lessons are not linked to one another and do not constitute a unit or curriculum. Each lesson provides an example of a skills-based approach. The discussion and review of these lessons will help participants to develop lessons and units of their own.

**Planning Activities**

During the planning activities, you will review the assignment for Session Three and address questions participants might have. Encourage participants to examine the lessons and feel free to modify them to suit the skill levels and interests of their students. Here, as in Session One, you will ask participants to find partners and exchange phone numbers so they can discuss this assignment between sessions.

Participants are also asked to complete a Post-Teaching Reflection Sheet. Please encourage the participants to pilot one of the lessons as soon as possible so that they have time to reflect on the experience before Session Three.

**Closure Activities**

Session Two ends with activities in which you have an opportunity to review both the content of the session and the discussion methods. Remember to leave time at the end of the session for participants to complete the session evaluation forms. After Session Two, review these forms and make use of the feedback.
The Group Discussion Methods

The Group Discussion Methods used in Session Two are designed to support collaborative work as participants share ideas and engage in analyses. The various discussion methods are described below.

- **Paired and Small Group Discussions:** These kinds of discussions are designed to maximize engagement and participation.

- **Facilitated Group Discussion:** Participants can report on and hear about others’ experiences. Discussion questions are used to focus the discussion and help make a transition to the next activity.

- **Small Group Work:** This method is used to foster group collaboration.

- **Walk-about:** This activity (which, in this session, takes place during an extended break) gives participants an opportunity to view the work completed by small groups. This activity provides an alternative to the activity where participants from each group report back to the whole group.

- **The Dance and the Balcony:** This activity is a metaphor for analyzing the group discussion methods used during the session. The purpose of this activity is to highlight the different ways you structured activities and encourage teachers to consider using some of these methods in their own classes.

Participants are asked to think of the activities they just completed as a “dance”. This review activity asks that they stop the dance and walk up to the balcony to look down on the dance floor. Thus they stop “dancing” and view the dance from a distance. From the “balcony” participants analyze the dance. They comment on and react to the discussion methods used during the session. Note that you will be conducting this activity at the end of each session.
Overview: Session Two

Objectives
During Session Two, participants will:
- Analyze the results of the dual assessment activities
- Develop a list of specific disease prevention and screening tasks and underlying skills that can be addressed in ABE/ESOL classes
- Review sample health literacy lessons for adult learners

Time
3 hours

Session Two Agenda

Introductory Activities (15 minutes)
- Welcome and Review of Session One
- Review Session Two Objectives and Agenda

Discussion & Analysis Activities (1 hour 40 minutes including the break)
- Review Results of the Needs Assessment Activity and the On-Line Risk Assessment Experience
- Identify Tasks and Skills for Disease Prevention and Screening
- Walk About (includes a 10-Minute Break)

Planning Activities (45 minutes)
- Review Sample Health Literacy Lessons
- Review the Assignment for Session Three

Closure Activities (20 minutes)
- Session Review
- Session Evaluation
Materials and Preparation

- Newsprints (flipcharts) and markers
- Overhead Projector (optional)
- Copies of your state’s adult education curriculum framework (if available)

Newsprints (flip charts) or overhead transparencies (4)

The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In these notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints for this session are included in this booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Student-Identified Screenings</td>
</tr>
<tr>
<td></td>
<td>• Student-Identified Barriers / Challenges</td>
</tr>
<tr>
<td></td>
<td>• Work Group Lists of Skills and Concepts</td>
</tr>
</tbody>
</table>

Handouts (10)

Make copies of the following handouts before the session begins. The handouts for each session are located after the session booklet.

1. Session Two Objectives and Agenda
2. Prevention and Risk Issues
3. Table of Disease Prevention and Screening Tasks and Underlying Skills

The Sample Lesson Packet includes four handouts:

4. Sample Lesson Packet Overview
5. Lesson Review Sheet (to be completed during Session Two)
6. Post-Teaching Reflection Sheet (to be completed after participants have taught a sample lesson between Session Two and Session Three)
7. Twelve Sample Lessons

Two Readings on Numerical Aspects of Disease Prevention and Screening

8. What’s in a number - Learn the meaning behind all those tests the doctors put you through
9. Making sense of risk information on the Web
10. Session Two Evaluation Form
Session Two: Identifying Disease Prevention and Screening Tasks and Underlying Skills
INTRODUCTORY ACTIVITIES (15 minutes total)

Welcome and Agenda
(15 minutes)

Discussion Methods: Presentation by facilitator
Handouts: Session Two Objectives and Agenda

Welcome the group back
Remind the participants that this study circle focuses on one set of health literacy activities and skills – those related to disease prevention, screening, and early detection of disease.

You may want to emphasize the importance of this topic for adult learners by noting that adults who are poor and/or are members of minority groups are less likely to engage in preventive activities and screening opportunities than are those who have more resources and are members of the majority ethnic and racial groups. As a result, many adults may discover diseases at late stages – sometimes too late for effective treatments.

Respond to any important issues raised in the Session One evaluations.

Provide an Overview of Session Two
Explain that during Session Two, participants will report back on the needs assessments conducted in their classes and on their own experience on line with the risk assessment. Please note that no one will be asked to share any information related to personal health or to personal risk. Participants will then list barriers related to disease prevention and screening activities. Participants will then begin to identify specific tasks and needed skills to overcome barriers and to be involved in prevention and screening activities. They will also identify the skills most appropriate for adult education instruction.

Distribute the Session Two Objectives and Agenda
- Review the objectives and agenda and briefly describe the session activities.
- Ask if anyone has additional comments or questions.
DISCUSSION & ANALYSIS ACTIVITIES (1 hour and 40 minutes including a 10-minute break)

Review the Results of the Needs Assessment Activity and the On-Line Risk Assessment Experience
(35 minutes)
Discussion Methods: Facilitated large group discussion

Focus on needs assessment activities and solicit reflection and commentary
(20 minutes)

Ask participants to consider the class-based needs assessment findings. Pose each of the following three questions and ask participants to volunteer answers and examples. Use newsprints or an overhead transparency to record the participants’ responses. Consider asking one of the participants to record this information.

1. With what screenings tests were your students familiar?

Student-Identified Screening Tests

Ask participants to augment the list. The box below offers some common screens.

<table>
<thead>
<tr>
<th>Some common screening tests:</th>
<th>Kenting test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual exam</td>
<td>Hearing test</td>
</tr>
<tr>
<td>Blood pressure measure</td>
<td>Height and weight analysis</td>
</tr>
<tr>
<td>Dental exam</td>
<td>Oral exam (cancer screen)</td>
</tr>
<tr>
<td>Stress test</td>
<td>Rectal exam</td>
</tr>
<tr>
<td>Cholesterol screening</td>
<td>Blood test for HIV or STDs</td>
</tr>
<tr>
<td>Fasting blood sugar test</td>
<td>Thyroid tests</td>
</tr>
</tbody>
</table>

Older men and women

Colonoscopy                                       Bone density
<table>
<thead>
<tr>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammogram</td>
<td>Prostate test</td>
</tr>
<tr>
<td>Pap smear</td>
<td></td>
</tr>
</tbody>
</table>

2. What kinds of barriers/challenges to successful disease prevention and screening did your students identify?

<table>
<thead>
<tr>
<th>Student-Identified Barriers / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Preventive Activities</td>
</tr>
</tbody>
</table>

You might anticipate some of the following groups of barriers.

- **Costs:** No health insurance.
- **Understanding:** Do not know how to determine risk, don’t understand purpose of tests, do not see value of early detection.
- **Planning:** Do not know how to weigh risks and benefits.
- **Knowledge:** Not aware of free services; do not know how to determine risk; do not know who is at risk; do not know why screening could be helpful; not aware that early detection can result in cure for some diseases.
- **Discomfort:** Too embarrassed to talk about a screening examination, not comfortable talking to a doctor or a nurse, too embarrassed to talk about certain parts of the body.
- **Fate:** Sense that “what will be, will be.”
- **Fear:** Prefer not to know, afraid to find something bad, afraid of test, afraid of treatment (it may hurt).
- **Access:** Lack of transportation or childcare.
3. Which, if any, of these barriers would you be comfortable addressing in class?
Which, if any, would make you feel uncomfortable?

Tell participants that they will return to this list when they discuss needed skills.

**Focus on on-line risk assessment activity and solicit reflection and commentary (15 minutes)**

Explain that the group will turn to their own experiences on line. Let the group know that they are not being asked to share the results of their risk assessments. Pose the following questions to generate discussion:

1. First, consider how you felt before you started the on-line risk assessment. For example, did anyone feel particularly nervous? Is anyone comfortable stating why?

2. How did you feel about your risk results produced by the assessment?

3. Did what you learned about your risk for disease make you inclined to change your behavior in any way? Why or why not?

4. How might this tool be used in ABE/ESOL classes?

Please bring this brief discussion to an end with the following statement:

*This activity was chosen so that you would come to this discussion with a fresh impression of a risk assessment. This can give us insight into how people greet news about risk and how they feel as a result.*
**Transition to the next activity**

Explain that as we consider skills related to prevention and screening, we cannot avoid those barriers that relate to attitudes and beliefs. We certainly face a dilemma here. It is not really our work to change attitudes. We could, however, help adult learners understand some concepts underlying prevention and augment skills so that they are better equipped to move through a decision-making process.

**Explore some issues related to prevention and risk**

**Handouts:** Prevention and Risk Issues  
**Discussion Methods:** Facilitated large group discussion (10 minutes)

Explain that participants will focus on some broad issues related to prevention and risk before they examine skills in more depth. Pass out the Prevention and Risk Issues handout to all participants and ask them to read it. Note the following:

- The first brief dialogue focuses on two reasons for taking the same action.
- The second quotation focuses on a researcher’s interpretation of findings from a survey on diabetes.

Invite the participants to comment on the issues posed by asking the following questions:

1. What is the difference between the statements made by Ruth and Lee? Is one more acceptable than the other? Why?
2. Do you agree with the researcher’s interpretation of the findings from the diabetes survey? Explain.
3. What can teachers do to help adult students better understand these concepts of prevention and risk?
Identify Tasks and Skills for Disease Prevention and Screening

(25 minutes)

**Discussion Methods:** Small group work followed by facilitated large group discussion

**Handout:** Table of Disease Prevention and Screening Tasks and Underlying Skills (from Book One)

**Posting:** Work Group Lists of Skills and Concepts

**Small Group Work (10 to 15 minutes)**

Divide the group of participants into four working groups. Ask each group to review the prepared handout from Book One: Table of Disease Prevention and Screening Tasks and Underlying Skills and the newsprint, Student Identified Barriers, from earlier in the session.

Ask groups to begin their discussion with one of the four questions listed below (by assignment) and then, if there is time, to move on to another question. Ask each group to prepare a list of skills or concepts on newsprint for others to review. Mention that this review will be in the form of a “walk about”. Participants will be asked to examine the various postings during a 15-minute break.

Work group tasks (assign one to each group):

1. What **vocabulary** and **reading skills** would your students need to master in order to understand and participate in prevention and screening activities?

2. What **math concepts** would your students need to master in order to understand and participate in prevention and screening activities?

3. What **planning skills** would your students need to develop or augment in order to understand and participate in prevention and screening activities?

4. What **oral language skills** would your students need to develop in order to verbalize questions and issues and engage in discussions with health workers around prevention and screening activities?
At the end of 15 minutes (or when each group appears to have completed their work), have each group post their results and ask everyone to look at the posting during the break.

**TAKE A 15 - MINUTE BREAK**

This break includes a *Walk About* for a Review of the Postings

**Facilitated Large Group Discussion (5 minutes)**

Pose the following question for group discussion and for transition to the next activity:

*With which of the skill sets noted in the above activity are you most comfortable? With which skills are you least comfortable? Why?*
PLANNING ACTIVITIES (45 minutes total)

Sample Lesson Review

(40 minutes)

**Discussion Methods** Paired discussions and facilitated large group discussion

**Handouts:** Sample Lesson Packet

*Distribute and briefly review the Sample Lesson Packet (5 minutes)*

- Explain that this packet of lessons does not constitute a syllabus. The lessons are not sequential nor are they related to one another. They were developed to illustrate a range of possible lessons.

- Note that several of the lessons set the groundwork to pursue project-based learning activities in the classroom. This enables students to develop skills in the context of a project. The follow-up activities to the lessons include suggestions for several projects that students can do, such as “Pick a screening program and describe who should be screened and how the screening is done.”

*Review and evaluate one sample lesson (20 minutes)*

- Ask the participants to work in pairs with someone who teaches in the same area (e.g., ESOL, ABE, GED) or with students at a similar learner level (e.g., beginning English proficiency, advanced GED students). This will enable pairs to discuss the appropriateness and applicability of the various lessons within their own teaching context.

- Ask participants to quickly scan the sample lessons with their partner.

- Ask each pair to choose one lesson to examine in depth (one that they might consider teaching).

- Ask the pairs to use the questions on the Lesson Review Sheet found in the Sample Lesson Packet to guide their examination of the lesson.

*Bring the participants together as a large group (15 minutes)*

Facilitate a group discussion with a focus on an initial evaluation of the sample lessons.

- First, ask each pair to name the lesson they examined.
Then use the following questions to guide the large-group discussion.

To what extent do the sample lessons address your students’ concerns and issues discovered through the needs assessment activity?

Which lessons do you anticipate trying out in your classes? Why?

Review the Assignment for Session Three

(5 minutes)

Discussion Methods: Brief presentation

Handouts: What’s in a number and Making sense of risk information on the web

Distribute the readings on numerical aspects of disease prevention and screening.

Ask participants to read the articles provided in preparation for Session Three. Point out that they are designed to stimulate participants’ thinking about numeracy skills that might be developed through health literacy lessons.

Introduce the teaching assignment: Teach a sample lesson before Session Three

Explain that the lessons in the packet are just sample lessons and that participants should feel free to modify them for use in their own classrooms, or generate their own lessons.

After they teach a lesson, participants should complete the Post-Teaching Reflection Sheet (located in the Sample Lesson Packet) and bring these back to Session Three.

Ask for questions or comments about the assignment.

Ask participants to find a partner for this assignment

Ask participants to find a partner for this assignment (perhaps someone they worked with in an earlier activity) so they can talk between sessions about the assignment.

Ask the pairs to exchange names and phone numbers so that they can speak with each other before and after teaching a sample lesson.

Encourage them to:

- Discuss the assignment and any problems they anticipate
- Discuss how the lessons went
- Share their findings and observations
CLOSURE ACTIVITIES (20 minutes total)

Session Review

(15 minutes)
**Discussion Methods:** Facilitated full group discussion, The Dance and the Balcony

**Content Review**
Briefly remind participants of the purpose of Session Two:
- To expand our understanding of the range of language, literacy, and numeracy skills needed for people to participate in disease prevention and screening activities
- To prepare participants to try out some sample lessons with their students

**Discussion Methods Review - The Dance & the Balcony**
- Remind participants about the purpose of the *Dance and the Balcony* activity:
  - To reflect on the discussion methods used for activities during this session.
  - To identify discussion methods that might be useful in the classroom.

- Review the following discussion methods and activities from Session Two. Then ask participants to identify the discussion methods that they feel would be effective for use in their classrooms. Use the table below to help you facilitate this discussion.

<table>
<thead>
<tr>
<th>Session Two Discussion Methods</th>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Group Discussion</td>
<td>Reviewing results of in-class activity; listing of tasks, reviewing group work</td>
</tr>
<tr>
<td>Small Group Work</td>
<td>Identifying skills related to disease prevention and screening tasks</td>
</tr>
<tr>
<td>Walk About</td>
<td>Review of group work</td>
</tr>
<tr>
<td>Paired Discussion</td>
<td>Sample Lesson Review</td>
</tr>
</tbody>
</table>
Session Evaluation
(5 minutes)
**Handouts:** Session Two Evaluation Form

**Session Evaluation (5 minutes)**
- Distribute the Session Two Evaluation Forms and ask participants to complete them. Collect the evaluation forms before the participants leave.

**Closing Notes**
- Thank the participants for their contributions during this session.
- Take a minute or two to address any logistical issues related to Session Three.
- Post the date, time, and place for Session Three.
The National Center for the Study of Adult Learning and Literacy (NCSALL) is a collaborative effort between the Harvard Graduate School of Education and World Education. The University of Tennessee, Portland State University, and Rutgers University are NCSALL's partners. NCSALL is funded by the Educational Research and Development Centers program, Award Number R309B60002, as administered by the Institute of Education Sciences (formerly Office of Educational Research and Improvement), U.S. Department of Education. The contents of this publication do not necessarily represent the positions or policies of the Institute of Education Sciences, or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
Skills for Disease Prevention and Screening
Session Two Materials

Newsprints (flip charts) or overhead transparencies (4)
We typically refer to materials on flip charts as “newsprints,” but feel free to use overhead transparencies instead. Examples of most newsprints for this session are included in this booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Student-Identified Screenings</td>
</tr>
<tr>
<td></td>
<td>• Student-Identified Barriers /</td>
</tr>
<tr>
<td></td>
<td>Challenges</td>
</tr>
</tbody>
</table>

Handouts (10)
Make copies of the following handouts before the session begins. Handouts for each session are located right after the session booklet.

1. Session Two Objectives and Agenda
2. Prevention and Risk Issues
3. Table of Disease Prevention and Screening Tasks and Underlying Skills
4. The Sample Lesson Packet includes the following handouts:
   ▪ Sample Lesson Packet Overview
   ▪ Lesson Review Sheet (to be completed during Session Two)
   ▪ Post-Teaching Reflection Sheet (to be completed after participants have taught a sample lesson between Session Two and Session Three)
   ▪ Twelve Sample Lessons
5. Readings on Numerical Aspects of Disease Prevention and Screening
   A. *What’s in a number - Learn the meaning behind all those tests the doctors put you through*
   B. *Making sense of risk information on the web*
6. Session Two Evaluation Form
Skills for Disease Prevention and Screening
Session Two

Session Two Objectives
During Session Two, participants will:
- Analyze the results of the dual assessment activities
- Develop a list of specific disease prevention and screening tasks and underlying skills that can be addressed in ABE/ESOL classes
- Review sample health literacy lessons for adult learners

Session Two Agenda

Introductory Activities (15 minutes)
- Welcome and Review of Session One
- Review Session Two Objectives and Agenda

Discussion & Analysis Activities (1 hour 30 minutes including the break)
- Review Results of the Needs Assessment Activity and the On-Line Risk Assessment Experience
- Identify Tasks and Skills for Disease Prevention and Screening
- Walk About (includes a 10-Minute Break)

Planning Activities (55 minutes)
- Review Sample Lessons
- Review the Assignments for Session Three

Closure Activities (20 minutes)
- Session Review
- Session Evaluation
1. Disease Prevention

Ruth:  I’ll sign up for the exercise class so that I can lose some weight before I attend our family reunion.

Lee: I’ll sign up too. I want to lose weight and lower my risk of getting diabetes.

2. Risk

“Are you at risk for diabetes?” Six hundred adults were surveyed about their efforts to lose weight and take care of their health. The survey found that most people knew that obesity was a risk factor for diabetes, and they knew they were obese. However, only half thought they were at risk for diabetes.

Why don't people think they are at risk?

The researchers commented, “People don't like believing that bad things are going to happen to them. It's the same thing with smoking or why some people don't wear seatbelts. We like to think we are exceptions to the rule. Denial is a powerful thing.”

# Table of Disease Prevention and Screening Tasks and Underlying Skills

<table>
<thead>
<tr>
<th>General Tasks with Specific Examples</th>
<th>Materials and Tools Adults Are Expected to Use</th>
<th>Skills Adults Need</th>
<th>Lesson Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Be attentive to public health recommendations</strong>&lt;br&gt;e.g., notice health posters in public places; look at health-related newspaper articles</td>
<td>Articles in newspapers and magazines, Postings, Public announcements on radio, Web sites</td>
<td>Read a newspaper, Comprehend radio announcements, Differentiate between commercials and official health warnings</td>
<td>Look at Web sites to determine the “sponsor”</td>
</tr>
<tr>
<td><strong>Take disease preventive action</strong>&lt;br&gt;e.g., stop smoking; use condoms; use sunscreen</td>
<td>Articles in newspapers and magazines, Public announcements, Web sites</td>
<td>Read package labels, Locate supports and resources</td>
<td>Compare and contrast two labels on sunscreen packages to determine use with a child</td>
</tr>
<tr>
<td><strong>Determine need for specific screening tests</strong>&lt;br&gt;e.g., make a decision about taking a screening test</td>
<td>Graphs and charts, Health information booklets and Web postings</td>
<td>Understand mathematical concepts and expressions of risk: percentage, proportion, and probability (1 in 100, 30% higher risk)</td>
<td>Use simple word problems to interpret expressions of risk</td>
</tr>
<tr>
<td><strong>Participate in screening programs</strong>&lt;br&gt;e.g., get an HIV test; get a dental checkup</td>
<td>Directions for preparation, Informed consent documents</td>
<td>Fill out forms, Ask questions</td>
<td>Provide generic family history forms for class to determine what screening programs are appropriate Review sample directions for a screening test and discuss the sequence of steps</td>
</tr>
<tr>
<td><strong>Take follow-up action</strong>&lt;br&gt;e.g., change a behavior; meet with doctor or dentist</td>
<td>Follow-up letters, Directions</td>
<td>Ask for clarification, Plan for various outcomes, Use reminder cues, Understand test result vocabulary, i.e., normal range, positive, negative, false positive, false negative, typical, and atypical</td>
<td>Provide a scenario and practice using decision trees (if A then B, if X then Y)</td>
</tr>
</tbody>
</table>
Skills for Disease Prevention and Screening
Sample Lesson Packet Overview

This packet includes sample lessons that address health literacy skills for disease prevention and screening. These sample lessons do not constitute a coherent syllabus. They are not in any logical order nor are they linked. The lessons do offer a range of content and skills. They may spark some ideas for incorporating health literacy skills into your own classroom curriculum. In addition, they may spark some ideas about a syllabus on health literacy.

Familiarize yourself with the entire packet of lessons before you decide which one(s) to try out in your classroom. Adapt the lessons to suit the needs of your students, or use ideas within these samples to create your own lesson. The packet includes the following materials:

1. Lesson Review Sheet (to be completed during Session Two of the study circle)
2. Post-Teaching Reflection Sheet (to be completed after you have taught a sample lesson and before Session Three)
3. Sample Lessons (12)
   - Lesson 1A: (ESOL) Health Screening Tests
   - Lesson 1B: (ESOL) Talking About Health Screening Tests
   - Lesson 2: (ESOL) Health Care Every Day, Every Month, Every Year
   - Lesson 3: (ABE) Inquiry-based Project on Preventive Screening Resources in the Community
   - Lesson 4: (ESOL) Filling Out Health Care Forms
   - Lesson 5: (ESOL) Understanding Family Medical History Forms
   - Lesson 6: (ABE) Using a Body Mass Index Table
   - Lesson 7: (ESOL) Talking About Symptoms to Your Doctor
   - Lesson 8: (GED) Making Important Health Decisions
   - Lesson 9: (ESOL) Introduction to Informed Consent
   - Lesson 10: (ESOL) How Likely is Likely? Vocabulary for Talking about Probability
   - Lesson 11: (ABE) Introduction to Probability
   - Lesson 12: (GED) Exploring Health Risks as Probabilities

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1 For work with lower level ABE or ESOL students, Lessons 1A and 1B may be used as substitutes for the Needs Assessment provided in Session One.

2 This lesson was originally developed for the Health Care Access and Navigation Study Circle. It has been included here, since filling out forms is often required in the process of engaging in disease prevention and screening activities.
Notes to Teachers

Adapting the lessons for your classroom

As the lesson titles indicate, the sample lessons were designed with a particular student audience (e.g., ABE or ESOL) in mind. At the same time, you are encouraged to adapt any of the lessons to your own classroom. These lesson topics are relevant to all adults and most of the lessons provide suggestions and tips for adapting them for other adult education contexts.

Opportunities to pursue project-based inquiries

Most of the lessons lay the groundwork for project-based learning activities in your classroom. Follow-up activities may include projects such as researching free screening tests available in the community, learning about the most common screening tests and how to interpret the results, or creating a personal medical logbook to record screening information (blood pressure, cholesterol, etc.).

Additional tips for teaching health literacy lessons

If your students have specific questions about disease prevention activities or screening procedures, remind them that you are an expert in building literacy skills. Encourage your students to ask questions when they see a doctor, dentist, nurse, health educator, or pharmacist. They may want to bring the answer back to class.

Consider inviting local health care professionals to your class so that they can answer students’ questions about disease prevention activities and screening procedures. Staff from town or city or state Departments of Health may also be interested in coming to class.

Set an example for maintaining privacy. You will be talking about disease prevention and screening in general and should not ask students to reveal their own health issues. In addition, you should avoid using your own personal health experiences as examples.
Lesson Review Sheet
~ To be completed during Session Two ~

Instructions: Work with your partner to choose one lesson from the Sample Lesson Packet to examine in depth. Complete the following worksheet.

Title of the lesson: ____________________________________________

Summary of the lesson: Briefly describe what this lesson is about.

Questions to consider:

1. Does this lesson address concerns raised by students in the needs assessment activity?

2. Will my students find the lesson topic interesting and useful?

3. Is this lesson appropriate for my students’ skill level?

4. How does the lesson link to skills and topics I am currently addressing in my classroom?

5. How might I adapt or alter the lesson to better fit the needs of my students?
Post-Teaching Reflection Sheet

~ Please bring this completed worksheet with you to Session Three ~

Instructions: After you have tried out one of the lessons from the Sample Lesson Packet (or perhaps one of your own lessons), complete the following worksheet. Use the back of this sheet if necessary.

Title of the lesson: ________________________________

Date(s) lesson was taught: _______________________

Class level: ________________________________

Reflection Questions

1. **How successful was the lesson?** (Consider: Did you meet your teaching goals? What specific features of the lesson went well? What did the students respond to most positively?)

2. **What did not go well?** (Consider the features the students had the most difficulty with.)

3. **What adaptations (if any) did you make to the lesson for use in your classroom?**

4. **What might you have done differently to make the lesson more effective?**
5. What teaching suggestions and tips would you offer a teacher who is interested in using this lesson?

6. As you answer the following questions, keep in mind the issues raised by your students during the needs assessment and the skills they need to develop. Think about how to build on the lesson you just taught.

- What additional related skills might you address?

- What additional lessons could you teach to meet your students’ needs?
Tests make everyone nervous, but at least in high school you got a letter grade at the top of the page that indicated how well you did.

Too many people don't have a clue what medical tests mean. If your doctor says your blood pressure is 140/97, cholesterol is 203 and glucose is 130, does that mean you're basically healthy or a heart attack waiting to happen? Are you at risk for diabetes? Should you change your diet?

"Unfortunately, many people are just not very knowledgeable about what their numbers are supposed to be, and what those numbers mean," says Dr. Karen Wilson, an attending physician with University Family Physicians at Huron Valley Family Practice Center in Novi. "And to a certain extent, it can all be confusing. It’s hard to make sense of the numbers when you don’t understand what the concept is behind the values and what they actually mean."

Having some basic knowledge about commonly performed tests, and what their results mean, can give you some insight as to where you should focus your attention. Today in Health &amp; Fitness, we discuss four tests, discussing why you need to know your score, what each number means, and how to improve your results.

But while it's important to know where you stand when it comes to your health, don't overreact.

"Any number in and of itself is not meaningful," cautions Dr. Donald K. Martin, a physician with St. Joseph Mercy Health System in Ypsilanti. "It really depends on what the patient's risk for disease is."

So if your blood pressure or cholesterol is slightly elevated, but you have no family history of heart disease, and you agree your diet could be better, the doctor might prescribe some lifestyle changes instead of medication. That same test result for a smoker with a strong family history of heart disease is going to elicit a completely different response. And remember, all lab tests are statistically based, cautions Martin. "If you have 20 tests done, the odds are very good that one will come back 'abnormal.' But I see abnormal tests every day, and often I do nothing about it since it has to be interpreted based on the person I am seeing, in context with their risk factors."
As always, if you have questions about your particular risk factors, consult your doctor. And if your doctor doesn’t give you the answers you need, consider getting a second opinion.

**Blood pressure**

**What it is?**

Each minute, the pump called your heart circulates five quarts of blood through your body. The blood travels through 60,000 miles of blood vessels to reach all of your tissues. By the time you are 80 years old, your heart will have beat 2 to 3 billion times. Blood pressure is a measure of how hard your blood is pressing on your artery walls.

**Why It’s Important**

One in five Americans has high blood pressure, but 31.6 percent of people with elevated blood pressure don’t know they have it. That’s because high blood pressure doesn’t hurt, and often produces no noticeable symptoms.

High blood pressure, also called hypertension, killed 42,565 Americans in 1997 and contributed to the deaths of about 210,000 Americans. As many as 50 million Americans aged 6 and older have high blood pressure.

A woman who has high blood pressure is three times more likely to develop heart disease and two times more likely to experience a stroke than a woman who has normal blood pressure. African-Americans, Puerto Ricans, Cubans and Mexican-Americans all have a higher risk of developing high blood pressure. So do women who take oral contraceptives.

Without adequate blood pressure, the blood cannot reach the cells to supply them with nutrients. It’s the same as in your water pipes at home: Without adequate pressure, water in the heater in the basement cannot reach the shower on the second floor.

Low blood pressure can cause fatigue and dizziness. However, when blood pressure is too high, the heart has to work much harder than normal. Imagine trying to suck water through a straw the diameter of a coffee stirrer: the water does not come through easily. That’s what high blood pressure is like for the body. The heart is forced to pump harder to circulate blood to the body's tissue. This often causes the heart muscle to enlarge and weaken, making it harder to meet the demands of the body. High blood pressure increases the risk of heart attacks, strokes, kidney failure, damage to the eyes and heart failure. When high blood pressure exists with-obesity, smoking, high cholesterol or diabetes, the risk of heart attack or stroke is much greater. High blood pressure adversely affects your arteries; they become less able to stretch, and that means they may not be able to get the blood where it needs to go quickly.
The cause of 90 to 95 percent of the cases of high blood pressure isn't known. But high blood pressure is easy to diagnose and is usually relatively simple to control.

**To improve your blood pressure**

Whether or not you need to take action about your blood pressure depends greatly on your individual risk factors.

"You can't diagnose high blood pressure by the results of one office visit," says Dr. Karen Wilson. "Ideally, we tell a patient to buy a home blood-pressure monitor at the drugstore and check their pressures at home a few times a day. Then we look at their readings. That helps us to have a more accurate picture."

Many lifestyle changes can help lower blood pressure. Your doctor may prescribe medications in conjunction with these lifestyle changes or if the changes do not produce a desired effect.

- Eat fruits and vegetables. Produce contains fiber, potassium, magnesium and calcium, all of which appear to play important roles in normalizing blood pressure.
- Limit alcohol consumption. In a Harvard Medical School study, nurses ages 34 to 59 who consumed two or three alcoholic beverages daily increased their risk of high blood pressure by 40 percent.
- Maintain a proper weight. The bigger you are, the harder your heart has to work to get blood to each part of your body. Sometimes weight loss is all that is needed to normalize your blood pressure.
- Relax. Stress can temporarily spike your blood pressure. In fact, in the doctor's office, many people have high blood pressure (this is referred to as White Coat syndrome). Some people with high-normal blood pressure have had success with meditation, yoga, deep breathing and other stress reduction techniques.

Don't immediately think you have to go off the Pill; just be aware of the problem, and your doctor will probably take your blood pressure before you start the contraceptives and then a few months later. If your blood pressure does rise, you might want to consider a different form of birth control- especially if you smoke, or have a family history of high blood pressure and stroke.

**For more information**

American Heart Association, (800) 242-8721
The numbers

Blood pressure is expressed as two numbers. When the heart pumps, pressure in the arteries increases temporarily. This is called the systolic pressure, and it’s the first number read when blood pressure is taken. When the heart relaxes between beats, the pressure in the arteries falls. This is the diastolic pressure, the second number. Blood pressure is read using the word "over," as "120 over 80" or "135 over 85."

<table>
<thead>
<tr>
<th>Considered</th>
<th>Systolic</th>
<th>Diastolic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal</td>
<td>80-119</td>
<td>50-79</td>
</tr>
<tr>
<td>Normal</td>
<td>120-129</td>
<td>80-84</td>
</tr>
<tr>
<td>High-Normal</td>
<td>130-139</td>
<td>85-89</td>
</tr>
<tr>
<td>High – Stage 1</td>
<td>140-159</td>
<td>90-99</td>
</tr>
<tr>
<td>High – Stage 2</td>
<td>160-179</td>
<td>100-109</td>
</tr>
<tr>
<td>High – Stage 3</td>
<td>180-209</td>
<td>110-119</td>
</tr>
<tr>
<td>High – Stage 4</td>
<td>210 +</td>
<td>120 +</td>
</tr>
</tbody>
</table>

Body mass index

What it is

Many physicians use a formula called the body mass index, or BMI, to assess a person’s body weight relative to how tall they are. It highly correlates with the amount of body fat in most people and can give a good indication as to who is at risk for weight-influenced diseases and conditions.

Why it's important

By now, we all know that obesity and heart disease is an epidemic in America. Obesity, simply, is an excess of body fat. This excess body fat puts you at risk for a host of problems, including heart attack, stroke, high blood pressure and diabetes. In addition to harming the heart and blood vessel system, obesity contributes to the formation of gallstones and worsening degenerative joint diseases like arthritis. Obesity is mainly caused by taking in too many calories and not getting enough exercise.
The numbers

To calculate BMI, take your weight in pounds and multiply it by 705. Divide that number by your height in inches, then divide again by height in inches. The resulting number is your BMI.

For a 135-pound woman who is 66 inches tall (5 feet, 6 inches), the calculation would be:

\[(\text{Weight in lbs.}) \times 705 = 95,175\]
\[95,175 \div 66 = 1,442\]
\[1,442 \div 66 = 21.8\]

This woman's BMI is 21.8.

Compare your number with the following:

Underweight: Less than 18.5
Healthy: 18.5 to 24.9
Overweight: 25 to 30
Obese: 30 or greater
Extremely obese: 40 or greater

How to lower your BMI

Since you can’t do much about your height, the only way to lower your BMI is to lose weight. For most people, that means you must bum more calories than you take in. Exercise is important, because it not only affects your BMI, but can lessen your risk for many other diseases and conditions.

Concentrate on eating fresh fruits and vegetables, whole grains, lean meats and low-fat dairy products. Try to accumulate at least 30 minutes of activity each day. If you want help losing weight, look for a respected program that emphasizes slow weight loss - no more than 2 pounds per week.

Cholesterol

What it is

Cholesterol is a waxy substance that is produced by the liver. It's needed to insulate nerves and make cell membranes. And it aids in the production of some hormones. Since the body is usually able to make as much as it needs, extra
cholesterol in the form of animal products (meats, poultry, fish and dairy products) can be too much.

**Why it's important**

If you eat too much dietary cholesterol, it can form hard, thick deposits on artery walls called plaque. This build-up causes arteries to be thicker and less flexible, and can slow down or even stop blood flow to the heart.

This can result in a heart attack. In this way, high cholesterol is a leading risk factor for heart disease.

High cholesterol is also believed to be a risk factor for stroke, or brain attack. If a blood vessel to the brain is constricted by plaque. The brain is deprived of oxygen. This can result in disability or death.

**How to Improve Your Cholesterol Levels**

Your risk for developing heart disease drops 2 to 3 percent for each percent you lower your cholesterol. To help keep your cholesterol levels in the normal ranges and lower your risk for heart attack and stroke, follow a healthy diet that includes fruits and vegetables, cereal, rice, pasta, lean meats, poultry without skin, low-fat dairy products, lean fish, shellfish, beans and peas. Avoid foods high in saturated fat and cholesterol, such as whole milk, cream, ice cream, butter, egg yolks, cheese, bakery goods, palm oil, kernel oil, liver, sweetbreads, kidney, sausage, bologna, salami, hot dogs, duck, goose, margarine and lard and fried foods.

To improve your HDL level, quit smoking. Lose weight if you need to. And exercise.

"Low levels of HDL is especially a problem for men. It's often not a problem in women who are premenopausal, because estrogen has protective effects," says Wilson. "But one of the most important factors is exercise, and it has to be cardiovascular exercise - aerobic exercise. Exercise has been shown to improve HDL levels. We suggest getting your heart rate up to its maximum for 30 to 40 minutes, at least three days a week."

To find your maximum heart rate, subtract your age from 220. Multiply this number by .6 to find your lower maximum and by .8 to find your upper maximum. Keep your heart rate between these numbers for at least 30 minutes.

Exercise is an important factor for controlling most high cholesterol levels. Lack of physical activity is now clearly shown to be a risk factor for heart disease, says the American Heart Association. The organization suggests you accumulate at least 30 minutes of cardiovascular activity, such as brisk walking, jogging, cycling or in-line skating, most days of the week.

To improve high levels of triglycerides, you can take several steps,
including limiting alcohol and losing weight if you need to. If you have diabetes, keep your blood sugars in the ranges suggested by your doctor. Cutting down on the amount of sugar and refined starches in your diet can help improve triglycerides, too.

Get enough fiber. Soluble fiber (found in oats) binds to cholesterol in your gut, sweeping it out of the body. But we eat about half the amount of fiber we should get on a daily basis. Instead, aim for 25 to 30 grams each day. Fiber is found in fresh fruits (apples, oranges, grapefruit), vegetables (brussel sprouts, broccoli, spinach), grains (whole wheat bread, oatmeal, brown rice) and legumes (navy beans, kidney beans).

If after all of these efforts, your cholesterol is still high, there are medications doctors can prescribe to lower your cholesterol. "But we really try to stress conservative measures, since most of the medications that are effective against high triglycerides and cholesterol are metabolized through the liver and are thus very hard on that organ," says Wilson. "That's why we need to monitor liver function tests every six months for patients on these medications."

For more information

* American Heart Association, (800) 242-8721.
* American Lung Association, (800) LUNG-USA.

The numbers

Several different numbers from a blood test explain your cholesterol level and risk. You may be told to fast before having blood drawn for some of these tests, as eating or drinking anything for 8-12 hours before your test can give an inaccurate number.

Total blood cholesterol is an overview of all the cholesterol in your body.

Desirable: Less than 200 milligrams per deciliter of blood

Borderline high: 200 to 239 mg/dl

High risk: 240 mg/dl and over

To devise a plan to raise or lower your risk for heart attack and stroke, it's important to know where you stand for each particular kind of cholesterol.

HDL cholesterol stands for high-density lipoprotein. HDL is considered the good cholesterol because research reveals it seems to protect you from a heart attack. So the higher the HDL level, the better.

High risk: Less than 35 mg/dL
Normal: Between 35 and 60 mg/dL

Desirable: More than 60 mg/dL

LDL cholesterol stands for low-density lipoprotein, the main carrier of harmful cholesterol in your blood. High LDL means you are at higher risk for heart disease. (Medical experts prefer that patients with heart disease have levels less than 100 mg/dl.)

Desirable: Less than 130 mg/dl

Borderline high: 130 to 159 mg/dl

High: 160 mg/dl or higher

Triglycerides are another kind of blood fat. A high level of this fat, especially in conjunction with a low level of HDL, is another warning sign of high risk for heart disease and heart attack.

Desirable: Less than 160

High: More than 160

Dr. Karen Wilson adds that there is one other ratio that's important. "One other thing we look at that is recommended by the AHA (American Heart Association) is the ratio of total cholesterol to HDL. That should be less than four, and the lower the better."

So if your total cholesterol is 212 (considered borderline high) but your HDL is 60, your ratio is 3.5 - meaning that your risk for heart disease is fairly low. But if your total cholesterol is 195 - considered normal – and your HDL is on the low end at 35, your ratio is 5.5 and your risk is higher.

**Glucose**

**What it is**

Glucose is the sugar your body needs for energy. It is taken from the food you eat and carried in the bloodstream to the cells, where it is used for energy. But glucose can't get to the cells without the help of the hormone insulin, which acts on the cells to help them extract glucose from the blood.

**Why it's important**

If there is not enough insulin in your system, the glucose in your bloodstream cannot be used by the cells. High blood sugar levels indicate diabetes.

Undiagnosed diabetes can do long-term damage to many of your organs.
Complications of high blood sugar that is not controlled properly include nerve damage, kidney failure and blindness.

**The numbers**

Doctors can use several different types of diagnostic tests to check blood sugar levels and diagnose diabetes.

* Fasting plasma glucose test

This requires you to fast overnight, or for at least eight hours. A small blood sample is drawn, and the lab analyzes it for glucose levels.

- Normal: Less than 110 milligrams per deciliter (mg/dl).
- Diabetes: More than 126 mg/dL on two or more tests on different days.
- Repeat test: Between 110 mg/dL and 126 mg/dL.

* Random plasma glucose test

This is sometimes used if symptoms of diabetes are present, such as extreme thirst, fatigue, excessive urination, hunger and weight loss. For this test, the doctor takes a random blood sample and does not require you to fast. However, this test must be reconfirmed with a second test at another time.

- Diabetes suspected: 200 mg/dL or higher.

* Oral glucose tolerance test

For this test, you must fast for eight to 16 hours. At the lab or doctor’s office, your fasting glucose will be tested. Then you drink a sweet-tasting liquid containing glucose. More blood samples are taken after you drink the liquid to measure your blood sugar levels.

The glucose levels normally rise and then fall quickly. In someone with diabetes, glucose levels rise higher than normal and don't come down as fast. Glucose tolerance tests may lead to one of the following diagnoses:

You have a normal response when the two-hour glucose level is less than 140 mg/dl, and all values between zero and two hours are less than 200 mg/dl.

You have impaired glucose tolerance when the fasting plasma glucose is less than 126 mg/dl, and the two-hour glucose level is between 140 and 199 mg/dl.

You have diabetes when two tests done on different days show that
blood glucose levels are abnormally high.

You have gestational diabetes when you are pregnant and have any two of the following: a fasting plasma glucose of more than 95 mg/dl, a one-hour glucose level of more than 180 mg/dl, a two-hour glucose level of more than 155 mg/dl, or a three-hour glucose level of more than 140 mg/dl.

How to improve your numbers

If you have been diagnosed with Type 2 diabetes, your doctor may suggest you lose weight. Weight loss lowers insulin resistance and helps the insulin produced by your body be more efficient at lowering blood glucose levels. If you take oral diabetes medications, you may be able to lower your dose or stop these medications altogether. Weight loss also helps lower cholesterol and blood pressure, both of which are risk factors for heart disease - and people with diabetes are twice as likely to get heart disease.

If you are diagnosed with diabetes, it is important to keep your blood sugar in the normal ranges as much of the time as possible. You can do this by following the eating plan your doctor suggests, getting exercise and monitoring your blood sugar levels daily to check your own progress.

For more information

* American Diabetes Association, (800) 342-2383.
* Juvenile Diabetes Foundation International, (800) JDF-CURE.

Spotlight on exercise

Looks like there is no way around it: Exercise keeps coming up as a way to prevent disease, lower risk factors, stay healthy and improve chronic conditions.

Up to 250,000 deaths per year in the United States - about 12 percent of all deaths - are attributed to a lack of regular physical activity, says the American Heart Association. Surveys show that 24 percent of Americans age 18 or older are not active at all. About 54 percent of adults get some exercise, but they don’t do it regularly or intensely enough to protect their hearts. Only 22 percent of American adults get enough leisure time exercise to achieve cardiovascular fitness.

"Exercise is something we always discuss and encourage, regardless of a person's test results or risk factors," says Dr. Donald K. Martin, a physician with St. Joseph Mercy Health System in Ypsilanti. "Exercise can reduce risk factors for so many conditions and diseases, and besides, it just feels good."

Special to The Detroit News, October 24, 2000, p. 8F. Reprinted with permission.
Contrary to what you might think, any activity is better than none. Sure, you’ll reap the most benefits when you participate in physical activity on a regular basis, but even low-to-moderate intensity activities, when done 30 minutes a day, can bring benefits.

Pleasure walking, climbing stairs, gardening, yard work, moderate-to-heavy housework, dancing and home exercise all count. More vigorous aerobic activities, such as brisk walking, running, swimming, bicycling, roller skating and jumping rope - done three or four times a week for 30-60 minutes - are best for improving the fitness of the heart and lungs.

For more information:

American Obesity Association, (800) 98-0BESE www.asbg.org

Weight Watchers International, (800) 3-FLORINE www.weight-watchers.com

American Dietetic Association, (800) 366-1655 www.eatright.org
Making sense of risk information on the web
Don't forget the basics

By Steven Woloshin, Lisa M. Schwartz & Andrew Ellner

Web based risk calculators are among the newest information resources available to people who want to understand the health risks they face. The advantage of these calculators is their ability to generate tailored risk information based on personal factors. But their usefulness depends on their accuracy and whether they are complete or balanced. To focus on the second issue, we present a hypothetical case history highlighting some elements of good (and not so good) risk communication.

The case: Mr. Jones is a 55 year old white man worried about prostate cancer after reading about a politician who had recently been diagnosed with the disease. His first search effort—using the Google search engine to look for "prostate cancer and risk calculator" yields 8410 hits. The first hit (www.yourcancerrisk.harvard.edu) seems perfect. This asks him questions about himself and, based on his age, ethnic group, family history, height, vasectomy history (he had one), and dietary habits (he eats 5 servings of food with animal fat a day and 5 servings of tomato based foods a week), tells him his risk is above average. He is now even more worried and calls his doctor.

Mr. Jones's doctor explains that three things are missing in this risk assessment: clarity about the risk, context, and an acknowledgment of uncertainty.

Clarity

Clarity means knowing what specific risk is under consideration (is this about getting or dying of the disease?), a number (the probability), and the time period associated with that number. Just being told that his risk is above average does not tell Mr. Jones the chance that he will get or die of prostate cancer in some defined time frame.

A limited number of calculators are available that can generate quantitative risk estimates for various diseases such as breast cancer in the next five years,¹ lung cancer in the next 10 years,² or the combined chance of myocardial infarction or death over 10 years.³ Most, however, calculate only the chance of developing a specific disease, not the chance of dying from it. The US federal government’s surveillance, epidemiology, and end results (SEER, http://seer.cancer.gov/) site provides look-up tables and an interactive calculator for estimating the risk of both getting and dying of most cancers.⁴ Its disadvantage is that the output can be tailored only to age, sex, and race. Its advantages are the broad array of cancers...
included and flexibility in specifying the time frame. Together Mr. Jones and his
doctor learn that over the next 10 years a 55 year old white American man's
chance of getting prostate cancer is about 40 in 1000 whereas his chance of dying
of it is 2 in 1000.

**Context**

Nevertheless, even with the clear statement of risk, something is missing—is a 2
in 1000 chance of dying over 10 years a big or a small risk? Mr. Jones needs a
context—for example, how his risk of prostate cancer compares with that of the
average person; or how his chance of dying of prostate cancer compares with his
chance of dying of other cancers. He can get some context simply by comparing
his chance of getting prostate cancer with his chance of dying of it: from this he
learns that prostate cancer is not uniformly fatal since so many more men get it
than die of it.

He can use the SEER site to get more context by calculating his risk of other
cancers. Even more helpful would be to have data on common causes of death
and death in general. This sort of benchmark information is available in the form
of risk charts. These charts make it easy for people to compare their chance of
dying of various causes and all causes. From these Mr. Jones sees that the 2 in
1000 risk of dying of prostate cancer is lower than his chance of dying of colon
cancer (4 in 1000) or heart disease (51 in 1000 if he is a smoker, 20 in 1000 if he
has never smoked) in the same time frame and much less than his chance of
dying of anything in that time (217 in 1000 if he smokes and 93 in 1000 if he has
never smoked).

**Uncertainty**

Mr. Jones's doctor also points out the third problem: Jones has not been given
any sense of the uncertainty inherent in risk predictions. To the extent that a
calculator tailors predictions, it is important to know something about the
strength of evidence behind the factors used in generating risk estimates. Age, for
example, has been consistently shown to be an important risk factor for prostate
cancer, whereas height, diet, and vasectomies have not—yet these factors were
included in the risk calculator used by Mr. Jones.

Unfortunately there is no simple way to judge the quality of risk information.
Moreover, Mr. Jones, like many people, has had little experience of thinking
about risk, let alone quantifying it. A new resource—a tutorial on the BMJ
Knowledge BestTreatments website—is now available to help patients
understand where numbers on risk come from (medical studies) and how to
interpret them. The tutorial helps people conceptualise the probabilistic aspects
of risk. It also explains the importance of how messages are presented (for
example, a drug reducing someone's risk of disease from 2% to 1% can be said to
reduce their risk by 1% or by half). Finally, it suggests ways for people to think about medical risks in context by comparing them with non-medical risks.

New communication technology now gives the public greater access to health information than ever before. But no matter how sophisticated the source, it takes more than good data to make useful information. We believe that risk presentations that follow the basic principles summarised in the box would help patients find meaningful answers to the questions they are asking.

**Elements of risk and selected sources**

**Clarity about the risk**

What risk is being discussed? What are the numbers? What is the time period? How dangerous is the disease?

**Sources:**

*Getting and dying from most cancers at specified times* (National Cancer Institute's surveillance, epidemiology and end results website, [http://seer.cancer.gov/query/](http://seer.cancer.gov/query/))


**Get context**

How does my risk compare to risk of an average person? similar disease? leading causes of death? all-cause mortality?

**Sources:**

*Dying from various and all causes in the next 10 years* (risk charts [http://jncicancerspectrum.oupjournals.org/cgi/content/full/jnci;94/11/799](http://jncicancerspectrum.oupjournals.org/cgi/content/full/jnci;94/11/799))

**Acknowledge uncertainty**
Has the risk factor been shown to change risk (is it really a risk factor)? Does the risk factor really cause disease? How precise is the risk estimate?

No single data source

See BMJ’s BestTreatments website: How to use research to support your treatment decisions
https://www.besttreatments.org/risk

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References


Skills for Chronic Disease Management
Session Two Evaluation Form

Please complete the following evaluation and turn it in before you leave today.

1. What was the most valuable thing that you gained from today’s session? (For example, an insight, a practical idea, specific information, etc.)

2. How would you improve this session?
Lesson 1A: (ESOL) Health Screening Tests

Prevention and Screening Tasks Addressed in this Lesson

• Gain familiarity with the variety and purposes of health screening tests
• Identify questions about health screening tests to ask a doctor

Skills Focus

• Students will learn new vocabulary related to health screening tests.
• Students will develop oral communication skills for asking their doctors questions about health screening tests.
• Students will practice skills needed to read informational flyers.
• [optional] Students will learn and practice the initial consonant cluster ‘scr’ and long e consonant blend ‘ee.’

ESOL Level
ESOL Literacy to Beginning ESOL

Time
Approximately 4 hours (or 2-3 class sessions)

Materials
Student handouts

Key Vocabulary
screening test
high blood pressure
cholesterol
vision
hearing

Purpose
This lesson is designed to introduce the concept of “health screening tests” to low-level ESOL students. The focus on screening tests is the basis for a series of activities that include brainstorming, vocabulary practice, phonics instruction, and reading of various text types (informational flyer, chart) similar to those encountered in everyday life. The activities in this lesson are designed to give beginning ESOL readers a variety of opportunities to share what they know and want to know about health screening tests.

Steps

1. Preparation. Copy and distribute the packet of student handouts (contains Tasks #1 – 8). Teaching notes for each task are provided below*

2. Task #1. Brainstorm. Ask students to look at the picture in the handout of the doctor giving an eye exam. Ask, “What do you see?” Give the students time to think individually and then talk about what they see in the picture in small groups of 2-3. Ask students to share their ideas. Write all ideas on the board.

To facilitate discussion, the teacher may ask some guiding questions. For example:

• Who is this person? (Point to the doctor, point to the patient, one at a time.)

• Where are these people?

• What is the doctor doing?

• What do you think the doctor is saying?

• What is this? (Point to the eye chart.) What is it for?

• Do you think the patient is sick?

*You may decide not to carry out Task 3 with your students. If so, remember to omit the relevant pages from the packet you give to students.
The students may say, “The doctor is looking in the man’s eyes,” or, “The doctor is checking the man’s eyes.” When these ideas are mentioned, be sure to repeat the ideas to the class.

After students have shared their ideas about the picture, explain that this is a *vision screening test*. Write “Vision Screening Test” in large letters on the board and tell students, “The doctor is doing a vision screening test.”

Underline or highlight in different-colored chalk the word “screening” on the board. Be sure to provide students with an opportunity to share their own prior experiences with vision screening tests (e.g., those who are parents may have children who get screened at school).

3. **Task #2. Vocabulary and spelling practice.** Review any new words and phrases that were mentioned during the initial brainstorm about the picture. Say the new word and then ask students to repeat after you. Task #2 provides a list of 5 new words but there may be more words based on the students’ brainstorm in Task #1. Check the students’ understanding of the words by asking them to match the words with parts of the picture or to give a short definition. Students from the same first language backgrounds may also want to check in with each other to get translations of complex words such as “vision” or “screening.”

Ask students to practice writing the new words. More advanced students in the class can be asked to generate original sentences using the new words while the other students are working on their spelling.

4. **(Optional) Task #3. Phonics.** The exercises included in Task #3 provide students with some phonics practice based on the spelling of “screening.” This phonics instruction can help strengthen ESL literacy students’ ability to recognize the word in texts, such as school flyers about vision screening tests or advertisements about free health screening tests. Note, however, that the exercises in Task #3 may not be appropriate for classrooms that do not normally include instruction in phonics/spelling.

Before passing out the two Task #3 phonics worksheets to the students, point to the word “screening” on the board. Ask the students, “What sound do you hear at the beginning of *screening*?” Pause for a response. Be sure to repeat the word several times, demonstrating the initial consonant cluster *scr-* for the students. Ask, “Do you know other words that start with the *scr-* sound?” You may wish to point out that students can make the *scr-* sound by adding *s* to words that start with *cr-* e.g., *s + cream = scream* and *s + cram = scram*. Allow ample time for students to think and share their responses. Be sure to write student responses on the board.

Distribute the phonics worksheets and direct the students’ attention to the handout that features several *scr-* words. Read the words aloud and ask the students to repeat after you. Next, ask the students to work in pairs or small groups to match the *scr-*word with the right picture. Repeat this sequence for the words with the long *ee* sounds. The double vowel *ee* sound is likely to be more familiar to students so they may be able to work on their own for this worksheet. Encourage
students to add other words that contain the scr- or ee- sounds and to come up with their own sentences that make use of the new words.

5. **Task #4. Group Work.** Students work in groups of 3-4 people to talk about the kinds of screening tests they know about already. Students then come together as a whole class and combine their lists. Because of the complexity of this topic, teachers may want to organize the students by L1 background to facilitate the sharing of ideas. Students should also be encouraged to use pictures to describe what they know about screening tests (e.g., draw an ear to indicate that they know about hearing screening tests). The official name of the screening test is not required for this lesson. This task serves as a mini-needs analysis. The information the students generate in this task will give the teacher a working idea of the breadth of students’ knowledge base about screening tests.

6. **Task #5. Read an informational flyer about screening tests.** Ask the students to look at the TASK #5 handout, which features an informational flyer about screening tests. Ask the students, “What do you see?” Allow time for the students to study the flyer and talk about it with their classmates. Invite students to talk about what the flyer is about. Ask, “Have you seen one like this before? Where? Did you read the information? Was it helpful?” Break the class into small groups of 3-4 and ask them to answer the comprehension questions that follow the flyer. More advanced students can help beginning ESL students with reading the questions. The teacher can check the students’ understanding of the three types of screening tests by asking them to match the name of the screening test with the appropriate picture on the flyer.

7. **Task #6. Read about Marco.** This short passage talks about the health and screening behaviors of one person. The teacher may wish to practice reading the text in different ways: choral reading (reading the text aloud together); echo reading (the teacher reads a line and all the students repeat the line back to the teacher); peer reading (students work in pairs to take turns reading the text). Also allow some time for students to read quietly on their own. Students can work in groups to answer the comprehension questions. Ask the students to present their answers to the whole class. Note: This passage makes use of some long-e and ee-words, so the teacher may wish to pull out these words for additional phonics instruction.

8. **Task #7. About you.** The questions in Task #7 are directed at the individual student. Allow time for the student to look over the answer and generate a response. Be sure to circulate to answer any questions students may have. Encourage students to write their answers in complete sentences. If time permits, students can work in pairs and interview one another using the questions in Task #7.

9. **Task #8. In-class survey.** Task #8 builds on the kinds of questions that were asked in Task #7, except now the students will circulate and ask at least three of their classmates for information about some of the behaviors first mentioned in the reading about Marco. Note to teacher: Like Task #4, Task #8 serves as a mini-needs analysis. The information the students generate in this task will give
the teacher a working idea of the different concerns and questions that the
students have about health screening tests. The teacher can address these
concerns/ questions by developing one or more of the follow-up activities listed
below.

Follow-up activities.

A. **Interactive word wall.** Create a word wall with the students. A word wall is an
organized collection of words that is displayed in large print on a wall in the
classroom. The wall is meant to promote active word learning - in this case, the
learning of new words related to disease prevention and screening activities. Each
week, add 4-5 new words organized by first letter to the wall (e.g., V words: vision,
vaccine). Avoid adding too many new words each week. Students can vote to decide
which words should get added to the wall. Ideally, use a word processor to type up the
words, and ensure the words are correctly spelled and legible. Verdana font (sans
serif) at the 150-point size can be useful for this purpose.

B. **Survey.** Have students identify 2-3 questions about high blood pressure and/or blood
pressure screening tests. They can survey family, friends, and health professionals
they may know. They can summarize findings and report back to the class.

C. **Guest speaker in class.** Invite a health professional to class to meet with the students
and answer their questions about blood pressure.

D. **Field trip.** Arrange a field trip for the students to visit a local community health
center that offers information about high blood pressure and/or health screening tests.

E. **Class project on common screening tests.** Students can create a resource guide on
common screening tests to share with other adult ESOL students. The guide can
explain in English and in translation the different kinds of screening tests commonly
offered to patients.

**Adaptations for ABE/GED settings**

Advanced ESL or ABE students can use the picture prompt to generate their own
individual stories about health screening experiences. The students can peer-edit and
revise their stories. Students can also work towards publishing their stories in a class
anthology.

Students can work together to write a letter to a local patient education center or health
organization. They can request health-related materials or a guest speaker to come speak
to their class.

Students can research their own questions about health screening tests or high blood
pressure on the Internet. Students can then prepare a presentation to share their findings
with the class.
Technology Tips
The following Web sites provide information about some common screening tests.

✔ Your Disease Risk
This is an educational Web site created by the Harvard Center for Cancer Prevention that provides information about major diseases. It is an interactive tool that enables you to estimate your risk for certain diseases, and suggests strategies for lowering your risk.

Particularly useful for this lesson is the definition of a “screening test” provided on this Web site: www.yourdiseaserisk.harvard.edu/english

What is a Screening Test?
Screening tests are important medical tests that can help protect against certain diseases. Some screening tests find diseases early when they are most treatable, while others can actually play a role in stopping diseases before they start. To help protect against cancer, heart disease, stroke, diabetes, and osteoporosis, these conditions should be tested for regularly:
- Colon and rectal cancer
- Breast cancer
- Cervical cancer
- High blood pressure
- High blood sugar
- Unhealthy blood cholesterol levels
- Overweight/Obesity
- Low bone density

Tests also exist for prostate cancer. Though, it’s currently not clear that the benefits of such tests outweigh their risks.

Ask a doctor which screening tests are right for you and how often you should have them. Which tests you should have and how often you should have them depends on your age, sex, medical history, family history, and lifestyle choices.†

✔ American Cancer Society
Every year the American Cancer Society (ACS) publishes its recommendations for early cancer detection, including updated guidelines. The most current guidelines are found at: http://caonline.amcancersoc.org/cgi/content/full/56/1/11

† From Your Disease Risk, 2004. www.yourdiseaserisk.harvard.edu/english
✔ Lifetime TV Network

The Lifetime TV network Web site features several links to health resources for women. One useful tool is a series of quizzes that ask users what they know about their own health care and what they do to stay healthy. Follow this link: http://www.lifetimety.com/reallife/health/quiz/index.html (accessed January 11, 2006) to view quizzes such as “Test your Breast Cancer IQ” or “Are you taking care of yourself?” These quizzes provide an effective way of introducing new vocabulary around preventive health care and screening activities. The quizzes also provide teachers with a way to learn about their students’ concerns and questions about preventive health care.
TASK #1

What do you see?
TASK #2

New words

1. doctor

2. patient

3. eye chart

4. check

5. vision screening test

Write the new words.

doctor

patient

eye chart

check

vision screening test
TASK #3

Learn more words that start with /scr/. Listen and repeat.

<table>
<thead>
<tr>
<th>screw</th>
<th>screwdriver</th>
<th>scroll</th>
<th>scrub</th>
</tr>
</thead>
<tbody>
<tr>
<td>scream</td>
<td>scratch</td>
<td>script</td>
<td></td>
</tr>
</tbody>
</table>

Write.

1. __________
2. __________
3. __________
4. __________
5. __________
6. __________
7. __________

My name is Jose.
Learn more words that have /ee/. Listen and repeat.

<table>
<thead>
<tr>
<th>bee</th>
<th>tree</th>
<th>teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>beet</td>
<td>sheet</td>
<td>feet</td>
</tr>
<tr>
<td>sleep</td>
<td>sweets</td>
<td></td>
</tr>
</tbody>
</table>

Write.

1. _______________
2. _______________
3. _______________
4. _______________
5. _______________
6. _______________
7. _______________
8. _______________
TASK #4

*Group Work*

Work in groups of 3 or 4 people. What health screening tests do you know about?

Make a list. If you do not know the English words, use your first language or draw pictures.

Share your list with another group. Make a class list of screening tests.
TASK #5

Read. What do you see?

HEALTH SCREENING TESTS

- blood pressure
- cholesterol
- hearing and vision

Wednesdays
9:00 a.m. - 1:00 p.m.

East Lake Health Center
123 Main Street
Parkville, CA
456-3333
Read. Write.

1. What health screening tests can you get?

2. On what day can you get the screening tests?

3. When will the screening tests start and end?

4. What is the name of the health center?

5. Where is the center?

6. Why is this paper important?
TASK #6

1. This is Marco.
2. He wants to be healthy.
3. He eats lean meat.
4. He eats a lot of green vegetables.
5. He does not eat a lot of sweets.
6. He likes to walk and play basketball.
7. Marco goes to the dentist. The dentist checks his teeth and gums.
8. Marco goes to the doctor. The doctor talks about health screening tests.
9. Marco says, “Everyone needs screening tests.”
10. I had some tests.
11. My doctor told me I am in good health.
12. I am happy. I have good peace of mind.
Read. Write.

1. What does Marco want?

2. What does Marco eat?

3. What does Marco do for exercise?

4. When does Marco go to the dentist?

5. When does Marco go to his doctor?

6. What do Marco and his doctor talk about?

7. Why does Marco have good peace of mind?
TASK #7

What about you? Write.

1. What kinds of food do you eat?
2. What exercise do you do?
3. Do you go to the dentist?
4. Do you talk to your doctor about health screening tests?
5. Why are health screening tests important?
6. “I have good peace of mind.” How do you say this in your native language?
**TASK #8**

Ask your classmates.

<table>
<thead>
<tr>
<th>You can say...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you like to exercise?</td>
</tr>
<tr>
<td>• Do you talk to a doctor about health screenings?</td>
</tr>
<tr>
<td>• Do you want to learn more about health screenings?</td>
</tr>
</tbody>
</table>

Ask 3 classmates. Write yes or no.

<table>
<thead>
<tr>
<th>Classmates</th>
<th>Likes to exercise</th>
<th>Talks to a doctor about health screenings</th>
<th>Wants to learn more about health screenings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
## Lesson 1B: (ESOL) Talking About Health Screening Tests

### Prevention and Screening Tasks Addressed in this Lesson
- Understand the purpose of health screening tests

### Skills Focus
- Students will use oral language skills and their own ideas to generate a story about a screening test. This story will, in turn, be used to practice literacy skills.

### ESOL Level
ESOL Literacy to Beginning ESOL

### Time
Approximately 2 hours

### Materials
- Picture prompts (see lesson handouts)
- Whiteboard or larger poster paper
- Markers

### Key Vocabulary
- health screening tests
- blood pressure
- doctor
- nurse
- patient

### Purpose
The Language Experience Approach (LEA) is an instructional tool that develops students’ literacy skills by prompting the students to generate a story, to transcribe this story, and then to use the text as reading material to practice their reading skills. LEA enables the students to connect their oral communication skills with their reading/writing skills. LEA also provides a meaningful opportunity for students to collaborate with one another and learn about others’ experiences with health screening tests. In this LEA lesson, students are asked to think about a story in response to a picture prompt featuring a doctor taking a patient’s blood pressure. This picture is meant to prompt students to talk about health screening tests, such as blood pressure checks, and discuss any barriers or concerns they have about screening tests.

### Teaching notes based on information in:

### Steps
1. Distribute copies of the picture prompt (Picture 1) to the students.
2. Ask the students, “What do you see?”
3. Give students time to think individually and then to discuss the picture in small groups. The teacher can ask questions to elicit details or ideas about the story. Some possible questions include:
• Who is this person? (Point to the doctor, patient, nurse, one at a time.)
• Where are the people?
• What is the doctor doing?
• What is this? (Point to the blood pressure cuff.) What is it for?
• What do you think the doctor is saying?
• Why do you think the patient is having her blood pressure checked?

**Note to teacher about the medical content of high blood pressure issues.** Students may raise a number of questions as they consider the picture. It may be helpful to have a basic understanding of blood pressure (see Technology Tips for links to informative Web sites on screening tests and high blood pressure). However, you should not feel compelled to be an expert in hypertension in order to use this lesson. You may want to identify the questions students have about blood pressure and invite an expert to the class. You might want to encourage students to look up information or to ask a doctor or nurse.

You might anticipate some of the following questions: *What is blood pressure? What is high blood pressure (i.e., hypertension)? What exactly does the machine - the blood pressure cuff - measure? What do the numbers mean?*

4. After students have had a chance to talk about what is going on in the picture, ask the students to think of a story about the picture. You may want to ask the students to think about the first time they had their blood pressure measured. Tell the students that you will write down the story.

5. **Some tips for transcribing the students’ story:**
   - Write clearly and in large print (e.g., on the board, poster paper or Overhead Transparency) so that everyone can see.
   - As students add to the story, be sure to re-read from the beginning to help beginning ESL readers remember what has already been written.
   - Avoid editing or redirecting the students’ story line while the story is being generated. Do, however, encourage students to edit and revise as they go along.
   - Note that beginning ESL students may only generate a short amount of text (1-2 sentences). This is appropriate. The goal is to get the students’ ideas on paper without concern for the amount of text generated.

6. **Reading the story.** After the students have generated the story, the teacher or a student volunteer should read the whole text aloud. You may, instead, consider different options: choral reading (reading the text aloud together), echo reading (the teacher reads a line and all the students repeat the line back to the teacher), peer reading (students work in pairs to take turns reading the text). Also allow some time for students to read on their own. You may want to generate a list of new vocabulary words that are part of the story.
7. **Going beyond the story.** You may consider several options for using the story to explore students’ concerns about health screening tests and to further develop their language skills. Here are some possible directions for beginning learners:

- **Reading/writing skills:** Students can copy the text to practice their handwriting skills as well as reinforce their familiarity with the text.

- **Vocabulary work:** Beginning students can alphabetize the list of new vocabulary words drawn from the text. More advanced students can generate new sentences making use of the new words.

- **Cloze exercise:** Give the students a version of the text with words missing and ask them to fill in the blanks. You can systematically delete every seventh word or you can delete some key words. You then provide a selection of words that students would draw from to correctly complete the sentences.

- **Phonics work:** Select a few words to work on sound-symbol correspondence. For example, you can focus on the word “screening” to practice the consonant blend **scr** and the long e-sound in **ee**. See Lesson 2 in the lesson packet for Disease Prevention & Screening for some activities that reinforce **scr** and **ee** patterns.

- **Syllables:** Ask students to find words in the story that have one syllable, two syllables, and so forth.

- **Listening dictation:** Dictate the story for the students to write. Beginning learners may need parts of the sentence provided to them.

- **Vocabulary and grammar:** Students can identify all the verbs (the “doing” words) in the text and other ones that are prompted by the photograph (e.g., talking, listening, watching, asking, checking, touching).

- **Phonics work:** Pick a sound that the class may have been focusing on recently (e.g., short e vowel). Have students listen to words the teacher pulls from the story. The students will repeat each word the teacher says and then say whether the sound is in the word or not. For example, if the target sound is short a vowel, you may provide examples (e.g., test, check) and non-examples (e.g., hand, talk).

9. After students have focused on these skill-building activities, you should provide them with an opportunity to practice reading the entire story. This helps the students appreciate the larger meaningful ‘whole’ that then frames the focus on the less contextualized skill-building exercises.

**Follow-up activities**

A. **LEA on immunization** - An additional photograph featuring a woman looking at an immunization chart is included at the end of this lesson. This is for those teachers who would like to use LEA again on a separate but related topic. Immunization is not a prevention activity that people do routinely, and it’s also not a screening test. Nonetheless, immunizations are viewed as essential in preventive medicine and can often be difficult to understand. The same instructions for using LEA presented in this lesson can be used with the immunization photograph.

B. **Needs assessment activity** - Refer to the needs assessment activity in Session One of
the Disease Prevention and Screening Study Circle. This needs assessment activity is designed to identify students’ concerns and questions about disease prevention and screening activities, and would build on the classroom discussions likely generated by this lesson.

C. **Survey** - Students identify 2-3 questions about high blood pressure and/or blood pressure screening tests. They survey family, friends, and health professionals they may know to try to gather more information about these topics and then report any findings back to class.

D. **Guest speaker in class** - Invite a health professional to class to meet with the students and answer their questions about blood pressure.

E. **Field trip** - Arrange a field trip for the students to visit a local community health center that distributes health information about high blood pressure and/or health screening tests.

**Adaptations for advanced ESL or ABE settings**

Advanced ESL or ABE students can use the picture prompt to generate their own individual stories about health screening experiences. The students can peer-edit and revise their stories. Students can also work towards publishing their stories in a class anthology.

Students can also work together to write a letter to a local patient education center or health organization. They can request health-related materials or a guest speaker to come speak to their class.

Students can research their own questions about health screening tests or high blood pressure on the Internet. Students can then prepare a presentation to share their findings with the class.

**Technology Tips**

✔ **Your Disease Risk**

[http://www.yourdiseaserisk.harvard.edu/english/](http://www.yourdiseaserisk.harvard.edu/english/)

This is an educational web site created by the Harvard Center for Cancer Prevention that provides information about major diseases. It is an interactive tool that enables you to estimate your risk for certain disease, and suggests strategies for lowering your risk. The website also provides some useful, reader-friendly information about high blood pressure:

“Blood pressure is the force created when the heart pumps blood. When a person has high blood pressure (hypertension), the heart has to pump harder and the arteries are under increased pressure, which can lead to injury of the artery walls, atherosclerosis, and coronary heart disease. High blood pressure is also associated with an increased risk of stroke and kidney damage. Some people are able to control their blood pressure with diet and exercise, while others need medication.” (Your Disease Risk, 2004)
Picture 1

© Jon Crispin (2005)
Picture 2
Lesson 2: (ESOL) Health Care Every Day, Every Month, Every Year

Prevention and Screening Tasks Addressed in this Lesson

- Become familiar with a range of routine health care activities
- Understand the names and purposes of common screening tests and examinations

Skills Focus

- Students will learn the names and purposes of common screening tests and examinations.
- Students will discuss routine tasks they do to take care of their health.
- Students will practice expressions for describing routine health care activities, including:
  - Use of simple present tense (e.g., Every day I take a vitamin.)
  - Use of adverbs and adverb phrases (e.g., usually, sometimes, every month, daily)
- Students will learn vocabulary for talking about charts and screening tests.
- Students will practice asking and answering questions.

ABE/ESOL Level

High beginning to intermediate ESOL

Time

3 hours

Materials

2 handouts

Key Vocabulary

screening test
routine
once a month (week, year)
every month (year, two years)

Purpose

This lesson is designed to introduce the idea of preventive care as part of what people do on a routine basis to take care of their health. This lesson is organized around two handouts. In Part One, students work in pairs to role-play, read, and discuss what people do every day, every month, and every year to take care of their health. These activities introduce students to the names of common screening tests and useful expressions for talking about screening tests and preventive activities. In Part Two, students do an “information gap activity” in pairs to learn the names and purposes of some common screening tests and routine checkups.

Steps

PART ONE

1. Preparation. Distribute a copy of Worksheet One, titled Pairwork: What do you do to take care of your health? Organize the students into pairs.

2. Pairwork. The Pairwork handout features five activities for the pairs to complete:
   - Role-play: This short conversation introduces the focus on activities that people do routinely to take care of their health—activities that they do every day, every month, every year. The role-play is meant to help students learn language for talking about screening tests and other routine checkups.

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1 Source: The structure of Worksheet One has been adapted from material in David Nunan’s Atlas 1: Learning-centered communication textbook (1995, Heinle & Heinle) series.
Note to instructor: Please note that this role play enables students to talk about one person’s screening behaviors. Neither the lesson nor the role play is intended to be used as medical advice. Some people will need to have screening tests more often or less often than others. Strongly emphasize to your students that they must talk to their doctors about what makes sense for their own health care.

- **Reading:** These two paragraphs focus on activities that people do routinely to take care of their health. One reading is about a woman named Carla. The second reading is about a man named Manny. These readings also introduce a few examples of screening tests and checkups. After students have had a chance to read the short passages, be sure to discuss what screening tests are. We offer this definition of screening tests from the Harvard Center for Cancer Prevention (see Technology Tips for link).

  Screening tests are important tests that can help protect us from diseases. Tests can help find diseases early, before the person gets really sick. Tests can also help stop diseases before they start.

- **Grammar:** The readings about Carla and Manny enable students to practice the simple present tense. Allow ample time for the students to do their own work and then check their answers with a partner.

- **Check your understanding:** This activity asks students to create their own questions about Carla and Manny. This activity enables students to check their understanding of the information presented in the short paragraphs.

- **Your turn:** This activity reinforces the idea that preventive care is a daily, on-going activity. Students do not need to write down the technical name for screening tests they know about or have had done. For example, they can write “breast check” instead of “mammogram.”

Once the pairs have completed all the activities on the Pairwork handout, you may wish to ask for volunteers to role-play the conversation for the whole class. Challenge the students to try to do the conversation without looking at their worksheets. Also, invite the students to share their ideas for things they do every day, every month, or every year to take care of their health.

Note to instructor: Take notes on the kinds of screening tests your students talk about, as well as the range of questions they raise. This information will help you decide on the focus of subsequent lessons.
PART TWO

3. **Information Gap Activity.** Organize the class into pairs. Students will become familiar with the names of some common screening tests, the purpose of the tests, and the recommended frequency and timing of such tests.

*Note to instructor:* Be sure to mention that this activity **only offers general guidelines.**
The information here does **not** substitute for a doctor’s advice about individual needs. This general information has been reviewed by a medical professional and reflects guidelines put forth by a U.S. government-run task force called the U.S. Preventive Services Task Force (USPSTF). Relevant USPSTF Web sites, as well as other related Web sites, are listed in the Technology Tips below.

Distribute the worksheet handout *Let’s Talk About Screening Tests.* This worksheet has two versions, one for Student A and one for Student B. Student A has information about screening tests that Student B does not, and vice versa. The complete instructor’s version is below. Both versions have complete information about high blood pressure (hypertension). You will be able to show students how to read the chart. Both versions have partial information about high cholesterol. Here too, you will be able to use this information to demonstrate how to ask and answer questions for the activity before the class breaks up into pairs.

### Let’s Talk About Screening Tests

#### Instructor’s Version

<table>
<thead>
<tr>
<th>Disease</th>
<th>Example of a screening test</th>
<th>Who should be tested?</th>
<th>How often?</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td>Blood pressure test</td>
<td>Men and women who are age 18 and older</td>
<td>Every 2 years</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>Blood test for cholesterol</td>
<td>Men and women who are age 20 and over.</td>
<td>Every 5 years</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>Mammogram (a special x-ray of the breast)</td>
<td>Women who are age 40 and older</td>
<td>Every year</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>Colonoscopy (a test that allows a doctor to examine the large intestine)</td>
<td>Men and women who are age 50 and over</td>
<td>Every 10 years</td>
</tr>
</tbody>
</table>

The information in this chart is based on guidelines provided by various medical organizations (please see Technology Tips for the recommended Web sites for current guidelines).
How to carry out the information gap activity:

a. Review vocabulary that students need as they complete the activity. Review the words in the header row of the chart, such as screening test (see definition above) and disease. We suggest explaining disease this way:

When a person has a disease, specific parts of the body are not working normally. People use different words to mean disease, such as condition, problem, or long-term illness.

b. Review basic question-answer routines such as, “What is the name of the test?” and, “The name of the test is...”. Students may also need some strategies for clarifying meaning, such as, “Can you say that again?” or, “How do you spell that?” Model how to ask and answer questions with the class by completing the second row on high cholesterol with the students. Ask a volunteer to ask a question about one of the empty boxes (e.g., “Who should get tested?”). Answer by saying “Okay. I look at my chart. It says ‘Men and women who are age 20 or older.’ So, this means that men and women who are age 20 or older should get tested.”

c. Teach the students how to read the chart. You may also need to teach chart vocabulary such as row, column, first row, last column. Next, review the information on high blood pressure in the first row.

d. Ask students to work with a partner. Remind the students that one partner is Student A and the other partner is Student B. Also remind them not to look at each others’ papers while doing the activity. Some students will share their papers with each other, especially if they are not used to information gap activities. Do not be overly concerned about whether students are “peeking.”

e. After students have completed their charts, ask volunteers to fill out a master chart posted on the board or on an Overhead Transparency. This will ensure that everyone has a complete chart and will give less proficient students an opportunity to hear the information again.

4. Whole class debrief. Ask students to talk about which of these screening tests they already know about. Ask for the names and associated diseases of other screening tests not on the chart. Students can add additional rows to their chart and write down this information. If you are not sure about the accuracy of the information the students generate, you can always propose a follow-up activity in which the students do their own “research” by talking to doctors or searching the links provided in Technology Tips.

Adapting the lesson for more advanced ESL learners

Ask the students to write a paragraph about their own routine health care activities. Students can also create and act out a role-play between Carla and her doctor or Manny and his doctor.
Follow-up activities

A. Interview. Ask students to talk to one family member or friend outside class about their screening experiences. The students can use the questions from the lesson activities in their interviews, such as: *What do you do every day to take care of your health? What do you every month? What do you do every year?* Students can also work together to think of new questions. Ask students to write down the person’s responses and present the information in class.

B. Survey project. Each student talks to 5-10 people outside class. Students ask the people what screening tests they know about. Students also ask the people what screening tests they have done on a regular basis. Students can also ask about problems the people have had getting screened. Students summarize their “findings” in sentences, such as:

> I talked to six people. Five people know about cholesterol screening. Only two people do a cholesterol screening test every year. Four people said the doctor didn’t tell them about the test.

Students can share their summaries in class. These summaries can help the teacher to identify areas on the topic of screening tests that the students want to learn more about.

Technology Tips

Here are some Web sites that provide information about common screening tests. The chart in this lesson represents an adaptation of the information from these Web sites.

- **American Cancer Society**
  
  Every year the American Cancer Society (ACS) publishes its recommendations for early cancer detection, including updated guidelines. The most current guidelines are found at:
  
  [http://caonline.amcancersoc.org/cgi/content/full/56/1/11](http://caonline.amcancersoc.org/cgi/content/full/56/1/11)

- **U.S. Preventive Services Task Force (USPSTF)**
  
  The U.S. Preventive Services Task Force (USPSTF) recommends screening mammography every 1-2 years for women aged 40 and older. The current recommendations are found at:
  
  [http://www.ahrq.gov/clinic/3rduspstf/breastcancer/brcanrr.htm](http://www.ahrq.gov/clinic/3rduspstf/breastcancer/brcanrr.htm)

  The USPSTF views colonoscopy as one screening option for colorectal cancer. The task force discusses various tests at: [http://www.ahrq.gov/clinic/uspstf/uspscolo.htm](http://www.ahrq.gov/clinic/uspstf/uspscolo.htm)

  The USPSTF recommends screening adults aged 18 and over for high blood pressure. See: [http://www.ahrq.gov/clinic/3rduspstf/highbloodsc/hibloodrr.htm](http://www.ahrq.gov/clinic/3rduspstf/highbloodsc/hibloodrr.htm)
National Heart, Lung and Blood Institute (NHLBI)

The National Heart, Lung and Blood Institute (NHLBI) provides recent guidelines on high blood pressure screening at:
http://www.nhlbi.nih.gov/guidelines/hypertension/jncintro.htm

The NHLBI also provides guidelines for screening for high blood cholesterol at:

Lifetime TV Network

The Lifetime TV network website features several links to health resources for women. One useful tool is a series of quizzes that ask the user what they know about their own health care and what they do to stay healthy.

Follow this link: http://www.lifetimetv.com/reallife/health/quiz/index.html (accessed January 11, 2006) to view quizzes such as “Test your Breast Cancer IQ” or “Are you taking care of yourself?” These quizzes provide an effective way of introducing new vocabulary around preventive health care and screening activities. The quizzes also provide teachers with a way to learn about their students’ concerns and questions about preventive health care.

Your Disease Risk

The Harvard Center for Cancer Prevention, based at the Harvard School of Public Health, has created a relatively easy to use online tool that enables the user to assess their risk of getting five of the most prevalent diseases in the U.S. Users can also get personalized tips for reducing their risk.

http://www.yourdiseaserisk.harvard.edu/
PAIRWORK: What do you do to take care of your health?

I. ROLE-PLAY. Practice this conversation with your partner.
   A: What do you do every day to take care of your health?
   B: I take a daily vitamin. I try not to eat a lot of fatty foods.
   A: What do you do every month?
   B: I check my weight.
   A: What about every year?
   B: I have an eye exam and a cholesterol screening test.

II. READ.
   What does Carla do?
   Every day Carla eats a good breakfast. Most days she tries to exercise for twenty minutes. Twice a year she goes to the dentist for a checkup. Every five years she has a blood pressure check. Every year she also has a mammogram.

   What does Manny do?
   Every day Manny wears sunscreen. Once a month he checks his skin for unusual moles. Most days he eats fruit, vegetables, and whole grains. Every year he has a prostate cancer screening test. Every few years he has a cholesterol screening test.
III. GRAMMAR. Read the paragraphs about Carla and Manny again. Some sentences have verb mistakes. Correct the mistakes.

**What does Carla do?**

Every day Carla *eats* a good breakfast. Most days she *exercises* for twenty minutes. Twice a year she *goes* to the dentist for a check-up. Every five years she *has* a blood pressure check. Every year she *also has* a mammogram.

**What does Manny do?**

Every day Manny *wears* sunscreen. Once a month he *checks* his skin for unusual moles. Most days he *eats* fruit, vegetables, and whole grains. Every year he *has* a prostate cancer screening test. Every few years he *has* a cholesterol screening test.

Check your answers with a partner.
IV. TALK ABOUT CARLA AND MANNY. Take turns asking and answering questions about Carla and Manny.

For example:

What does Carla do every day?

Every day she eats a good breakfast.

What does Manny do once a month?

Once a month he checks his skin for unusual moles.

V. ABOUT YOU. What do you do to take care of your health? Think and write.

<table>
<thead>
<tr>
<th>Every day</th>
<th>Every month</th>
<th>Every year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share your chart with a partner.
Let’s Talk About Screening Tests

**Student A**

Read the chart. When you see an empty box, ask your partner for help.

<table>
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<td></td>
<td>Colonoscopy (a test that allows a doctor to examine the large intestine)</td>
<td></td>
<td>Every 10 years</td>
</tr>
</tbody>
</table>
**Let’s Talk About Screening Tests**

**Student B**

Read the chart. When you see an empty box, ask your partner for help.

<table>
<thead>
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<td>Blood test for cholesterol</td>
<td></td>
<td>Every 5 years</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>Mammogram (a special x-ray of the breast)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>Colonoscopy (a test that allows a doctor to examine the large intestine)</td>
<td>Men and women who are age 50 and over</td>
<td>Every 10 years</td>
</tr>
</tbody>
</table>
Lesson 3: (ABE) Inquiry-based Project on Preventive Screening Resources in the Community

### Prevention and Screening Tasks Addressed in this Lesson
- Be familiar with a range of preventive screening activities
- Identify preventive screening resources in the local community

### Skills Focus
- Students will share and discuss personal perspectives on preventive screening activities.
- Students will strengthen problem-solving skills needed to identify and access preventive health care resources in the local community.
- Students will strengthen oral communication skills needed to identify and access preventive health care resources in the local community.
- Students will practice describing and interpreting survey findings.

### ABE Level
Intermediate to advanced

### Time
In class: 3-4 hours
Outside of class: Varies

### Materials
- Student handouts #1 and #2
- Poster paper
- Markers

### Key Vocabulary
- prevention, preventive
- screening
- testing
- community resource

### Purpose
This lesson is designed as an inquiry-based project that places students in the role of active problem-solvers to examine their own questions about preventive screening tests and activities. Students will learn about a range of preventive screening activities and identify preventive screening resources in their local community. Asking questions is a hallmark of inquiry-based learning. This inquiry-based lesson is meant to elicit questions about preventive screening resources in the community that students are genuinely interested in and to guide them in working together to find answers.

To start the lesson, the students are given a short reading that presents Gallup Poll survey findings on preventive screening. This reading is meant to prompt discussion about the challenges students face in understanding what screening tests are available, which ones they should have, and how often to have the tests done. This initial discussion is meant to help students arrive at their own questions about preventive screening and plan how they might work together to find answers.

### Steps
**Note to teacher.** There are two sets of handouts for this lesson. Teaching notes for each handout are described on the next several pages.

**Student Handout #1: What people think about preventive screening** asks the students to complete several exercises, including two pre-reading activities, a reading passage related to peoples’ views about preventive screening, and discussion questions. **Student Handout #2: Inquiry-based project on preventive screening** guides students through a series of exercises as part of an inquiry-based project on some aspect of preventive screening that students are interested in learning more about.
Teaching Notes for Student Handout #1 for Reading
“What people think about preventive screening tests”

1. Section A. Before you read. Vocabulary work - Match the words with their definitions

This exercise introduces new vocabulary that is used in the reading on preventive health, “What do people think about preventive screening tests?” Ask the students to complete the matching exercise on their own, and then find a partner to go over their answers and check their comprehension of the word meanings. (Answer key: 1-f, 2-d, 3-b, 4-a, 5-c, 6-e)

2. Section B. Sentence completion

This exercise reinforces the students’ comprehension of the new vocabulary words learned in Section A. Some of the sentence prompts (#2, #3, and #6) also get students thinking specifically about their perceptions of preventive health care.

Ask students to complete the sentences on their own, and then ask students to share their sentences with other students. During this exercise, you should encourage students to be active listeners, thinking about ways that their responses are the same or different. You may wish to ask the students to write their completed sentences for #2, #3, and #6 on poster paper and display them on the wall for the duration of the lesson. Displaying the students’ ideas will send the message that their ideas and knowledge about preventive health care are important.

3. Section C. Reading

Do a model reading of the text. Read the text again, asking for volunteers to read sections aloud. Ask the students to explain to a partner what the passage is about. This retelling can be useful for students who need the opportunity to practice new vocabulary and build self-confidence in reading fluently. Once students have a working idea of what the reading is about, you may wish to practice reading the text in different ways: choral reading (reading the text aloud together); echo reading (the teacher reads a line and all the students repeat the line back to the teacher); peer reading (students work in pairs to take turns reading the text).

4. Section D. Summarizing: Write Three Sentences

Ask students to work in small groups to write three sentences that summarize the information in the passage. To prompt their thinking, ask the students, “What are the main ideas in this passage?” or, “What ideas are the most important to remember from
5. Section E. Discussion

The discussion questions are meant to help the students review the ideas in the passage and make connections to their own experiences.

Depending on the size of the class, the teacher may want to discuss the questions as a whole class. If the students discuss the passage in small groups, the teacher should invite each group to share its responses with the whole class. The students’ responses to question #2 will be useful to record on poster paper as their ideas will reveal the range of health resources the students already know about and use. Question #4 prompts students to talk about their own ideas about barriers to preventive care, and question #5 prompts students to talk about the screening tests they are familiar with. In this way, the discussion of the reading passage serves as a useful information-gathering activity. This information helps set the stage for the next part of this lesson, which is an inquiry-based project on preventive screening.
Teaching Notes for Student Handout #2:
Inquiry-based project on preventive screening

The information in the teaching notes has been adapted from:

1. Section A. Pose a question

A good inquiry-based project begins with good questions. The students are asked to think of one question they have about preventive screening. Here are a couple of tips for helping students with their questions:

- **The question must be answerable with some amount of objective information.**
  “Why do so many people in the U.S. have high cholesterol?” can be answered if the students search for information on the Web or in a library. However, “Why did God make cancer?” cannot be answered because it a question based on faith. Both questions are meaningful, but the latter is not a useful question for inquiry-based learning. Opinion- or belief-based questions don’t enable students to make use of the scientific (or quasi-scientific) ways of thinking that are at the heart of inquiry-based learning. “What do people say about why God made cancer?” is a more appropriate question for inquiry.

- **The students can’t already know the answer to the question.** “What is a screening test?” is a bit too straightforward and was already covered in the reading the students discussed earlier in the lesson. The students are not likely to learn much more than they know already. “What are the most important screening tests that women should have?” is a better question because it provides students with more opportunity for exploration.

2. Section B. Discuss

Allot at least 20-30 minutes for students to discuss their questions in groups of 3-4. Each student should read his/her question aloud to the group and say why the question is important to him/her. This discussion may prompt new questions. The group should discuss other questions that are important to them and write down at least one additional question.

3. Section C. Plan

In this activity, students begin planning how they will go about answering their questions. They are asked to answer several questions to guide their planning process:

- What do you think is the best way to answer your questions?
Resources in the Community

- Where can you find information?
- Who can you call or visit to get answers?
- How would you know the information you get is ‘correct’?
- Is there any other information you need to answer your questions?

Allow at least 40 minutes for the groups to complete this planning activity. This includes preparing a chart on poster paper that summarizes the resources they are thinking of exploring to answer their questions. Each group must also decide which resources to explore first and who will explore which resource. For example, one student might say, “I work near a clinic. I can go and look for brochures about screening tests.” Or, another student might say, “I will search the Internet” or “My sister-in-law was a nurse in Mexico. Maybe she can help us.” Students will choose one of their group’s resources to explore outside of class, for homework. Be sure to set a deadline so the students know how much time they have to explore their resource.

If time allows, you may wish to ask each group to present their poster to the rest of the class. If there is no time for group presentations, ask students to display their posters on the wall so that other students can see the range of questions and planning strategies. Encourage students to walk around the room (e.g., during a break, before or after class) and read other groups’ ideas.

Special note to the teacher: This step in the lesson gives you an important opportunity to practice your listening skills. Listen to the students’ discussions, but resist jumping in to amend their planning choices and decisions. Remember: this project is based on the students’ questions, not the teachers’. Students in lower levels may feel shy or hesitant if they have never done an inquiry-based project. At least initially, you may have to ask a few leading questions or give them a few suggestions for resources. Be patient. The students will likely become more enthusiastic and engaged as they become more comfortable with the process.

4. Section D. Explore your resources

This part of the lesson plan is to be completed individually by the students. This worksheet helps the student to document what they learned (I learned that...), assess the quality of the information (How good is this information?), and identify any new questions they might have (My new question is...). Finding information in a library or on the Internet may be fairly simple for the students (assuming they have some prior experience in using the Web). However, figuring out whether the information is “good” is not so easy. There is a lot of information on the Internet, for example, that may not necessarily be accurate. This individual exercise is meant to help students understand (or better appreciate) the idea that all information has an “author.” As pointed out on the YouthLearn website, “Learners must be taught the skills to collect bits of partial answers and assess their validity. Because all information tends to be biased by the perspective, experience or interest of its author—whether it's from a book or one's grandmother—developing critical evaluation skills is key.”
Students need to record the information they find in order to be able to evaluate it later on. The worksheet in section E provides students with a template for doing so.

Be sure to tell students that it is possible that their original questions may change or go in different directions depending on the information they find.

*Important note:* Students need to remember the deadline for completing their exploration of resources outside of class. The success of the subsequent steps in this lesson plan depends on the students’ completion of their outside assignments.

5. Section E. Share your information

Students get in their groups again to share the information they found. Students may identify new questions to explore based on this information.

The students may wish to go back to the chart they created in Step C (on poster paper) to see if there are additional resources they want to explore.

If time permits, allow time during class for students to check out additional resources – i.e., searching the Internet, making phone calls. Or set a new deadline for students to continue their outside exploration.

6. Section F. Present your information

Once each group feels satisfied with the answer to their question, ask them to prepare a short presentation that summarizes what the group’s questions were, what resources they explored, and what they learned. Step F provides a sample poster, but students should feel free to present the information differently if necessary.

7. Section G. Create a class resource guide

This inquiry process will likely generate a rich pool of information that is grounded in the students’ interests and concerns.

Suggest to the students that they create a book, *A Resource Guide to Preventive Screening in Our Community*, which compiles the information they found. The students should be encouraged to include the information and graphics (e.g., maps, illustrations) that they feel would be useful to other students who read the guide. Step G on the handout offers some suggestions for the kind of information that might be included in the resource guide.

Students should feel free to include information in English and/or in their native languages so that the information can be readily accessible to other students of varying proficiency. Be sure to make this resource guide available to other students in the adult education program.
ESOL Teaching Tips

When working with adult ESOL learners, especially those at the lower levels of proficiency, expect to spend more time working through the reading and the inquiry process.

Inquiry-based learning is a highly cognitively demanding task. Don’t be afraid to try out this activity with ESOL students who are still developing their oral communication or literacy skills in English. Place confidence in the fact that this project builds upon those questions and concerns that they want to answer. This motivation may help them strategize to try to overcome language/literacy barriers. For example, they may decide to interview a nurse who is bilingual in English and in their first language.

Follow-up Activities

A. **Guest speaker series.** Ask the students to identify 2-3 topics in their *Resource Guide to Preventive Screening in Our Community* that most interest them. Students can work together to write a letter to a particular doctor, health department, or local clinic inviting someone to come speak to their class. Students can prepare questions in advance. After a guest speaker event, students can summarize what they learned and share their notes with other students in the adult education program.

B. **Personal essay.** Students can write a personal essay in which they talk about the inquiry process, what they enjoyed about the process, and what they found confusing or difficult. Ask students to think about other areas of their life where this kind of process might be useful.

C. **Photo album OR video project.** Students can create a photo album or video to accompany their *Resource Guide to Preventive Screening in Our Community*. The album/video would provide a walking tour of important health services in the local community. The video version could feature adult students giving advice to new residents of the community about how to find information about preventive screenings.
Technology Tips

- **Harnessing Technology to Serve Adult Literacy by David Rosen, Newsome Associates**
  This website represents a goldmine of resources to help teachers integrate Internet use into their classroom instruction. Teachers may also want to look for those links that provide guidance on helping ESL learners use the Internet on their own. [http://www.alri.org/harness.html](http://www.alri.org/harness.html)

- **Focus on Basics, Special issue on Project-based Learning**
  This special issue of *Focus on Basics*, a publication from the National Center for the Study of Adult Learning and Literacy, addresses questions such as: What is project based learning? What is the theoretical rationale for using this approach? What are advantages and limitations to the approach? [http://www.ncsall.net/index.php?id=160](http://www.ncsall.net/index.php?id=160)
STUDENT HANDOUT #1 FOR READING

“What people think about preventive screening tests”

A. Before you read: Vocabulary Work. Match the words with their definitions.

1. ___ regular  
   a. a set of questions that you ask a large number of people in order to find out what they think or do

2. ___ researcher  
   b. the answers that we get from doing a scientific study or test

3. ___ results  
   c. intended to stop something you do not want to happen, such as a disease, from happening

4. ___ survey  
   d. someone who studies a subject in detail, usually in order in order to discover new facts or test new ideas

5. ___ preventive  
   e. to do tests on someone to find out whether she or he has an illness or disease before the person begins to feel sick

6. ___ screen  
   f. happening every hour, every week, every month etc, usually with the same amount of time in between

Practice. Test yourself. Choose a word. Can you define the word without looking at the page?

More practice! Work with a classmate and ask each other to define the word without looking at the page.

For example: You say, “What does results mean?” Your partner says, “Results means the answers you get from doing a scientific study or test.”

B. Sentence Completion. The following sentences use the words you learned in Section A. Complete the sentences with your own ideas.

1. If I carried out my own survey, I would ask people what they thought about ____________________________

2. Some preventive steps I take to stay healthy are ____________________________

3. Some things that doctors say we should do on a regular basis are ____________________________

4. The results of a study are more believable if ____________________________

5. The researcher was surprised to find out that ____________________________

6. For adults about my age, doctors usually screen for diseases such as ____________________________
C. Reading.

What people think about preventive screening tests

In 2003, the Gallup Organization carried out a survey of peoples’ views on preventive screening tests. The Gallup researchers spoke to 1,498 people over the phone for this survey.

D. Write 3 sentences about the information in this text. Share your sentences with another student.

1. 
2. 
3. 
E. Discussion. Form a group of 3-4 students. Discuss the following questions.

1. The text says that 61% of the survey participants said they know which screenings tests they should have, but they did not know how often they should have the tests. Do you know which screenings to have but don’t know how often? Explain your answer.

2. Where do you usually get information about screening tests?

3. Do you believe that “regular screening tests can save people’s lives”? Explain your answer.

4. The text talks about three reasons why people don’t get regular screening tests. Do you agree with these reasons? Explain why or why not. What are other reasons why people don’t get regular screening tests?

5. Which preventive screening tests do you feel are most important for your own health?
STUDENT HANDOUT #2
INQUIRY-BASED PROJECT ON PREVENTIVE SCREENING TESTS

A. Pose a question.

What is one thing you really want to know about preventive screening tests? Write it in the box below

My question

B. Discuss. Form a group of 3-4 students. Share your questions.

Share your question with your group. Talk with your group and think of other questions about preventive screening tests. Write the questions here.

Other questions
C. Plan. With your group, think about how you might find answers to your questions.

Think about these questions as you plan where you might find answers:

- What do you think is the best way to answer your questions?
- Where can you find information?
- Who can you call or visit to get answers?
- How would you know if the information you get is "correct"?
- Is there any other information you need to answer your questions?

Make a chart like this one on poster paper with your group’s list of possible resources. The chart shows one example.

<table>
<thead>
<tr>
<th>Question</th>
<th>How do I answer my questions?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Where can I go?</td>
</tr>
<tr>
<td></td>
<td>Who can I ask?</td>
</tr>
<tr>
<td></td>
<td>Where can I look?</td>
</tr>
<tr>
<td>What are the most important screening tests that women should have?</td>
<td>• Ask a doctor.</td>
</tr>
<tr>
<td></td>
<td>• Search the Internet.</td>
</tr>
<tr>
<td></td>
<td>• Go to my local clinic and get brochures.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the names of screening tests</td>
</tr>
<tr>
<td></td>
<td>• what the tests are for</td>
</tr>
<tr>
<td></td>
<td>• whether tests will hurt</td>
</tr>
<tr>
<td></td>
<td>• if tests are free</td>
</tr>
</tbody>
</table>
When you are done, look at your chart. Which resources are the most important to check out first? Place a star ★ next to these resources.

Next, each member in your group will choose ONE of the resources with a ★ to explore outside of class.

Write the names of your classmates next to the resources they will explore.

**DEADLINE REMINDER**

You need to check out your resource by the following date:
D. Explore your resource(s).

Before the deadline, complete your assigned task. Be sure to take notes when you find out any information. This will help later on when you have to share the information with other people in your group.

Fill in the boxes below to help you record the information you learn. If you need to, use more sheets of paper to record the information you learn.

- **My question was...**
- **I learned that...**
- **How good is this information?**
- **My new question is...**
E. **Share your information.**

Meet with your group members. Talk about what you learned. Share your notes. Are there new questions you want to explore?

Look at the chart of resources you created earlier in Section C. Are there other resources you still want to check out?

Keep exploring until you get the answers you want. You may be able to check out resources during class – for example, searching the Internet – or you may need to spend more time outside of class visiting places or calling people.

F. **Present your information.**

When your group feels satisfied with your answers, prepare a presentation to show other students in the class. Make a poster summarizing your questions, the resources you explored, and what you learned. Here is an example of what your poster might look like, but it’s fine to present the information differently if your group chooses.

<table>
<thead>
<tr>
<th><strong>We wanted to know...</strong></th>
<th><strong>We explored the following resources...</strong></th>
<th><strong>We learned that...</strong></th>
</tr>
</thead>
</table>

Pick a member of your group to present the poster to the rest of the class.
G. Create a class resource guide.

Ask the students to design a book called *A Resource Guide to Preventive Screening Tests in Our Community*, which compiles the information they found. The students should be encouraged to include the information and graphics (e.g., maps, illustrations) that they feel would be useful to other students who read the guide.

For example, the class can create a list of the addresses and phone numbers of local agencies and medical professionals that provided them with useful information about screening tests. The class can also design a page that explains the various screening tests in the different native languages spoken by the students. When the guide is complete, share it with other teachers and students in the adult education program.
Lesson 4: (ESOL) Filling Out Health Care Forms

Access and Navigation Task*
Addressed in this Lesson

- Fill out health-related forms

Skills Focus

- Students will discuss the challenges of filling out health-related forms.
- Students will improve their ability to recognize dependent questions (“e.g., If yes, then skip to question 8…”) on health care forms.
- Students will practice scanning for specific information in forms.

ABE/ESOL Level

- High beginning to low intermediate ESOL

Duration

- 2 hours

Materials

- Group Worksheet: General Information Form
- Sample health benefits forms and applications (see Appendix A)
- Improving Forms and Applications Handout (see Appendix B)

Key Vocabulary

D.O.B.
next of kin
emergency contact
marital status
primary language
employment status
retired, widowed
HMO
PPO

Purpose

To address questions and concerns students have about difficulties in filling out health care forms. To familiarize students with some of the skills involved in answering questions on health care-related forms, specifically skills involved in recognizing and responding to questions whose answers depend on answers to previous questions. *

Steps

1. Getting started. To begin the lesson, write the following question on the board: What do you find difficult about filling out forms and applications? Ask the students to share their experiences filling out forms (e.g., health forms, bank forms) and applications (e.g., job applications). Do not worry if discussion is slow at first, as students may need some time to recall the last time they filled out a form/application. Also, keep sample forms and applications (see Appendix A) on hand to show students who do not recognize the words form and application.

Use these follow-up questions if students seem to need more prompting: Do you remember the last time you filled out a form or application? What kind of form (or application) did you fill out? What was easy about filling out the form? What was difficult? List all ideas generated by the students on the board.

2. Background information for the teacher. In 1998, the Canadian Public Health Association asked a group of senior citizens to talk about their difficulties filling out forms. The problems that the seniors identified include:

- the large amount of text on forms
- inadequate space for writing their answers
- inconsistencies in the way the same information is asked across forms
- large amount of technical vocabulary
- small text size
- long sentences
- use of acronyms. **


After your students share their own ideas, you may wish to present the results of this Canadian study; there may be areas of interesting overlap with the students’ and seniors’ responses, particularly those difficulties related to language. To present these results, write the seniors’ comments on the board and read them aloud. This will help the students think about the seniors’ comments. Also, it will be very important to have some health care forms on hand (see Appendix A) to illustrate the different features identified by the senior citizens.

For example, when you cite the problem of small text sizes, be sure to point to the small text on an actual application. You can also ask the students to work in pairs and distribute a sample form to each pair. As you cite a problem, such as small text size, each pair can work together to see if their form illustrates the problem. Ask each pair to report to the whole class.

Note: The results of the Canadian study can be used to jump start a class discussion if the students are having a hard time generating responses to the initial question, *What do you find difficult about filling out forms and applications?*

3. **Pair activity.** Distribute the Group Worksheet: General Information Form. This form asks students to fill out general information that is commonly requested on a range of health care forms, from benefits applications to medical history forms. Before the students begin pair work, go over with the class any unfamiliar terms used on the form. Check whether students are familiar with commonly used terms on forms, such as “D.O.B.” for “date of birth”. It may also be important to point out that date of birth is sometimes expressed as month/day/year and other times day/month/year. Also, be sure to ask students to identify any unknown vocabulary and write these unknown words along with their definitions on the board. Words such as *widowed, retired, or next of kin* may not be familiar.

4. **Teaching tip.** Language-minority adults often rely on the help of neighbors, family members, or adult educators to fill out complex forms and applications. In this way, the pair-work approach to the form-filling task may feel familiar to some of your students. However, also note that depending on your class, students may not feel comfortable disclosing personal information with other students. Students should be told that they are free to make up information to practice filling out the form. Alternatively, students can be given the option to work individually rather than in pairs.

5. **Looking at dependent questions.** After students have had an opportunity to fill out the General Information Forms and talk about any unfamiliar vocabulary, direct their attention to items 10A and 10B. Ask students if they had any trouble with these questions, and if so, what gave them trouble? Explain that people often do not respond appropriately to these kinds of questions. These types of questions are sometimes referred to as *dependent questions*, because their answers are dependent on answers to previous questions. Explain that studies have shown that people tend to overlook key instructions that indicate whether a person should complete or skip a
question. As a result, people often end up answering irrelevant questions on forms. This often wastes time and can confuse the person who is filling out the form.

6. **Scanning activity.** Explain that the final part of the lesson will help students learn to recognize dependent questions on forms and applications, and also provide the students with practice with scanning, a useful learning strategy. Distribute sample health benefits forms (see Appendix A) to students in the class. Write on the board *Scanning = searching a text for specific information.* Training your students to recognize the different sections of a form provides them with important scanning skills. This kind of preparation shows them how some questions are topically linked to other questions. You may wish to spend a few minutes talking about scanning as a valuable literacy skill when reading for information. Ask the students, in pairs or small groups, to *scan* the forms for examples of dependent questions. Ask volunteers to share any examples they find with the class.

7. **Discussion questions.** After the class has identified a few examples of dependent questions, ask the students:

   *What patterns do you see in the way these questions are asked? Or, In what ways are these kinds of questions similar? Or, Do you see similarities in the way these questions are written on these forms?*

Write all ideas generated by the students on the board.

Possible responses:

- *Questions are indented.*
- *Questions are written in italic font.*
- *Questions follow a similar sentence pattern: “If yes, go to ...” or, “If yes, explain why” or, “If yes, complete section C” or, “If so, answer the following questions.”*

Have one student role-play explaining how to fill out these kinds of questions to the teacher or have students role-play with each other. This will help you assess whether students understand the general format of dependent questions. More importantly, this prepares the students for helping family members or friends to fill out forms and applications.

8. **Wrap-up.** To close the lesson, remind your students that (1) filling out forms and applications is a very complex skill; and (2) many forms and applications are very poorly written. For these reasons, it is very important to encourage your students to seek out help from office personnel or medical staff if they do not understand the information on a form. To this end, students can learn and practice the following expressions for requesting help:

- *Excuse me. Can you help me fill out this form?*
- *I don’t understand question number 10 on this form. Could you explain the question to me?*
- *Could you tell me what xxx means?*
Follow-up Activities

A. **Group project.** Ask students to work in groups of 2-3 to complete the **Improving Forms and Applications** handout in Appendix B. Student volunteers can present their ideas to the rest of the class.

B. **Creating a class resource file.** Ask students to visit their local Department of Human Services or doctor’s office and pick up copies of health benefits applications or medical forms. If no applications are on display, students should ask the office staff for the applications and forms. Explain to students that these documents will be placed in a class “resource file” available to them and other students. Students can use the forms or get help filling out the forms in class. Make sure there is a designated place in the classroom for this file to be stored.

C. **Writing activity.** Students imagine that they are one of the senior citizens who participated in the Canadian Public Health Association study described previously. Students will write a letter to the editor of the local newspaper complaining about the problems senior citizens have when trying to fill out forms and applications. The letter should describe the sources of difficulty and offer a few solutions.
# Group Worksheet: General Information Form

Interview your partner and fill in the application below for him or her.

Example questions:
- Where do you live?
- When were you born?
- Are you married?
- Are you currently working?
- What is your first language?

## Section I. General Information

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</thead>
<tbody>
<tr>
<td>1A. Name (Last, First, MI)</td>
<td>1B. Other names used</td>
<td>2. Social Security Number</td>
<td>3. Gender (Check one)</td>
<td>4. DOB (mm/dd/yyyy)</td>
<td>5A. Current Mailing Address (Street, PO Box, RR, include apt. number)</td>
<td>5B. City</td>
<td>5C. State</td>
<td>5D. Zip</td>
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<td>7. Work telephone number</td>
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<td>8. Current marital status (Check one)</td>
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<tr>
<td>□ Married</td>
<td>□ Never married</td>
<td>□ Separated</td>
<td>□ Widowed</td>
<td>□ Divorced</td>
<td>□ Unknown</td>
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<td>9. If your primary language is not English, please list:</td>
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<tr>
<td>10A. Employment status (Check one)</td>
<td>10B. Company name, address, telephone number</td>
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<td>If employed or retired, complete item 10B.</td>
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<td>□ Not employed</td>
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<td>□ Employed</td>
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<tr>
<td>□ Retired -- Date of retirement mm/dd/yyyy)</td>
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<tr>
<td>11A. Name, address, and relationship of next of kin</td>
<td>11B. Next of kin’s home telephone number</td>
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<tr>
<td>11C. Next of kin’s work telephone number</td>
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<tr>
<td>12A. Name, address, and relationship of emergency contact</td>
<td>12B. Emergency contact’s home telephone number</td>
<td></td>
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<tr>
<td>12C. Emergency contact’s work telephone number</td>
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<td></td>
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</tbody>
</table>
APPENDIX A:
Sample Health Benefits Forms and Applications

For your convenience, two sample benefits applications have been included in this lesson plan.

Sample #1: Allied Health Coverage -- Application for Benefits
Sample #2: Application for Children’s Medicaid

To add to this collection and make your examples more relevant to community needs and services, you may find additional forms and applications at local offices including the:

- Library
- Department of Health and Human Services
- Head Start offices
- Regional hospitals and community health centers
- Office of Veterans Affairs
- Women, Infants, and Children (WIC) centers
- Senior centers

The following web sites may also be helpful resources for gathering health benefits forms and applications.

- http://www.cms.hhs.gov/forms/
- http://www.va.gov/onlineapps.htm
## Sample #1:

### Allied Health Coverage

**Application for Benefits**

### Part A: PLAN SELECTION

Type of Plan – select a plan type and benefit level

- Health Maintenance Organization (HMO):
  - □ Gold
  - □ Silver
  - □ Basic
- Point of Service (POS)
- Preferred Provider Organization (PPO):
  - □ Basic
  - □ Expanded

### Part B: SUBSCRIBER INFORMATION (oldest applicant must be the subscriber)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Last Name</td>
<td>2. First Name</td>
<td>3. MI</td>
<td>4. Social Security Number</td>
</tr>
<tr>
<td>5. Sex</td>
<td>6. Date of Birth (month/day/year)</td>
<td>7. Marital Status</td>
<td>8. Type of Coverage Requested</td>
</tr>
<tr>
<td>□ Male</td>
<td>/</td>
<td>□ Single</td>
<td>□ Individual</td>
</tr>
<tr>
<td>□ Female</td>
<td>/</td>
<td>□ Married</td>
<td>□ Family</td>
</tr>
<tr>
<td>17. Name of Primary Care Physician</td>
<td>18. Are you a previous Allied Health Coverage member?</td>
<td>19. Do you currently have any other health insurance?</td>
<td></td>
</tr>
<tr>
<td>□ No</td>
<td>□ Yes</td>
<td>□ No</td>
<td></td>
</tr>
<tr>
<td>Previous ID #: _____________________</td>
<td>Name of Health Plan: _______________________________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of Plan Holder: _______________________________________________</td>
<td>Health Plan Number: _______________________________________________</td>
<td></td>
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</tr>
</tbody>
</table>

### Part C: DEPENDENT INFORMATION

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Full Name (first, middle, last)</td>
<td>Sex (M / F)</td>
<td>Date of Birth (month / day / year)</td>
</tr>
<tr>
<td>Spouse</td>
<td>/ /</td>
<td></td>
</tr>
<tr>
<td>Child/Dependent</td>
<td>/ /</td>
<td></td>
</tr>
<tr>
<td>Child/Dependent</td>
<td>/ /</td>
<td></td>
</tr>
<tr>
<td>Child/Dependent</td>
<td>/ /</td>
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</tbody>
</table>

Applicant Signature (required): ______________________________________ Date: _______________________

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HALL/NCSALL Health Literacy Study Circles™ Skills for Disease Prevention and Screening
Sample #2: Application for Children’s Medicaid
Free Health Insurance for Children under 19

PART A: Parent’s/Guardian’s Information

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>M.I.</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mailing Address</th>
<th>City</th>
<th>State</th>
<th>Zip Code</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

PART B: Family Information. List the parent shown in Part A on the first line below.

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
<th>Sex</th>
<th>Date of Birth</th>
<th>Social Security #</th>
<th>How is this person related to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>List parent(s) and children</td>
<td>List parent(s) and children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Self</td>
</tr>
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</tbody>
</table>

PART C: Income Information. Enter gross pay, not take home pay. Enter zero (“0”) if you are unemployed.

<table>
<thead>
<tr>
<th>Your Income from Employment</th>
<th>Other Parent’s Income from Employment (if living in the home)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer Name and Phone Number</td>
<td>Employer Name and Phone Number</td>
</tr>
<tr>
<td>Amount you earn each pay period before taxes: $ ________________</td>
<td>Amount you earn each pay period before taxes: $ ________________</td>
</tr>
<tr>
<td>Weekly  □ Every two weeks □ Twice a month □ Monthly</td>
<td>Weekly  □ Every two weeks □ Twice a month □ Monthly</td>
</tr>
<tr>
<td>Hours worked each pay period: ______________________</td>
<td>Hours worked each pay period: ______________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Income</th>
<th>Amount</th>
<th>How Often Do You Get This Income?</th>
<th>Which Family Member Gets This Income?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Support</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alimony</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Security Payment</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed Benefits</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Please explain)</td>
<td>$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART D: Attach Proof of Income. Please indicate what you attached.
☐ Copies of pay stubs for the last 4 weeks OR a letter from my employer.
☐ A copy of a letter indicating the amount of any benefits received (Social Security, Unemployment, VA, Workers Compensation, etc.), or a copy of any checks received.
☐ I am self-employed and I have attached a copy of my most recent federal income tax form.
☐ Child support check stubs.
☐ A statement signed by the person who gives my family child support or cash contributions.
☐ My family has no income.

PART E: Primary Language.
☐ English  ☐ Spanish  ☐ French  ☐ Portuguese  ☐ Chinese  ☐ Vietnamese  ☐ Russian  ☐ Somali  ☐ Other: __________________________

PART F: Any Health Insurance You Already Have for Your Children. Even if you have health insurance, you can still qualify for Children's Medicaid.

<table>
<thead>
<tr>
<th>Insurance Company or Employer</th>
<th>Policy Number</th>
<th>Policyholder’s Name</th>
<th>Policyholder’s SSN</th>
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</table>

PART G: Signature
I certify that the information I have provided above is true to the best of my knowledge and I give permission for the State to make any necessary contacts to check my statements.

Signature of Applicant: ___________________________________________ Date: ________________________
### APPENDIX B:
**Improving Forms and Applications**

*Student handout for follow-up activity*

**Group work:** Work with your classmates and think about the problems that people have when they fill out forms. Suggest possible solutions. Fill in the chart with your ideas. The first one is done for you. After you have completed your chart, compare your list with another group’s list.

<table>
<thead>
<tr>
<th>Problem</th>
<th>What can I do to solve this problem?</th>
<th>What should companies and organizations do to solve this problem?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many difficult words</td>
<td><em>I can use a bilingual dictionary or ask someone for help.</em></td>
<td><em>Companies and organizations should use easy English words on their forms.</em></td>
</tr>
<tr>
<td>Not enough space on forms to write answers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print is too small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too much information to read</td>
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</tbody>
</table>
Lesson 5: (ESOL) Understanding Family Medical History Forms

**Prevention and Screening**

**Tasks Addressed in this Lesson**
- Understand what a family medical history is and its role in preventive health care
- Know what types of information a patient should provide on a family medical history form

**Skills Focus**
- Students will discuss and share personal opinions about the value of talking to doctors about one’s family medical history.
- Students will learn expressions for talking about family medical history with a doctor.
- Students will practice completing medical history forms.

**ABE/ESOL Level**
High beginning to intermediate ESOL

**Time**
2 - 90-minute lessons

**Materials**
Student worksheets

**Key Vocabulary**
family medical history
disease or illness
condition
general health
operations
allergies
medications
risk or risk factors

**Purpose**
This two-part lesson addresses skills related to the purpose and completion of family medical history forms. In Part One, students are asked to read a short story, *What’s wrong with Tony?*, about a man named Tony who is worried about his father’s health. Tony’s friend Van suggests that he go to see a doctor to talk about his family medical history. Tony is not sure this is an important step to take. In Part Two, students practice filling out a medical history form.

**Steps**

**PART ONE: Short story and discussion**

1. **Preparation.** Distribute a copy of the short story *What’s wrong with Tony?* and the discussion questions to the students (pages 7-8). Organize the students into small groups of 3-4 students.

2. **Reading and discussion of *What’s wrong with Tony?* (Small group work)**
Read the short story aloud to the whole class. This will provide the students with a model reading. Allow the students to ask questions about any unfamiliar vocabulary. Record new vocabulary words and their definitions on the board. Ask students to re-read the story in their small groups. Encourage students to use their dictionaries or ask the teacher for help with new vocabulary. Ask students to read the story and then answer the discussion questions.

*Note to teacher:* The discussion questions are meant to prompt a discussion about the value of sharing one’s medical concerns and history with a doctor. Below are listed some possible responses:
Teacher’s Guide

*What’s wrong with Tony?  Possible Responses*

1. **Why do you think Tony does not feel well?**
   *Possible responses:* He is tired and does not sleep well. He works long hours. He is worried about his dad. Stress makes you feel sick. He smokes, so he may not be healthy. His dad had a heart problem so Tony may have some health problems that can also lead to heart problems, like high blood pressure.

2. **What do you think Tony should do to feel better?**

3. **Van tells Tony to see a doctor. Do you agree with Van? Why or why not?**
   *Possible responses:* I think Van is right. Tony needs to talk to his doctor about his stress and his dad’s heart attack. This might help Tony so he does not have a heart attack too.

4. **Is it important for Tony to tell a doctor that his father had a heart attack? Why or why not?**
   *Possible responses:* Very important. This information is an important part of Tony’s family medical history. A doctor needs to know if people in your family (father, mother, sister, brother, grandparents) have had serious diseases. A doctor will also want to know if people in your family have died from these diseases. If someone in your family has had a disease, then the doctor may want to do a test to see if you have the disease too, or to test to see if you have risk factors for the disease.

   *Note to teacher:* This question provides a good opportunity to introduce the phrase family medical history, which is a record of the key medical facts in one’s family. This information can help a doctor to identify some health risks that may affect the patient in the future and to suggest steps to keep the patient healthy.

5. **Do you think Tony will go to the doctor soon? Why or why not?**
   *Possible responses:* Maybe, maybe not. Some people are scared to go to a doctor because they don’t know how to talk to the doctor. Sometimes people are scared to be tested because they don’t want to find out they are sick. Some people are afraid of the tests that the doctor might do. Some people don’t go to the doctor if they don’t feel really sick.

   *Note to teacher:* This question may prompt students to talk about possible fears and worries that they have about going to a doctor and talking about their health care. You may wish to point out that for some conditions, like high blood pressure, there are no clear symptoms. People also don’t act or feel sick when they have high cholesterol. A doctor needs to do a test to find out whether a person has these health problems. This discussion may also prompt class discussion about the different ways people view health conditions. For example, cultural factors may affect how people view ‘weight problems.’
PART ONE: Short story and discussion (continued)

3. **Analysis of What’s wrong with Tony? (Large group discussion)** Discuss the short story as a whole class. After the small groups have had an opportunity to share their reactions to the story and responses to the questions, continue the discussion by posing the following questions:

- If you were Tony, what would you do?

- Are there medical problems that are common in your family? How did you find this out? What did you do?

**Note to teacher:** Remind students that they should only share information that they feel comfortable talking about with other students.

- Have you ever had to talk about your family medical history with a doctor? Was this difficult? Why or why not?

**Note to teacher:** Again, remind students that they should only share information that they feel comfortable talking about with other students.

Invite students to share their thoughts and comments on these questions. (Depending on the size of your class, you may wish to ask the students to keep working in pairs, or join another pair to form a group of four, so that all students have an opportunity to share their ideas.) These questions may raise issues of cultural differences in health care practices and beliefs in the U.S. and in other countries. For example, there may be differences in the way family medical history is viewed. A patient may believe that past diseases are not linked to current diseases, in other words, that a disease has a unique cause and cure. Encourage students to point out ways that health care beliefs in the U.S. differ from health care beliefs in their home countries. As much as possible, use the students’ own experiences and concerns to drive the class discussion.

PART TWO: Filling out medical history forms

1. **Overview of family medical history forms (Large group discussion)**

   Pass out the attached *Personal and Family Medical History Form* (see pages 9-10 for two-page form) to each student. This form is a modified version of a typical family medical history form. The form is adapted from material in the HEAL: Breast and Cervical Cancer curriculum¹ and in *Life Prints 2: ESL for Adults* by Christy Newman, Allene Grognet, and Jodi Crandall and published by New Readers Press.

   Ask the students to look at the form and answer the following questions:

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¹ *HEAL: Breast and Cervical Cancer Curriculum*, developed by World Education in cooperation with the Centers for Disease Control and Prevention, 2002.
2. Filling out Tony’s family medical history form (Pair work)
Organize the class into pairs. Tell the students that you are going to read aloud a short text about Tony entitled, *Some medical facts about Tony Garcia* (see page 7 of this lesson plan for the teacher script). The students will listen to the text and fill out the family medical history form with the information they hear. Read the text as many times as you feel is necessary for the students to complete the form. After listening to the text, the students will work in pairs to complete the form with the appropriate answers. While students work in pairs, encourage them to use their dictionaries or ask the instructor for help with new vocabulary. Write down new vocabulary words and their meanings on the board.

*Note to instructor.* This activity is designed as a listening exercise. However, if you prefer to focus on the students’ reading skills, you can make copies of the short text and give each pair a copy. The pairs will read the text and use the information to complete the form. If you do use this activity as a listening exercise, you may still wish to eventually distribute the written text to the students so they can check their listening comprehension. Also, you may wish to provide each student with two (2) copies of this form so that after they complete the form with Tony’s information, they can practice completing the form with their own information. Please remind the students that they do NOT have to turn in these forms to the instructor. They also do NOT have to share the personal information on their forms with others.

3. Analysis of Tony’s medical history form (Large group discussion)
After students have had an opportunity to work on their form in pairs, bring the class together as a whole to check their responses. In addition to checking the students’ comprehension of the passage about Tony, you will want to reinforce and extend the students’ understanding of the organization (i.e., the structure) of a medical history form. You will also want to help the students think of strategies for requesting help with medical forms whenever they are confused or are unsure what to write down. Pose the following questions to facilitate a discussion about the structure of forms and possible coping strategies for dealing with difficulties:

a. Test yourself! What kinds of health information do you need to write on a personal and family medical history form? Cover your form and try to think of as many different kinds of information as you can.

b. What vocabulary on these forms do you find difficult? What vocabulary do you think is important to learn?

c. Imagine you are in a doctor’s office. The nurse gives you a medical history form to fill out, and there are words that you don’t understand. What would you do?

d. Imagine again that you are in a doctor’s office. The nurse gives you a medical history form to fill out, and you can’t remember the name of the
medication you are taking. You also can’t remember whether your grandfather had diabetes or high cholesterol. What would you do?

Follow-up activities

A. Talking to your doctor about your medical history
   Ask students to practice the following conversation between a doctor and patient. (This conversation is adapted from Visiting a doctor: Lessons on language and culture, published by Western Pacific LINCS and available at http://www.literacynet.org/vtd/.)

   Doctor: Does your family have a history of heart disease?
   Patient: My father had a heart attack two years ago.
   Doctor: How old was your father when he had the attack?
   Patient: He was 53.

   Students can practice this conversation and take turns role-playing the doctor and patient. Next, the students can create their own conversations to talk about other family members (e.g., my mother, grandmother, brother, sister) and other medical conditions (e.g., diabetes, stroke, high cholesterol, asthma, and blindness).

B. Creating a family medical history record
   Ask students to think about their own family medical history and create a record of all significant diseases and illnesses in their family. Some information to gather might include:
   
   - Names of diseases that family members have had. Some examples are heart disease, stroke, cancer, diabetes, blindness, high blood pressure, high cholesterol
   - Approximate dates when the family member learned she/he had the disease (i.e., date of diagnosis)
   - Age when family member passed away and cause of death, if known
   - Any allergies that family members have had
   - Any birth defects or disabilities in the family medical history
   - The family’s racial and ethnic background. (Some diseases are more common among certain races and ethnicities.)
   - Any other information that students think is important and would like to talk to their doctors about

   Students can summarize their medical history information in an actual family tree, which looks very much like a family genealogical tree with additional information about the family’s health facts. The technology tips in this lesson provide several sites that feature medical history tools for organizing the students’ information.

   Note to teacher: This activity likely involves a lot of complex, technical medical vocabulary (e.g., names of diseases, birth defects). Encourage your students to make
use of their bilingual dictionaries or to create their medical trees in their native language, if they prefer.

C. Writing Activity: Advice for Tony
Suppose Tony was your best friend. What advice would you give him? Write Tony a letter and tell him about your concerns and suggestions.

Technology Tips

Below are Web sites that feature tools for creating your own medical family tree:

- **American Medical Association, Family History** Tools
  The Importance of Gathering a Family History

- **How to Compile Your Family Medical History**

- **My Family Health Portrait**
  [https://familyhistory.hhs.gov/](https://familyhistory.hhs.gov/)
Some medical facts about Tony Garcia

Tony Garcia is 34 years old. He is 5 feet 11 inches tall and weighs about 175 pounds. Tony says that his overall health is good. He takes aspirin for headaches. He also takes an allergy medicine because he is allergic to pollen and dust. He doesn’t drink coffee but likes to drink beer on Fridays after work with his friends. Five years ago Tony had an operation to remove his appendix.

Lately, Tony has not been sleeping well. He is worried about his father. His father had a heart attack and is in the hospital. Tony also worries about his mother because she has diabetes. Tony is worried about how he will take care of his mother and father. Tony sometimes smokes to deal with stress. Lately he has been smoking one pack a week.
What’s wrong with Tony?

Tony and his friend Van were riding the bus home after a long day at work. Tony was very tired and wanted to go home to rest. He was not sleeping very well lately because his father had a serious heart attack a week ago. Tony was spending a lot of time worrying about his father.

When Tony is worried about something he usually smokes. Tony wants to stop smoking. But this week it has been hard to stop. Van saw that Tony did not look right. He asked, "What’s wrong, Tony? Are you sick?"

"I don’t know what’s wrong with me. I don’t really feel sick. I guess that I am just worried about my dad. He is only 52! I thought he was too young to have a heart attack," Tony said.

"I know your dad is in the hospital, but maybe you should see a doctor, too," said Van.

"Why? I’m not sick. I just feel tired and a little worried about my dad," said Tony.

"Your life is very stressful right now. Maybe the doctor can help you stop smoking and start feeling better. You never know. You might be at risk for a heart attack too," said Van.

Tony didn’t say anything. Then, he said, "I don’t know. Maybe I’ll call the doctor in a couple of weeks."
Questions to discuss with your group members.

1. Why do you think Tony does not feel well?

2. What do you think Tony should do to feel better?

3. Why does Van tell Tony to go to the doctor? Do you agree with Van? Why or why not?

4. Do you think it is important that Tony tells a doctor that his father had a heart attack? Why or why not?

5. Do you think Tony will go to the doctor soon? Why or why not?
# Personal and Family Medical History Form, Page 1

**Patient's Name**

<table>
<thead>
<tr>
<th>Last</th>
<th>First</th>
<th>Middle</th>
<th>Date</th>
</tr>
</thead>
</table>

Age: _____  _________  Weight: _______

**Describe your general health.**

- [ ] Excellent
- [ ] Good
- [ ] Fair
- [ ] Poor

Check all the diseases or conditions you or a family member has had.

<table>
<thead>
<tr>
<th>Condition</th>
<th>You</th>
<th>List family member(s) with this condition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cholesterol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arthritis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Are you taking any medicines currently? If yes, please list.

______________________________________________________________

______________________________________________________________

Do you have any allergies? (For example, pollen, dust, medications). If yes, please list.

______________________________________________________________

______________________________________________________________

Have you had any surgery? If yes, please list.

______________________________________________________________

______________________________________________________________

Do you smoke?  □ yes  If yes, how many packs a week?  □ no  __________

Do you drink alcohol?  □ yes  If yes, how many glasses a week?  □ no  __________

Are there any other past or current medical problems that you want to tell the doctor about? If yes, please explain.

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________
Lesson 6: (ABE) Using a Body Mass Index Table *

Prevention and Screening

Tasks Addressed in this Lesson

• Use the Body Mass Index as one kind of tool for evaluating weight
• Plan and make decisions related to individual weight status

Skills focus

• Students will learn how to read data presented in a table.
• Students will practice recording data in a table.
• Students will review units for height and weight.

ABE/ESOL Level
Intermediate ABE

Time
1½ to 2 hours

Materials
Overhead projector
Student Handouts
BMI Table on transparency
Optional:
Rulers
Blank paper

Key Vocabulary
Height
Weight
Data
Body Mass Index
Obese/Obesity

Purpose
This lesson is designed to: 1) introduce students to the concept of the BMI as one indicator of weight status, 2) teach students to read a table, such as the BMI index table, and (3) use information gathered from the table as the basis for planning/decision making. In analyzing the BMI table, students will develop their document literacy skills. Within the lesson activities, students will have an opportunity to practice recording data in their own tables.

The lesson is designed to help students at a pre-GED level learn to read a table. Depending on the level of your students and their familiarity with reading tables, you may wish to spend more or less time on steps in the lesson that pertain to table reading instructions.

Connection to GED Skills
In introducing this lesson, you may wish to point out that gathering information from a table is a skill that is tested on the GED. See the Harcourt Achieve’s website (www.gedpractice.com) for related sample GED test items.

Steps

1. Introduction
Point out that in this lesson, you will talk about an important health issue, watching our weight.

Ask students the following question and record answers on a blackboard or overhead:

Why is it a problem for people to be overweight?
(e.g., can’t move well, can lead to disease, such as diabetes, heart attack, etc.)

Point out that medical research shows that being overweight is connected to:

- Early death
- Cardiovascular disease (heart attack, stroke)
- High blood pressure
- Arthritis
- Some cancers (including prostate, colon, endometrial, breast, cervical, and ovarian cancer, as well as cancer of the gallbladder, kidney, esophagus, and pancreas)
- Diabetes
- Gall bladder disease
- Sleep apnea

Note that there are different degrees of being overweight. Ask a student to define the term “obese” (very overweight) and point out the related terms “obesity” (noun form) and “morbidly obese” (being obese to the point of being really unhealthy).

Ask the following questions:

How do we know if we are overweight?
(e.g., clothes don’t fit, we look big, scale says so, doctor says so)

Imagine that two people, Fred and Mary, both weigh 200 lbs. Fred is 6 feet tall, while Mary is only 5 feet tall. Which one do you think is overweight? Why?
(e.g., Mary – she’s too short to weigh that much.)

Point out that the same amount of weight is different on different size bodies. In this case, 200 lbs is too much on a 5-foot frame.

Note to teacher: Remember that adult students who were not born in the U.S. may not be familiar with the U.S. measurement system. You may need to present the problem in meters/centimeters. Conversion factors are as follows:

1 inch = 2.54 cm  
1 cm = 0.4 inches  
1 pound = 454 grams  
1 kilo = 2.2 pounds

2. Introduction to the Body Mass Index (Large group activity)

In this part of the lesson, you will introduce the concept of the Body Mass Index (BMI), review the parts of the BMI table, and give students some guided practice using the table. In introducing the concept, try to avoid lecturing and make an effort to elicit as much pre-existing knowledge as possible from students.
Write the term, “Body Mass Index (BMI),” on the board or overhead. Ask students to:

- Indicate whether they’ve seen this term before and where they saw it (e.g., magazine, doctor’s office)
- Share what they know about the term (e.g., It’s something that tells you if you weigh too much. It looks at your height and weight. It’s a number, etc.)

Note student responses on the board or overhead.

How much you need to say next will depend on how much your students are able to generate themselves. Be sure that the following points are covered:

- In assessing whether or not someone is overweight, doctors want to consider the person’s height as well as weight. One way that doctors now decide if someone is overweight is to use the **Body Mass Index, or BMI**. The BMI gives doctors a common way of deciding whether or not their patients might have a weight problem. The BMI is presented as a kind of score that is based on height and weight.

- The BMI measurement is a reliable indicator of your total body fat. The score you get is valid for most people over age 18 with the following exceptions:
  - It may overestimate body fat in athletes and those people with a muscular build – so that someone might appear to be overweight when, in fact, they are just very muscular. (Muscle weighs more than fat.)
  - It may underestimate body fat in older people and others who have lost muscle – so that someone might appear to have a normal BMI but might actually have too much body fat.

Point out that BMI “scores” are related to different categories. You may want to point out that each weight category corresponds to a range of BMI scores, rather than one single number. Write the following down on a board or overhead:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Weight Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5-24.9</td>
<td>Normal (neither underweight nor overweight)</td>
</tr>
<tr>
<td>25 – 29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>30 and higher</td>
<td>Obese</td>
</tr>
</tbody>
</table>

Offer some examples, in which students locate a BMI within the appropriate range:

---

1 From WebMD:
http://my.webmd.com/content/tools/1/calc_bmi.htm?z=3628_81000_0000_07_05
Let’s imagine that Maureen is five feet tall and weighs 110 pounds. She has a BMI of 21. In what category does her BMI fall? (answer: normal).
Sheila is also five feet tall and weighs 180 pounds. She has a BMI of 35. In what category does her BMI fall? (answer: obese)

Note to teacher: You may want to make the examples more concrete by pointing out how tall five feet is relative to your own height or by asking someone who is close to five feet tall to stand up. Be sensitive to your students and any potential emotional issues related to weight before you call attention to any individuals in your class.

3. Review how to read a table (Large group activity)
Point out to students that in this lesson, you want to help students learn to read tables of information. Before looking at the large table that lists heights, weights and BMIs, you will look at a simple table to review how to go about reading a table.

Distribute the How to Read a Table handout and review the questions listed below. If your students have little experience with table reading, you may want to put the BMI Examples table on an overhead so that all students can see it as you work through it.

1. What is the table about? Read the title. (BMI Examples)

2. How is the table organized?
   (If necessary, explain that tables have rows and columns. Rows run across the page, columns run down the page.)
   How many columns do you see in this table? (4)
   How many rows? (5 – one row contains headings)

   Note that rows and columns have headings. Headings help us understand what it is in each row or column.

   What are the column headings in this table? (Name, weight, BMI, category)
   What are the row headings? (Antoine, Kayla, Michael, Sheila)

   What kind of information can you find in this table? (These 4 peoples’ weight, BMI and category)

3. Which rows and columns will you need to read to find the information you want?
   We are interested in looking at these peoples’ BMI’s. Which rows and columns will we need to read to find this information? (Name and BMI)

4. Use your finger or a ruler to find the place where a row and a column meet.
   We find information in a table like this at the place where a row and column meet. How can I find out what Antoine’s BMI is by looking at this table?
   (e.g., You use your finger to move across Antoine’s row. You use your other
finger to move down the BMI column. The place where your fingers meet gives the answer – 41.)

**BMI Examples**

<table>
<thead>
<tr>
<th>Name</th>
<th>Weight</th>
<th>BMI</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antoine</td>
<td>325 lbs.</td>
<td>41</td>
<td>extremely obese</td>
</tr>
<tr>
<td>Kayla</td>
<td>110 lbs.</td>
<td>21</td>
<td>normal</td>
</tr>
<tr>
<td>Michael</td>
<td>170 lbs.</td>
<td>29</td>
<td>overweight</td>
</tr>
<tr>
<td>Sheila</td>
<td>180 lbs.</td>
<td>35</td>
<td>obese</td>
</tr>
</tbody>
</table>

If you feel that students would benefit from more practice in locating information in the table before moving on, ask questions like the following:

*How much does Michael weigh? (170 pounds)*
*What is his BMI? (29)*
*What is the category for Antoine’s weight? (extremely obese)*

If you feel that students are ready for more of a challenge, ask questions like the following:

*Who weighs the most? (Antoine) the least? (Kayla)*
*Who has the highest BMI? (Antoine)*
*Who does not need to lose any weight? (Kayla)*

4. **Present the Body Mass Index (BMI) Table**

Explain that the table that students just reviewed listed some examples of people’s weights and BMI’s. Students will now have a chance to look at a BMI table to learn how to find someone’s BMI if we know their height and weight.

Distribute a **BMI Table** to each student and, if possible, have one available on an overhead.

You may want to acknowledge that the table has so many numbers it seems overwhelming. Reassure students that they will only need to look at a few numbers at a time in order to use the table. Point out that you will first look at the different parts of the table to understand how to read it, and that you will provide some examples for practice as a group.

Ask students to use the first two sets of questions listed on their **How to Read a Table** handout to help them look over the BMI table.

1. *What is the table about? What is its title?*
2. How is it organized? What are the column and row headings?

Give students two minutes to look at the table silently. Then, ask students what pieces of information they see listed in this table (e.g., heights, weights, BMIs).

Ask a volunteer to explain how to use the table (e.g., you find the person’s height in the far left column, match it with the weight column, find where they meet).

If your students have a difficult time navigating the table, “walk” them through the parts of the table, pointing out each part on the overhead version and making certain that students are able to locate the parts on their own copy of the table. Give students an opportunity to identify each part before providing answers. For example, ask questions such as, “What is the title of this table?” and “What does the first row of numbers tell us?” Share additional points as suggested below.

Be sure that you cover each of the following elements of the table.

- The title - “Body Mass Index Table”
- The next line – weight (Point out that this table only represents a portion of a complete BMI table.)
- The titles - pertaining to height and body weight
- The vertical columns – BMI for weight ranges
- The rows – BMI for height ranges

You may also wish to call attention to the shading within the table. Ask students to explain how they think the table is shaded. Be sure that everyone understands that the darkest shading represents normal, healthy weight ranges. The lighter shaded areas represent borderline healthy weight ranges.

5. Provide some examples to practice using the table.

If you have available rulers or blank white sheets of paper, show students how they can use them to look across a row more easily.

Ask everyone to look at the first row only. Point out that this row is for a person who is 5 feet tall. Ask the following questions:

- What is the person’s BMI if s/he weighs 120 pounds? (Answer: 23/normal).
- What is the person’s BMI if s/he weighs 160 pounds? (Answer: 31/obese)

Explain that the weights listed represent a range of weights. So, for example, a person who is 5 feet tall will have a BMI of 20 if they weigh 100-104 pounds. They will have a BMI of 24 if they weigh 125-129 pounds.

Now ask students:
What is the BMI for a person who is 5 feet 7 inches tall and weighs 236 lbs?  
(Answer: 37)

Examples
Work through the following examples as a group. Ask for a volunteer to answer the question and explain how they found the answer. If you’re using an overhead, have the volunteer physically show how they found the answer.

1) Rose is 5 feet 2 inches tall and weighs 115 pounds. What is her BMI?
   Sample answers:
   - Find the row with 5’2” inches.
   - Read across the weight columns until you come to 115.
   - Find the place (cell) where the row and column meet - in this case, 21.

   Ask if Rose, with a BMI of 21, is overweight? (Answer: no)

2) Tony is 5 feet 4 inches tall and weighs 150 pounds. What is his BMI? Is he overweight? (Answer: 26 – yes)

3) Marie is 5 feet 6 inches tall and weighs 182 pounds. What’s her BMI? (Answer: 29) Is she overweight? (Answer: Yes)

4) Max is 5 feet 9 inches tall and weighs 202 pounds. What is his BMI? (Answer: 30 / obese)

6. Using the BMI Table (Pair/small group work)
   In this part of the lesson, students will work in pairs to practice using the BMI table to determine individual BMI scores. Students will then record their answers in a simple table. Each pair will join with another pair to compare their answers and then discuss a set of questions.

   Distribute the Using the BMI Table and BMI Exercise Answer Table handouts. Ask students to form pairs to work on the examples listed on the handout and then complete the table. Depending on the level and experience of your students, you may need to provide some demonstration or guidance on how to record their answers in the table. While students are working on this part of the lesson, circulate among pairs to see if students are having any difficulties. Answers are listed in the Teacher’s Answer Key – BMI Exercise Answer Table below.

   Have pairs form groups of four to review their tables and discuss any differences in answers. Again, the teacher should circulate among groups to see if students have any questions.

   Ask small groups to discuss the questions listed on page 2 of the handout.
Lesson 6: (ABE) Using a Body Mass Index Table

Teacher’s Answer Key -- BMI Exercise Answer Table

<table>
<thead>
<tr>
<th>Name</th>
<th>Height</th>
<th>Weight</th>
<th>BMI</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamara</td>
<td>5'1&quot;</td>
<td>164</td>
<td>30</td>
<td>obese</td>
</tr>
<tr>
<td>Lena</td>
<td>5’</td>
<td>168</td>
<td>32</td>
<td>obese</td>
</tr>
<tr>
<td>Robert</td>
<td>5'7&quot;</td>
<td>191</td>
<td>30</td>
<td>obese</td>
</tr>
<tr>
<td>Luisa</td>
<td>5'5&quot;</td>
<td>104</td>
<td>17</td>
<td>underweight</td>
</tr>
<tr>
<td>Chris</td>
<td>5’10”</td>
<td>240</td>
<td>34</td>
<td>obese</td>
</tr>
<tr>
<td>Joe</td>
<td>5’8”</td>
<td>158</td>
<td>24</td>
<td>normal</td>
</tr>
<tr>
<td>Mariana</td>
<td>6’</td>
<td>220</td>
<td>30</td>
<td>obese</td>
</tr>
<tr>
<td>Ramon</td>
<td>6'4”</td>
<td>225</td>
<td>27</td>
<td>overweight</td>
</tr>
<tr>
<td>Maricel</td>
<td>5'7”</td>
<td>109</td>
<td>16</td>
<td>underweight</td>
</tr>
<tr>
<td>Stephen</td>
<td>6'2”</td>
<td>186</td>
<td>24</td>
<td>normal</td>
</tr>
</tbody>
</table>

7. **Sharing ideas and conclusion (Large group discussion)**
   In this part of the lesson, small groups have an opportunity to report back on what they discussed.

   Ask groups to share responses to the discussion questions. Record answers to questions 2-5 on the board or an overhead. Allow the class to respond to each others’ comments and ask any questions about the graph that they may have.

   1. *Aside from your weight, what are some other things that a doctor might want to know about you to decide if you are at risk of developing health problems?* (Possible answers: if you smoke, drink, take drugs, exercise, sleep regularly, lead a stressful life, have a family history of disease, etc.)

   2. *What are three things that people who are overweight can do to lose weight?* (Possible answers: eat less, exercise more, talk to their doctor, avoid sweets, drink less alcohol, eat more fruits and vegetables, etc.)

   3. *What are three things that people who have a “normal” weight can do to maintain their weight?* (Possible answers: exercise regularly, eat moderately, weigh themselves regularly)
4. If you had a BMI that fell in the “overweight” category, what questions might you want to ask your doctor?
   (Possible answers: How much weight do I need to lose? What can I do to lose weight? Can I take anything to help me lose weight faster? What kind of exercise is it safe for me to do?)

To conclude the lesson, direct students to an appropriate follow-up activity.

Follow-up activities

A. Writing exercise: What’s your BMI? Ask students to find their own BMI using the table. In their journals, students should answer the following questions: Is the BMI a good measure of your own health? Why or why not? What other things would you want a doctor to know about you to decide if you are at risk for developing health problems? What are things you currently do to monitor your weight? What things might you do differently to maintain or reach a healthy weight?

B. Table-creating exercise: The BMI of friends and family
   Have students gather the heights and weights of friends and family and calculate BMIs. They should then record their findings in a table that lists names, heights, weights, BMIs and a column for evaluating the BMI as a measure for each individual. If students wish to ensure the confidentiality of other individuals’ weight, they can make up names for each person on their table.

C. Table-reading practice: Have students practice finding information in a variety of tables. Some sample health-related tables are listed at the end of the lesson.

D. Exploring other tables: Ask students to look for other examples of tables and prepare to present the tables to others in class by describing what each table is used for, what information is given, etc.

ESOL Tips

You may want to have students practice converting from metric height and weight to feet/inches and pounds.

You may want to have some discussion around how different cultures view weight and/or obesity (e.g., in some cultures being heavier is viewed as a sign of wealth, since poor people tend to be thin; in different cultures good looks are not determined by weight, etc.) You may wish to ask the students to generate a list of some ways that ideas about body weight differ between the U.S. and their home countries.
Technology Tips

✓ Expanding Beyond the BMI
The on-line GED 2002 Teacher’s Lesson Bank includes a lesson titled *Protect Your Heart*, which puts the BMI in the context of heart health. The lesson includes a discussion of risk factors for heart disease and stroke, and provides students with practice in graphing and planning for healthy actions. Elements of the lesson can be adapted to pre-GED students. The lesson plan and materials are available at: http://www.floridatechnet.org/GED/LessonPlans/Science/sciencelesson35.pdf.

✓ BMI Calculators
The following websites provide BMI calculators. You might ask your students to try using one of these to determine their own BMI and to read more about the BMI and what it means.

- **BMI - Body Mass Index: BMI Calculator from the Centers for Disease Control (CDC) and Prevention at**
  [www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm](http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm)
  This site has a BMI calculator that provides both English and metric calculations. It also provides a brief explanation of what the BMI means, as well as a link to a calculator of the BMI for children.

- **Body Mass Index Calculator at** [www.halls.md/body-mass-index/bmi.htm](http://www.halls.md/body-mass-index/bmi.htm)
  This site provides a BMI calculator that compares you to others for your age and indicates what percentile you fall into for your age group.

- **The National Institutes of Health at** [http://nhlbisupport.com/bmi/](http://nhlbisupport.com/bmi/)
  This site offers a BMI calculator and includes links to the NIH healthy weight home page and a menu planner.

✓ The BMI for Children
If you are working with more advanced ABE students, you may wish to discuss percentiles, which are particularly important in understanding children’s BMI scores. The interpretation of the BMI score in children is based on their percentile and not on an absolute number, as with adults. Children's BMI measurements are plotted on growth charts rather than using a universal normal range for BMI as is done with adults, and separate charts are used for boys and girls to account for differences in growth rates and amounts of body fat as the two genders mature. ABE students may get confused when they deal with their children’s BMI charts, something important these days as many schools have decided to conduct BMI assessments.

- The following website offers an explanation about the BMI in children: [www.kidshealth.org](http://www.kidshealth.org)
This site also contains an article explaining how the BMI chart works for children, along with a BMI calculator, found at: http://www.kidshealth.org/parent/food/weight/bmi_charts.html
How to Read a Table

1. What is the table about? Read the title.

2. How is the table organized? Read the column and row headings. What kind of information can you find in this table?

3. Which rows and columns will you need to read to find the information you want?

4. Use your finger or a ruler to find the place where a row and column meet.

BMI Examples

<table>
<thead>
<tr>
<th>Name</th>
<th>Weight</th>
<th>BMI</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antoine</td>
<td>325 lbs.</td>
<td>41</td>
<td>obese</td>
</tr>
<tr>
<td>Kayla</td>
<td>110 lbs.</td>
<td>21</td>
<td>normal</td>
</tr>
<tr>
<td>Michael</td>
<td>170 lbs.</td>
<td>29</td>
<td>overweight</td>
</tr>
<tr>
<td>Sheila</td>
<td>180 lbs.</td>
<td>35</td>
<td>obese</td>
</tr>
</tbody>
</table>

Note: lbs. is the abbreviation for pounds.
**Body Mass Index Table**

<table>
<thead>
<tr>
<th>HEIGHT</th>
<th>10</th>
<th>10</th>
<th>11</th>
<th>11</th>
<th>12</th>
<th>12</th>
<th>13</th>
<th>13</th>
<th>14</th>
<th>14</th>
<th>15</th>
<th>15</th>
<th>16</th>
<th>16</th>
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<th>22</th>
<th>22</th>
<th>23</th>
<th>23</th>
<th>24</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'0&quot;</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
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Adapted from *Body Fat Lab Body Mass Index* [http://www.shapeup.org/bodylab/tools/bmi2.asp]

**BMI Ranges**

- **<18.5** = underweight
- **18.5 - 24.9** = normal
- **25 -- 29.9** = overweight
- **30 and higher** = obese
## Using the BMI Table

### I. For each example, give the person’s BMI and weight status (normal, overweight, etc).

1. Tamara is 5 feet 1 inch tall and weighs 164 pounds  
   BMI: 30, obese

2. Lena is 5 feet tall and weighs 168 pounds.  
   ________________

3. Robert is 5 feet 7 inches tall and weighs 191 pounds.  
   ________________

4. Luisa is 5 feet 5 inches tall and weighs 104 pounds.  
   ________________

5. Chris is 5 feet 10 inches tall and weighs 240 pounds.  
   ________________

6. Joe is 5 feet 8 inches and weighs 158 pounds  
   ________________

7. Mariana is 6 feet tall and weighs 220 pounds.  
   ________________

8. Ramon is 6 feet 4 inches tall and weighs 225 pounds.  
   ________________

9. Maricel is 5 feet 7 inches tall and weighs 109 pounds.  
   ________________

10. Stephen is 6 feet 2 inches tall and weighs 186 pounds.  
    ________________

### II. Summarize what you found in the BMI Exercise Answer Table on the next page.
BMI Exercise Answer Table

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Discussion Questions

1. Aside from your weight, what are some other things that a doctor might want to know about you to decide if you are at risk of developing health problems?

2. What are three things that people who are overweight can do to lose weight?

3. What are three things that people who have a “normal” weight can do to maintain their weight?

4. If you had a BMI that fell in the “overweight” category, what questions might you want to ask your doctor?
Lesson 7: (ESOL) Talking About Symptoms to Your Doctor *

Disease Prevention and Screening
Task Addressed in this Lesson
• Describe symptoms clearly and accurately to a doctor

Skills Focus
• Students will learn language expressions and adjectives for talking about symptoms.
• Students will develop communication strategies that can help them be as specific as possible about the nature of symptoms and the conditions under which symptoms appear.

ABE/ESOL Level
Intermediate to advanced ESOL

Time
2 hours

Materials
Student Handouts

Key Vocabulary
ache   inflammation   severe
constant irritation   sharp
crusty low energy   soreness
dull mild   spotty
exhaustion moderate throbbing
frequent occasional tiredness
itchy oozing twinge

Purpose
This lesson is designed to help students learn how to describe their symptoms clearly and effectively. This lesson begins by inviting the students to discuss how talking to a doctor about a health concern is a lot like talking to a car mechanic about a problem with their car. This analogy provides a framework for helping students understand the value of being clear and specific.

Students practice using details about symptoms, including their character, duration, onset, and conditions. A chart of vocabulary words used to describe symptoms is provided.

Steps
1. Whole class discussion. Distribute the handouts. Ask students to look at the page titled Talking about Symptoms to Your Doctor. Discuss the question How is talking to a car mechanic when you have a problem with your car a lot like talking to a doctor when you have a health problem?

Give students a few minutes to write down their thoughts. Then ask students to share what they’ve written with the whole class.

(See possible responses below.)

- It's hard to know what's wrong with a car and what's wrong with our bodies sometimes. We have to explain a lot of things to a car mechanic and a doctor to figure out what is wrong.
- Sometimes the car mechanic doesn’t understand what the problem is with the car. Sometimes the doctor also doesn’t understand what the problem is with our body.
- Car mechanics and doctors both ask lots of questions.
- It can be hard to find words to describe noises and feelings or sensations.

After students have had an opportunity share some of their ideas, explain that the topic of the day’s lesson is how to talk to your doctor about your symptoms. Write the word SYMPTOM on the board and ask students to help you define the word. Encourage them to use their dictionaries and to translate the word into their first language.

Here is a suggested definition:

*It’s useful to think of symptoms as what the patient feels and signs as what the doctor observes. Symptoms, like tiredness (fatigue) and pain, are subjective experiences. (In contrast, signs, like abnormal pulse rate or high blood pressure, are objective features of an illness that can be detected by the doctor during a physical examination.) The doctor cannot easily measure or observe symptoms. Only the patient knows exactly what his or her symptoms feel like. Doctors try to understand the nature and pattern of a patient’s symptoms in order to make a diagnosis.*

2. **Small group work: Reading and discussion.** Organize the class into small groups of three to four people. Ask the groups to read the handout titled **Signs from Your Car, Signs from Your Body.** Explain that the reading talks more about the similarity between talking to your car mechanic and talking to your doctor. After the group reads the paragraph, they should answer the discussion questions from the handout.

   Encourage the students to use their dictionaries or ask for help with unfamiliar vocabulary. Record any new words and their meanings on the board for all to see.

   Check in with each group to make sure they do not have trouble understanding the ideas in the handout.

3. **Large group discussion: What does it mean to be CLEAR and SPECIFIC?** Invite the groups to share their responses to the discussion questions. Be sure to check the students’ understanding of what it means to be CLEAR and SPECIFIC when describing your symptoms to a doctor. The more information you give to a doctor, the more likely the doctor will be able to identify the problem.
Be sure to recognize the students’ worries and concerns about talking to a doctor about their symptoms. It is easy to be scared and nervous when talking to a doctor about your health, especially when you don’t feel very well. At the same time, if you are too scared or nervous, you may not be able to think clearly, describe your symptoms effectively, or ask good questions.

Not all doctors are good listeners. Students will need help as they think about what to say to a doctor. They need practice asking questions and planning skills to decide what to focus on. Many people are assertive in this way when they talk to a car mechanic because they want their car fixed quickly and in the right way. This is a useful way of thinking about talking to doctors to avoid delays in getting health care.

4. Small group work: Practice describing symptoms. Ask students to turn to the handout Practice: How to Describe Your Symptoms, which features several questions that can help the students know what to say to the doctor about symptoms. Ask the students to work in their small groups to read the questions and the examples of things to say to a doctor. Ask the students to practice what they might say to a doctor.

Also, refer students to the handout Vocabulary for Describing Symptoms, which gives examples of words used to describe pain, tiredness, and rashes. Encourage the students to use the words from this handout in their descriptions. Encourage students to add other symptoms (e.g., fever, stress) and add other related nouns, verbs, and adjectives to the list. The follow-up activities in this lesson describe ways to use this handout for vocabulary development.

Follow-up Activities

A. Vocabulary for Describing Symptoms

Ask students to review the vocabulary in the handout Vocabulary for Describing Symptoms, and to use a dictionary to learn the meanings of any new words. Students can work in pairs to explore the differences in meaning for a group of words related to a particular symptom. Students can discuss, for example, how a dull pain feels different from a sharp pain, or how a twinge is different from a throbbing pain. Encourage students to come up with strategies for remembering these differences, such as ordering these words on a continuum to indicate severity of pain. For example, students might generate mnemonics such as this:

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<td>dull</td>
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<td>throbbing</td>
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Students can also work in pairs to generate descriptive words for other symptoms, such as shortness of breath, fever, stress, or anxiety. Be sure to have a dictionary and thesaurus on hand for each group.
B. Interview someone about their experiences with being sick and managing symptoms
Ask students to identify someone who has experience with being sick or managing a chronic disease. The students will interview the person about the range of symptoms the person had. This activity will help students understand the kinds of symptoms associated with particular illnesses or diseases. Here is a suggested interview protocol:

- Please tell me about the last time you were sick. (Please tell me about your chronic disease.)
- What were your symptoms?
- When did you notice the symptoms? (When did the symptoms start?)
- What were you doing when the symptoms started?
- Did the symptoms happen all the time (constant) or only sometimes? When did you have the symptoms (e.g., only at night)? How long did the symptoms last (a few seconds, an hour, a week)? What seemed to make the symptoms worse?
- Did the symptoms make it hard for you to do everyday activities (e.g., eat, sleep, and work)? How?
- Did you do anything to feel better? (Did you take any medicine? Did you rest?)
- If you went to a doctor, were you able to explain your symptoms to the doctor? How? Was the doctor able to help you feel better? How?

The students can summarize the person’s responses into an oral presentation or a short descriptive essay. In a large group discussion, talk about common difficulties people have in understanding symptoms and talking to doctors about symptoms.

ABE/GED Teaching Tips
Even those students who are native English speakers or who were born in English-speaking countries will likely find this lesson useful and relevant. Many people – whether they speak English fluently or not – feel intimidated or unsure about what to say when they visit a doctor.

At a conference (Health and Literacy Working Together) organized by the Iowa New Readers,* adult learners shared concerns about not being able to communicate well with their doctors. These students wanted to tell their doctors, “Treat us with respect and we will treat you with respect.” These students also wished their doctors would spend more time with them. They want their doctors to give them clear instructions, for example,

*These comments were taken from conference proceedings but are not available on the Web. For more information about the conference, visit http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Literature/HealthandLiteracyWorkingTogether.htm
when getting a new prescription. The students shared concerns about doctors who assume their patients understand their instructions and can read the documents they are given. The students were also concerned about the assumptions that doctors sometimes make about patients who cannot read well. The students asked that doctors not "feel sorry for us…we want (doctors) to try and understand us.”

You may wish to share some of these comments with your ABE/GED students as a way to jumpstart the discussion of doctor-patient communication issues.

Technology Tips

Here are some suggested Web sites for learning more about patient-doctor communication and symptoms.


- Improve communication with your doctor, Women’s Heart Foundation. http://www.womensheartfoundation.org/content/HeartWellness/improve_doctor_patient_communication.asp
Talking About Symptoms to Your Doctor

1. **Warm-up.** Brainstorm with your classmates.

   How is talking to a car mechanic when you have a problem with your car a lot like talking to a doctor when you have a health problem?

   *Write down your ideas. Share your ideas with your classmates.*

2. **Short reading and discussion**

   Read the handout titled *Signs from Your Car, Signs from Your Body* and answer the discussion questions. Talk about your answers with your classmates.
Signs from Your Car, Signs from Your Body

You know your car better than anyone else does because you drive it every day. You know how it acts when it's running right. You also know when something is not quite right. When something is not right with your car, it sends you a signal. In the same way, you know what feels right with your body.

When something is not right with your body, it sends you a signal, just like a car does. The medical word for these signals is symptoms. A symptom is the way your body lets you know that something is not normal. A symptom may be a sharp pain or shortness of breath or a lack of energy.

Talking to a mechanic about problems with your car is a lot like talking to your doctor about problems with your health. A mechanic will ask you many questions to find out what is wrong with the car. If you say, “My car doesn’t work,” the mechanic will have to ask you many questions to figure out the problem. But, if you say, “My car makes a loud noise when I drive fast on the highway,” this helps the mechanic find the problem faster. In the same way, your doctor can more easily figure out a health problem if you are CLEAR and SPECIFIC. If you say, “I feel sick,” the doctor will have to ask you many questions to find out what is wrong. But, if you say, “I have a sharp pain in my arm when I try to write,” you can help the doctor figure out the problem faster.
Discussion Questions

1. Think of a time when you or someone you know (a member of your family or a friend) was sick. What were the symptoms?

2. What can be difficult about talking to a doctor about your symptoms?

3. Why do you think it’s important to clearly explain your symptoms to a doctor?

4. What are ways that you can be CLEAR and SPECIFIC when you talk to a doctor about your symptoms?
Practice: How to Describe Your Symptoms

It is useful to think about what to say to the doctor before you go to the doctor’s office. Here are some questions that you can ask yourself. Your answers may help you be CLEAR and SPECIFIC when talking to your doctor about your symptoms.

- What is the symptom? (Is it a pain? Is it a rash? Is it a feeling of tiredness?)
- When did you notice the symptom? (When did the symptom start?)
- What were you doing when the symptom started?
- Does the symptom happen all the time (constant) or only sometimes? When do you have the symptom (e.g., only at night, when I’m moving)? What seems to make the symptom worse?
- How long does the symptom last (e.g., a few seconds, an hour)? How long have you had it (e.g., a week, a month)?
- Does the symptom make it hard for you to do everyday activities (e.g., eat, sleep, and work)? How?
- Are you doing anything to try to feel better? (Do you take any medicine? Do you rest?)

Here are some examples of how to describe symptoms:

“Doctor, I have a red rash on my stomach. I saw the rash after dinner two nights ago. It hasn’t gone away.”

“Doctor, I have a sharp pain in my lower back. I was lifting a heavy box at work a couple of weeks ago when I first felt the pain. I took some aspirin and the pain went away for a little while. The pain is getting worse.”

“Doctor, I have a mole on my left arm. The mole used to be small, but I think it looks bigger and darker. I work outside and I sometimes use sunscreen, but I often forget.”
“Doctor, I have chills and feel very weak, especially in the late afternoon, before dinner.”

Don’t say, “Doctor, I don’t feel well. What’s wrong with me?”

**Practice:** Think of a time when you (or someone you know) didn’t feel well or had a health problem. What were the symptoms? Imagine that you were going to talk to a doctor about the problem. Answer as many of the questions as you can that are listed in the handout titled **Practice: How to Describe Your Symptoms.**

What do you want to tell the doctor? You can use the handout titled **Vocabulary for Describing Symptoms** to find words for describing symptoms, such as pain, fatigue, or a rash. Use a dictionary or ask your classmates or your teacher for help with any new words.

If you want to talk about a symptom that is not on the list, fill in a blank row with the symptom and the other nouns, verbs, and adjectives you would use to describe it.
### Vocabulary for Describing Symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Adjectives I can use to describe the NATURE of the symptom</th>
<th>Adjectives I can use to describe the DURATION of the symptom</th>
<th>Nouns with similar meaning</th>
<th>Expressions I can use to describe the symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain</td>
<td>dull mild moderate severe throbbing sharp</td>
<td>constant occasional frequent</td>
<td>soreness ache throb</td>
<td>I feel sore. It aches. It twinges. It throbs.</td>
</tr>
<tr>
<td>fatigue</td>
<td>severe mild moderate</td>
<td>constant occasional frequent</td>
<td>tiredness exhaustion low energy</td>
<td>I tire out. I am exhausted. I have low energy.</td>
</tr>
<tr>
<td>rash</td>
<td>spotty red itchy oozing crusty mild severe</td>
<td>occasional frequent</td>
<td>reaction inflammation itchiness irritation</td>
<td>I have a skin reaction. My skin is irritated. My skin is itchy. It flares up.</td>
</tr>
</tbody>
</table>
# Lesson 8: (GED) Making Important Health Decisions

<table>
<thead>
<tr>
<th>Disease Prevention and Screening Tasks Addressed in the Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Understand the purpose and process of colorectal cancer screening</td>
</tr>
<tr>
<td>▪ Make health-related and other types of important decisions</td>
</tr>
<tr>
<td>▪ Use a tool for making important decisions</td>
</tr>
</tbody>
</table>

**Skills Focus**

- Students will practice science-related reading.
- Students will review vocabulary related to colorectal cancer screening.
- Students will practice making a decision about health screening.
- Students will practice writing about a big decision they have faced.

**Purpose**

The purpose of this lesson is to provide students with an opportunity to explore the process of making important health-related decisions, in this case about health screening.

The lesson is designed as two sessions. In the first session, students learn about colorectal cancer and the colonoscopy test and then explore decision making through a role-play game. The second session focuses on the Ottawa Personal Decision Guide, a tool for making health and other important decisions. Students have an opportunity to practice using the guide and write about their own decision-making experiences.

**Note to teachers:** This lesson was designed around the question of whether or not to have a colonoscopy. You may wish to focus the lesson on some other type of screening (e.g., amniocentesis, HIV test) or health procedure that seems more relevant to your students and still requires a thoughtful decision process about participating in the test or procedure.

## Session 1

1. **Introduction.** Start the class with a discussion prompt, such as the Decisions, Decisions! diagram included in this lesson. Show the prompt on an overhead transparency or copy it as a handout.

Ask students the following question about the prompt:

*What makes these decisions difficult?*

e.g., They involve money; the consequences might last a long time; the course of action might be risky or might bring more problems than person has already, etc.

## ABE/ESOL Level

GED

## Time (Two Sessions)

Session 1: 2 to 2½ hours  
Session 2: 1½ hour

## Materials

- Watch or other timer  
- Handouts

## Key Vocabulary

- benign  
- biopsy  
- cancerous  
- colon  
- colonoscopy  
- colorectal  
- complication  
- cons  
- option  
- polyp  
- pros  
- tumor
Ask students the following questions:

*Think about a time in your own life when you faced a big decision.*  
*What made your decision difficult?*  
*What influenced your decision?*  
*What helped you make a decision?*  
*Were you happy with your decision? Why?*

Have students think for 1-2 minutes and then share stories in pairs for 5 minutes.

Have volunteers share some examples. Focus on influences and what helped with the decisions. Keep a running list of influences on decision-making on the board or overhead transparency.

2. **Background Reading on Colorectal Cancer (Pairwork)** Explain that in this lesson, you will look at an example of a big decision that has to do with getting a health screening test. Share the following scenario with students:

*William just turned 52. At his last check-up, his doctor suggested that William have a colonoscopy test. William is not sure whether or not to have the test. In the next activity, we are going to try to help William make that decision.*

Note that before students move on to discussing that decision, they will do a short reading to help them understand what a colonoscopy test is all about.

Have students work in pairs to read the three handouts **What is Colorectal Cancer?**  
**Who is Likely to Get Colorectal Cancer?**\(^1\) and **Colonoscopy**. Students should then answer the **Colorectal Cancer Reading Comprehension Questions**. Circulate among pairs while they are working and bring the class back together to review answers to the questions.

Remember, as an ABE teacher, you are not a medical expert, so technical questions should be referred to a health professional!

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\(^1\) These materials are adapted from the Healthy Roads Media Web site at [http://www.healthyroadsmmedia.org/eng.htm](http://www.healthyroadsmmedia.org/eng.htm).
Colorectal Cancer Reading Comprehension Questions
(Teacher’s Answer Key)

I. Read the page titled, “What is Colorectal Cancer?” and answer the following questions.
   1. Digestive system
   2. Tumor or polyp
   3. Blood in or on stools; alternating between constipation and diarrhea; very thin or narrow stools; feeling bloated or gassy; stomach pains; vomiting; losing weight without trying; feeling tired all the time.
   4. Eat fruits and vegetables every day; exercise

   True or False
   1. False (stomach and small intestine)
   2. True
   3. False
   4. False
   5. True

II. Read the pages titled, “Who is Likely to Get Colorectal Cancer?” and “Colonoscopy,” and answer the following questions.
   1. More than 55,000
   2. Being 50 or older; having (or having family members who have had) polyps or colorectal cancer before; having chronic inflammation of the colon, such as Crohn’s disease or ulcerative colitis
   3. Take a daily vitamin with folic acid or folate; eat less red meat (2-3 serving per week); eat deep-fried foods less often; eat less fatty foods; quit smoking; don’t drink a lot of alcohol.

   True or False
   1. False
   2. True
   3. False
   4. False
3. **The Big Decision Game (Large group activity)** In this part of the lesson, students take on roles to explore the process of making a decision such as whether or not to have a colonoscopy.

**Preparation**

To begin, explain the three different roles available to students, and ask each student to choose a role to play during this activity.

- Three people make up the team of *decision-makers*.
  
  Explain that the job of this group is to make a decision about William’s colonoscopy. As the “game” moves along, they will hear pieces of information from the different kinds of influences that affect this kind of decision. Every time the team hears new information, they will have 30 seconds to keep or change their decision.

- Five people act as *influences*.
  1. personal views, beliefs, phobias, etc.
  2. family, friends, community
  3. money
  4. work
  5. health information/doctors

  Explain that this group will serve as the voices of some of the influences that can affect this kind of decision. Each person should write down the name of their influence to hold up, so others know who they are (personal views, money, work, etc). Each person will also be given examples of things that he or she can say from this perspective. (See the Big Game Materials Influence Statements on page 21 of this lesson.) You can also invite students to ad-lib, as long as what they say represents their assigned influence.

- The rest of the class serves as *observers and voters*.

  Explain that this group will listen to the influences and observe the decision making of the decision-makers. This group should pay careful attention to the reasons behind the team’s decisions at each step. They will be asked to vote on the decision and share their observations and comments at the end of the game.

**To Play the Game**

1. First the decision team must make an initial decision (not final) based only on hearing the question. The three people vote; the majority wins. The teacher or a volunteer records the answer on the board or an overhead for all to see.
2. Next, one of the influences reads a card with a statement on it. For example: Personal Views says: “I hate doctors, needles and anything that has to do with a hospital.”

3. The decision team then has 30 seconds to revise its decision or keep as is and indicate why.

4. While the team is deliberating, the teacher polls the observers for a decision and records their answer in a separate column on the board. Running records are made of the decisions. (2 lists – 1- team and 1- observers). The teacher then compares the decisions.

5. Next, another influence speaks. For example: Money says “My insurance only covers part of the cost of the test. I’ll still have to pay $100.”

6. Again the team is asked to make a decision and indicate why, and the teacher polls the observers and compares answers.

7. The same process continues until all influences have spoken at least twice. Then influences and observers are offered the opportunity to add additional influences or elements to the decision making process. “Would anyone like to add something that our team should think about in making this decision?”

8. When no more influences or ideas are offered, the team must make its final decision. It has no more than 2 minutes for this. During that time, the observers are polled for their final decision. When time’s up, the team announces its decision.

**Sharing Observations and Comments**

Once the team has offered its decision, ask observers the following questions:

*What did you notice about how the team made its decision over time?*
  e.g., They never wavered, they changed a lot, etc.

*What appeared to be the strongest influences on their decision?*
  e.g., They seemed very concerned with money, or how the decision affected their family, etc.

Ask the whole class the following questions:

*Let’s look at the observers’ decision making. What do you notice about their decision-making route? Was it similar or different? How? How might you draw the two decision-making paths?*

Ask for volunteers to draw the decision making paths on the board or overhead.
As a way to review the activities of the day, ask the students to generate the following lists (bolded column headings). Record their answers in a table like the one below on the board or an overhead.

### Making Big Decisions

<table>
<thead>
<tr>
<th>Influences on decision</th>
<th>What makes decision hard</th>
<th>What helps with decision</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal views</td>
<td>e.g., Time pressures</td>
<td>e.g., Information</td>
<td>e.g., People</td>
</tr>
<tr>
<td>Family, friends,</td>
<td>Worries</td>
<td>Time and space to think</td>
<td>Doctors</td>
</tr>
<tr>
<td>community</td>
<td>Costs</td>
<td></td>
<td>Web</td>
</tr>
<tr>
<td>Money</td>
<td>Consequences</td>
<td></td>
<td>magazines</td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health information/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>doctors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Add others generated from student discussions]

4. **Homework Assignment: Use the Ottawa Personal Decision Guide**\(^2\) Distribute the Ottawa Personal Decision Guide (found at the end of the lesson plan handouts) to each student. Explain that this is one tool for people to use when they are facing a difficult decision about health or other areas of life.

Point out that the guide is based on five key steps in the decision making process:

1) Clarify the decision.
2) Identify your role in decision-making.
3) Assess your decision-making needs.
4) Weigh the options.
5) Plan the next steps.

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\(^2\) This guide was developed by the University of Ottawa, Ottawa Health Research Institute. It is available on-line at http://decisionaid.ohri.ca/deeguide.html.
The guide allows a person to go through the decision-making process two times, since sometimes new information becomes available, or our thoughts change over time – as students probably observed during the big decision game.

Ask students to read over the Decision Guide for homework. As they read, ask students to think about the following questions:

- What would you find helpful about using this tool?
- What would make it difficult to use?
- How does this way of making a decision compare to your own way of making big decisions?
Session 2

1. **Introduction** Review the activities of the previous session, in which students learned about the colonoscopy test and played the Big Decision Game. Ask students to comment briefly on their impressions of the Ottawa Personal Decision Guide.

2. **Practice Using the Decision Guide (Pairwork)** Have students work in pairs for about 25 minutes. Distribute one new copy of the decision guide to each pair. (Students can keep the clean copy distributed for homework for their own future reference.) Explain that in each pair, one student will play the role of the “decision maker” around a current, imagined, or past decision. The other student will be the “decision coach.” The coach will interview the decision maker, using the Decision Guide. Together, the pair should complete one copy of the guide (as much as possible).

When all pairs have finished, ask for volunteers to answer the questions:

- *What was most useful about this guide?*
- *What was most difficult about using it?*
- *How well does this guide match with how you make decisions?*

Point out that you hope that the guide— or some parts of it— will be helpful to students the next time they face a big decision.

3. **Writing Activity (Individual practice)** Ask students to think of a time when they faced a big personal decision. Distribute the handout *Essay: My Big Decision* and review the questions with all students. Have students begin to draft their essay. Follow through to completion using your usual essay-writing procedures.

**Note to teacher:** This writing assignment may be done in class or as homework.

**Follow-up Activities**

**A. Invite a guest speaker.** Ask a health professional from the program’s community to visit your class to talk about colorectal cancer and other types of screenings. Have students prepare a list of questions in advance in preparation for this meeting.

**B. Draw decision paths.** Ask students to think about a big decision they once made that are willing to share with the class. Have students make a drawing that represents their path to the decision. For instance, was their path to a decision a straight line or was it a winding road? Have students present their drawings to the class.
Technology Tips

1. **Audio presentation of information**

   ✓ *Healthy Roads Media*
   http://www.healthyroadsmedia.org/
   The Healthy Roads website offers audio versions of much of its health information. If you have access to a computer lab, you may want to have your students go to the website and listen to the audio presentation on colorectal cancer and other health topics.

2. **More information on colonoscopy**

   ✓ *WebMDHealth: Health Guide A-Z*
   http://my.webmd.com/hw/colorectal_cancer/hw209694.asp
   This site offers more information on the colonoscopy test. It includes diagrams of the large intestine, as well as a person having the procedure done, and provides more detail on the actual procedure, including how to prepare, how it feels, risks, and results.

   ✓ *National Digestive Diseases Information Clearinghouse: Colonoscopy*
   http://digestive.niddk.nih.gov/ddiseases/pubs/colonoscopy/
   This site offers an explanation of a colonoscopy, including risks and preparation. It also provides a diagram of the digestive system.

3. **Medical test information form**

   ✓ *WebMDHealth: Health Guide A-Z*
   http://my.webmd.com/hw/colorectal_cancer/hw209694.asp
   The Medical Test Information Form can be accessed through a link within the WebMD website on Colonoscopy, in the “How to Prepare” section. The form can be used by patients to gather information about medical tests. It includes questions on the purpose of the test, what might happen if the test is not done, risks associated with the test, how it will feel to have the test done, and more.
Decisions, Decisions!

Should I have that operation the doctor wants me to have?

Should I get tested for that disease I’ve heard about?

Should we buy a house instead of renting?

Should we move the family to Florida?
Colorectal cancer is often called colon cancer. It is a common health problem in the United States. It kills more people than any other type of cancer except lung cancer. More than 55,000 Americans die from colorectal cancer each year.

Colorectal cancer affects the large intestine, which is part of the body's digestive system. The digestive system breaks down food so your body can use it for energy. After you eat a meal, your stomach starts to break down the swallowed food. The broken-down bits of food go into the small intestine where they’re broken down even further. The small intestine also absorbs nutrients into your bloodstream from the broken-down food. The material that remains goes into the first part of the large intestine (colon), where water is removed and it becomes more solid. It then goes into the part of the large intestine called the rectum, and passes out of your body as stool (also called bowel movements or feces).

Colorectal cancer is a problem with cells in the large intestine. Cells are the very small units that make up all living things, including the human body. They are so small, you need a microscope to see them. There are billions of cells in each person's body. Normally, cells grow and divide and know when to stop growing. Sometimes, things go wrong and cells just continue to grow and divide out of control. These uncontrolled cells can clump together to form a growth that sticks out into the large intestine. This growth is known as a polyp, or a benign tumor. A polyp itself is not cancerous at first, but it can eventually become cancerous.

Colorectal polyps are common in people over age 50. About 4 out of 10 people over age 50 have them. Some polyps become cancerous. When a polyp becomes cancerous, it is also known as a malignant tumor. This means that cells from the polyp can destroy the healthy tissue around the polyp and can invade other body parts. This can be dangerous and difficult to treat.

Fortunately, most polyps are not cancer. A non-cancerous polyp

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3 Adapted from What is Colorectal Cancer? Available at www.healthyroadsmedia.org
may grow to a large size, but it will not spread to other body parts. A small number of polyps (5 to 10 percent) will become cancer if they are not removed early. But, doctors cannot tell which polyps will become cancer. So to be safe and prevent colorectal cancer, it is better to find and remove all polyps.

Usually, polyps and early colorectal cancer don’t cause any noticeable changes in your body. Later, as colorectal cancer grows, people may notice some problems, or symptoms, like:

- Blood in or on your stools
- Going back and forth between hard stool (constipation) and loose stools (diarrhea)
- Very thin or narrow stools
- Feeling bloated or gassy
- Stomach pains
- Vomiting
- Losing weight without trying
- Feeling tired all the time

These problems or symptoms may be caused by colorectal cancer or other problems. Check with a doctor if you notice any of them.

Without symptoms, the only way to find polyps or colorectal cancer is to be tested. If polyps are found, they are usually removed. If the polyps are discovered to be cancerous, then the treatment may also include radiation, chemotherapy or other medicines. Cancer is not contagious. You cannot catch it from someone who has it.

Talk to your doctor about the tests that find polyps early. When they are found early, they are easier to treat. Things you can do to prevent colorectal cancer are eating fruits and vegetables every day and exercising often.
Who Is Likely to Get Colorectal Cancer?

Colorectal cancer occurs more frequently in industrialized, Western societies. It kills more than 55,000 Americans each year. Both men and women can get colorectal cancer. It is most common in people who are 50 years old or older. Doctors do not know exactly what causes colorectal cancer. However, there are some things that increase your risk of developing it.

Your risk increases if:
- You are 50 years old or older.
- You or a family member had colorectal polyps or cancer before.
- You have chronic inflammation of the colon, such as ulcerative colitis or Crohn’s disease.
- Your diet is high in fat.
- Your diet is low in fruits and vegetables.
- You eat a lot of red meat, especially if it’s grilled, fried or barbequed. ("Red" describes the type of animal meat, not whether it is rare or cooked. This includes lamb, pork and beef.)
- You smoke cigarettes.
- You drink a lot of alcohol.
- You don’t exercise and you are overweight.

What Can You Do to Prevent Colorectal Cancer?

The most important thing you can do is to be screened for it on a regular basis when you are 50 years old and older. Be tested at a younger age if you or a family member have or had colorectal polyps or cancer before; colon diseases, such as ulcerative colitis or Crohn’s disease, or a hereditary disease that increases

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4 Adapted from Who is Likely to Get Colorectal Cancer? Available at www.healthyroadsmedia.org
your family’s risk for certain kinds of cancer. Ask your doctor at what age you need to be tested and which test is best for you.

People of all ages can do things to help prevent polyps and colorectal cancer:

- Take a daily multivitamin with “folic acid” or “folate,” a “B” vitamin that is found naturally in fruit, vegetable, and rice.
- Exercise. Try getting at least 30 minutes of physical activity everyday.
- Eat less red meat, just 2-3 servings per week.
- Eat 5 or more servings of fruits and vegetables a day.
- Eat deep fried food less often, and eat fewer fatty foods.
- Quit smoking.
- Don’t drink a lot of alcohol.

Doing things to prevent colorectal cancer can protect you and your family against other diseases, too, like heart disease and diabetes. Follow your doctor’s recommendations for staying healthy!
Colonoscopy

Colonoscopy is one type of screening test that doctors use to look for colorectal cancer. There are a number of different screening tests that can be used to screen for colorectal cancer, and a doctor may suggest one of the others based on your situation and the risk factors that you may have. Doctors usually recommend that people aged 50 and over have screening tests for colorectal cancer. Colonoscopy allows a doctor to look directly inside your large intestine to examine the entire colon. The doctor inserts a thin, flexible tube through the rectum into the colon. A tiny camera at the end of the tube lets the doctor see inside. If you have a polyp, the doctor will probably remove it during the colonoscopy. If the polyp cannot be completely removed, the doctor may take a sample piece (called a “biopsy”) of it to be more closely examined in a lab.

To prepare for the colonoscopy, you have to clean out your colon. This can include following a special diet and using medication that helps to empty the colon. This usually takes 1 or 2 days. Doctors often suggest that you stay home during this time since you will have to use the bathroom a lot.

Right before the colonoscopy, you receive medication to help you relax. After the test, you cannot drive yourself home, so you will need someone to drive you home.

There is a small chance of having a serious complication or problem from the colonoscopy test. There are other tests that look at your intestine, but the colonoscopy is the most thorough. When you have a colonoscopy test done, you don’t need to have any other tests to look for polyps or colorectal cancer.

5 Adapted from 5 Tests to Find Polyps and Colorectal Cancer. Available at the Healthy Roads Media website: http://www.healthyroadsmedia.org/eng.htm
Colorectal Cancer Reading Comprehension Questions

I. Read the page titled “What is Colorectal Cancer?” and answer the following questions.

1. The colon is part of what system of the human body?

2. What do doctors call the thing created by the growth of uncontrolled cells?

3. What are four problems that might mean someone has colorectal cancer?

4. What are two things that you can do to help prevent colorectal cancer?

True or False?

1. The colon is the part of the body where food is broken down. T  F
2. Polyp s are common in people over 50. T  F
3. Everyone who has a polyp has cancer. T  F
4. Colorectal cancer is contagious. T  F
5. The best way to keep polyps from turning into cancer is to have a doctor find and remove them. T  F
II. Read the pages titled, “Who is Likely to Get Colorectal Cancer?” and “Colonoscopy,” and answer the following questions.

1. Approximately how many people die each year from colon cancer?

2. What are three things that increase a person’s risk of getting colorectal cancer?

3. Besides the two things you listed earlier in question 5, what are three other things you can do to reduce your risk of colorectal cancer?

True or False?

1. Only men can get colorectal cancer.  
   
2. You are at higher risk for colorectal cancer if someone in your family had colorectal cancer.  
   
3. If you have a colonoscopy, you will still need other tests to find polyps or colorectal cancer.  
   
4. You can tell if you have colorectal cancer without seeing a doctor.
Cut out each of the boxes provided below. Distribute a box to each student who will play the role of an influence in the Big Decision Game. Remind students that they can make up their own statements, as long they represent the perspective of the influence that they are assigned.

### Personal Views

If you are playing this role, you might say the following:

* I hate needles and all that stuff doctors use, and I don’t want anyone poking around in my behind!

* What if I find out I do have cancer? I’m not sure I could handle it.

* When you have a colonoscopy done, there is a risk of getting severe bleeding or a tiny hole in your colon. They say there’s about a 1 in 1,000 chance of that happening – what if I’m the one in a thousand?

### Family, Friends, Community

If you are playing this role, you might say the following:

* My father’s doctor thinks colon cancer is what killed my dad.

* My wife keeps telling me that I should have this test done so she won’t worry about me.

* I want to be around to see my kids grow up.
### Money

If you are playing this role, you might say the following:

*If I have this test done, it's going to cost me $200, even with my health insurance.*

*If I get sick and am out of work, how will we pay the bills?*

*If it turns out I have cancer, how will I be able to support my family?*

### Work

If you are playing this role, you might say the following:

*To prepare for this test, I'd have to drink only liquids for a day or two and go to the bathroom a lot to clear out my colon. That will mean I'll probably have to miss work on the day before, and the day of the test. My boss won't be happy about that.*

*What if I find out I've got cancer? They might fire me and then I'll lose my insurance, and my family will really be in trouble.*

### Health Information, Doctors

If you are playing this role, you might say the following:

*Doctors think that the most important thing you can do to prevent colorectal cancer is to get tested for it on a regular basis once you turn 50.*

*Having someone in your family who has had cancer increases your risk of getting colorectal cancer.*

*A person could have early colorectal cancer and not even have any symptoms.*
Essay Writing:  *My Big Decision*

Think of an important decision that you once faced in your life. Write an essay that answers the following questions:

- *What was the big decision you faced?*
- *What made this decision difficult?*
- *What were the pros and cons of each option?*
- *What was important to you in making the decision?* (e.g., I wanted to do what was best for my children, I didn’t want to upset anyone, etc.)
- *What helped you make your decision?*
- *Were you happy with your final decision? Why?*
Ottawa Personal Decision Guide

For Health or Social Decisions

The Ottawa Personal Decision Guide is for people who are facing tough decisions. It will help you identify your personal needs, plan the next steps, track your progress, and communicate your views to others involved in the decision. The skills you learn here will also help you make other decisions in the future.

You will be guided through 5 steps:

1. **Clarify the decision.**

2. **Identify your role in decision making.**

3. **Assess your decision making needs.**

4. **Weigh the options.**

5. **Plan the next steps.**

The guide can be used more than once to track your progress in decision making. The first time you use the guide, please place your answers in the first column. The next time, please use the second column.

---

**1. Clarify the decision.**

What is the decision you face?

____________________________________________________________

____________________________________________________________

What is your reason for making this decision?

____________________________________________________________

When does this decision have to be made? Date ________________

How far along are you with your decision? [Check ✓ the box that applies to you]

- [ ] a. I have not yet thought about options
- [ ] b. I am considering the options
- [ ] c. I am close to choosing an option
- [ ] d. I have already made a choice

Are you leaning toward a specific option? If yes, which one? Specify:

---

**2. Identify your role in decision-making.** [Check ✓ the box that applies to you]

- [ ] a. I prefer to decide on my own or after considering the opinions of others.
- [ ] b. I prefer to share the decision with: ________________________
- [ ] c. I prefer that someone else decides for me, namely: ________________

---

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Assess your decision-making needs.

People make better decisions if they feel confident in four areas: 1. knowing the options; 2. feeling clear about what is important to them; 3. having enough help from others in deciding; and 4. feeling sure that they are making the best choice.

The questions below can help you see how confident you are in the four areas. Please circle your answers to the questions and date each column.

<table>
<thead>
<tr>
<th>Areas</th>
<th>First Time Date mm/dd/yy</th>
<th>Changes Date mm/dd/yy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What I know</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you know which options you have?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Do you know the good and bad points of each option?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>What’s important to me</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you clear about which good and bad points are most important to you?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>How others help</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have enough support from others to make a choice?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Are you choosing without pressure from others?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>How sure I feel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel sure about the best choice for you?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

If you answer 'yes' to all the questions in an area, this shows you feel confident. People who have answered 'no' to one or several questions are more likely to delay their decision, to have trouble sticking with their choice, or to feel regret about their choice or less satisfied with their decision. Therefore, it is important to work through steps 4 and 5 to gain more confidence in each area.
4 Weigh the options.

Use the balance scale below to help you compare the options and, if you wish, show others involved in the decision.

What I Know
A. Please list and review the options you are considering on the balance scale below.
B. List the pros and cons of each option.
C. Underline the pros and cons that you think are most likely to happen.

What is Important to Me
D. Show how important each pro and con is to you by placing one star (*) to five stars (*****). More stars show more importance.

How Sure I Feel
E. Circle the option with the pros that are most important to you and most likely to happen. Avoid the option with the cons that are most important to avoid and most likely to happen.

<table>
<thead>
<tr>
<th>Option #1 is:</th>
<th>☺ PROS Reasons to choose option</th>
<th>Personal Importance Add * to *****</th>
<th>☺ CONS Reasons to avoid option</th>
<th>Personal Importance Add * to *****</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option #2 is:</th>
<th>☺ PROS Reasons to choose option</th>
<th>Personal Importance Add * to *****</th>
<th>☺ CONS Reasons to avoid option</th>
<th>Personal Importance Add * to *****</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option #3 is:</th>
<th>☺ PROS Reasons to choose option</th>
<th>Personal Importance Add * to *****</th>
<th>☺ CONS Reasons to avoid option</th>
<th>Personal Importance Add * to *****</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

4 Weigh the options. (continued)
F. ‘How Others Help Me’.

Complete the table below to keep track of others involved in this decision.

<table>
<thead>
<tr>
<th>List the persons whose help or opinions matter most to you</th>
<th>Circle their opinion on the best choice for you</th>
<th>Things they can do to help you in this decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Neutral Option #1 Option #2 Option #3</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Neutral Option #1 Option #2 Option #3</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Neutral Option #1 Option #2 Option #3</td>
<td></td>
</tr>
</tbody>
</table>

5 Plan the next steps.

✓ Things making the decision difficult ✓ Things you are willing to try

☐ Not enough information about options, pros and cons
  Having enough information makes it easier to participate in decision making.
  ☐ List your questions:
  ☐ List the sources you will use to find this information (e.g. health professionals, librarian at a health centre, Internet, etc.):

☐ Not enough information about the likelihood of the pros and cons
  People make decisions based on their perception of what might happen.
  ☐ Get advice from your health professional or counsellor about how likely the pros and cons are to happen in your situation.

☐ Unsure about which pros or cons are most important to me
  Finding out what was most important to others who made this decision may help clarify what is important for you.
  ☐ Talk to your health professional or counsellor about other people who made this decision.
  ☐ Review stories about others who made this decision (e.g. on the Internet) Whose views match yours?
  ☐ Talk with people you know who have gone through this decision. Please specify who: _____________________________________________

☐ Lack of support or resources
  Support from other people or groups can help your decision making.
  ☐ List the resources or practical help you still need.
  ☐ Get advice from a professional you feel comfortable with.
  ☐ Choose a trusted person who will help you work through the decision.
  ☐ Bring someone with you to medical or other appointments to take notes.

☐ Pressure from others to make a specific choice
  Focus on the opinions of ‘people who matter’ in this decision.
  ☐ Share your decision guide with others.
  ☐ Ask others to complete a guide themselves. Identify areas of agreement and differences. (People usually can agree on the facts, but may differ on what they value most. It is the person who will be most directly affected by the choice whose values matter most).
  ☐ Find a neutral person to help you and others find solutions to the disagreement.

☐ Other factors making the decision difficult
  List anything else you need to help you:

If you would like to share this information with your health practitioner or other health professional, please complete this section with some information about yourself.

Current Date: ______________________________

Last Name: ______________________________ First Name: ______________________________

Year of birth: ______________________________

Sex: □ male □ female

Highest completed education:
□ grade school
□ elementary school
□ some high school
□ high school diploma
□ community college diploma
□ university degree

Language most often spoken at home: ______________________________

Ethnic origin: ______________________________ (e.g. Caucasian, Asian, African, Hispanic)

Medical conditions that might affect your decision: ______________________________

Please rate your health: □ excellent □ good □ fair □ poor

Family composition (Who lives at home with you?) ______________________________

Address: ______________________________ ______________________________

Telephone number: ( ______ ) ______________________________

Discuss your options and views with your health professional or counsellor.

Before making a final decision, discuss your situation with your health professional or counsellor. Every individual's needs and health concerns are different.

For additional copies of this decision aid and an interactive version, visit www.ohri.ca/decisionaid
Lesson 9: (ESOL) Introduction to Informed Consent

**Prevention and Screening Tasks Addressed in This Lesson**
- Become familiar with the nature and purpose of informed consent forms
- Get help to understand information on official forms and documents

**Skills Focus**
- Students will share and discuss personal perspectives on official documents and forms used in everyday life.
- Students will learn vocabulary typically found on informed consent forms.
- Students will strengthen oral communication skills needed to ask questions and request help when they want more information from their doctors about tests and procedures.

**ESOL Level**
Intermediate to advanced

**Time**
Approximately 4 hours (or 2-3 class sessions)

**Materials**
Student handout

**Key Vocabulary**
- benefits
- capacity
- coercion
- duress
- grant
- informed consent
- patient rights
- risks
- test
- treatment
- voluntarily

**Purpose**
This lesson is designed to introduce ESOL students to the nature and purposes of informed consent forms in health care. The lesson is organized around four readings, which describe the concept and purpose of informed consent forms. After each reading, students complete an exercise that either reinforces new vocabulary or provides them with an opportunity to talk about the nature of informed consent.

**Steps**

**PART A: Introduction to Informed Consent**

1. **Pair Work**
   Ask the students to find a partner to complete Part A on the handout. As the directions on the handout indicate, the pairs are asked to look over the list of official documents and forms in the chart and check which ones they know about and which ones they have actually signed before. This pair work provides students with an opportunity to share their experiences with official forms and documents and to identify barriers to understanding these forms. When pairs have finished, invite 1-2 students to share their experiences with forms and documents.
PART B: Introduction to Informed Consent

1. **Reading #1**

   Say to the students, “We have just talked about lots of different kinds of official documents and forms. Now we are going to focus on one kind of form that doctors often use. It is called an informed consent form.”

   Write “informed consent form” on the board. Say to the students, “Do not worry if you do not know what this means. We will now read something that will teach you about informed consent. Let’s begin.” Tell the students to look at Reading #1 in Part B.

   You can do a model reading of Reading #1. Next, ask for a volunteer to read the text again. Then, ask the students to explain to a partner what the passage is about. This retelling can be useful for students who need the opportunity to practice new vocabulary and build self-confidence in reading fluently. Once students have a working idea of what the reading is about, you may wish to practice reading the text in different ways: choral reading (reading the text aloud together); echo reading (the teacher reads a line and all the students repeat the line back to the teacher); peer reading (students work in pairs to take turns reading the text).

2. **Vocabulary Study**

   This exercise is meant to reinforce the students’ comprehension of the new vocabulary words learned in Part A. The students are asked to look closely at the words *informed* and *consent* and to think of words that are related in form and meaning. This exercise builds the students’ knowledge base and taps into any prior knowledge they may have of these words.

   Note also that students may be able to identify cognates for the words *informed* and *consent* in their first language. (Cognates are words in two languages that have a common ancestral origin and thus are similar in spelling and/or meaning. *Inform* in Spanish is *informar*; *consent* in Spanish is *consentimiento*). To strengthen students’ vocabulary knowledge, invite students to share any cognates of these new words with the class.

3. **Check Your Understanding**

   An important step after Reading #1 is asking students to define in their own words what they think informed consent means. This step provides you (the teacher) with an important comprehension check. It also will be useful for students who need practice using new vocabulary. If appropriate, you may wish to encourage students from similar first-language backgrounds to work together at this point so that they can utilize their first language to confirm and clarify their understanding.

   **Note to teacher:** Reading #1 contains the words “risks” and “benefits,” words that may be unfamiliar to students. Understanding these words is important if the students are to fully appreciate the meaning of “informed consent.” Be sure to check the
students’ comprehension of these words before going on to Reading #2.

4. **Reading #2 and Discussion**
You (the teacher) can do a model reading of Reading #2. As with Reading #1, ask for a volunteer to read the text again. Then ask the students to explain to a partner what the passage is about. Practice reading the text in a way that suits your class: e.g., choral reading (reading the text aloud together); echo reading (the teacher reads a line and all the students repeat the line back to the teacher); peer reading (students work in pairs to take turns reading the text).

Be sure that in your model readings of Reading #2, you emphasize the words “the moral and legal right to make decisions,” because these words are the focus of the discussion immediately following Reading #2. The students are asked to say what they think the phrase “the moral and legal right to make decisions” means. To guide discussion, ask students, “What is a moral right? What is legal right? Why is informed consent a moral and legal right?”

*Note*: A legal right is a right that is protected by the law of the government. A moral right is a right that people believe all humans should have. Moral rights are not protected by the law. People do not always agree on what is a moral right.

The students are asked to complete a sentence prompt that makes use of the phrase “moral and legal right.” This task is meant to reinforce their understanding of these important words.

Ask for volunteers to share their completed sentences with the rest of the class.

5. **Reading #3, Vocabulary Study, and Discussion**
Again, as with previous readings, you (the teacher) can do a model reading of Reading #3. Ask for a volunteer to read the text again. Then ask the students to explain to a partner what the passage is about. Practice reading the text in a way that suits your class: e.g., choral reading, echo reading, or peer reading, as described above.

After the students finish reading Reading #3, they focus on some legal words commonly used on informed consent forms. The chart, which compares **Legal Talk versus Everyday Talk**, shows the students how the legal words can be “translated” into everyday words. The vocabulary focus and accompanying discussion questions help students think critically about the language used on medical consent forms. This critical look at language can help students talk about how the language of the medical world is a barrier to health care. Students have the opportunity to talk about issues of language and power. For example, the students may want to talk about the underlying assumptions – the “unspoken” messages – about who is in control of health care decisions. Lawyers and doctors may have more control because they decide what information to put on these forms, and patients may not feel in control if they cannot understand the information that is given to them. From this kind of discussion,
students are then given an opportunity to identify coping strategies – action steps they might take if they didn’t understand a word on an informed consent form (e.g., ask for a trained interpreter, ask the doctor a lot of questions).

6. **Reading #4 and Discussion.**
   As with previous readings, you (the teacher) can do a model reading of Reading #4. Ask for a volunteer to read the text again. Then, ask the students to explain to a partner what the passage is about. Practice reading the text in a way that suits your class.

   Allow 20 minutes for partners to discuss the questions that follow the reading. These questions are meant to check students’ comprehension of two main ideas from Reading #4. One, students should understand that asking questions of your doctor about tests and treatment is important; asking questions **before** you have a test or treatment is the best time to ask questions. Remind students: if you don’t ask questions, your doctor may think you understand. Two, students should understand that you can still ask questions after you sign a consent form. You can also change your mind about a test or treatment even if you have signed a form. Signing the form does not mean you HAVE to have a test or treatment.

**Follow-up Activities**

A. **Personal “health care dictionaries.”** The creation of a vocabulary log can be carried out individually or in small groups. Students are asked to create their own “dictionaries” for studying the new vocabulary presented in the readings on informed consent. The dictionaries can include key words chosen by the instructor as well as words that the students want to remember. Encourage the students to include first language translations, pictures, and sample sentences for each entry. This project can be used to launch the creation of personal “health care dictionaries,” where students can record any new words related to health care that come up in class. Students can use their dictionaries for self-study or exchange dictionaries with a partner to learn more new words.

B. **Looking at informed consent forms.** Gather sample informed consent forms from hospitals and doctors’ offices. Students can also ask their doctors for sample informed consent forms. In class, form small groups to look at the consent forms. Ask the students: Are these forms clear? What is easy to understand? What is difficult to understand? Are these forms written in other languages besides English? What should doctors do to make these forms clearer and easier to read?

C. **Role-play.** Tell the students: “You are a patient. Your doctor gives you an informed consent form. You do not understand what the form is about. What can you ask the doctor?” Write a short skit between the patient and the doctor. Practice your skit. Perform your skit for the whole class.
D. Guest speaker series. Invite a doctor and/or a medical lawyer to talk to the class about informed consent forms. Students can work together to write a letter of invitation to a particular doctor, local clinic, or legal office inviting someone to come speak to their class. Students can prepare questions in advance. After a guest speaker event, students can summarize what they learned and share their notes with other students in the adult education program.

E. Multilingual resource guide on informed consent. Students can create a resource guide on informed consent forms to share with other adult ESOL students. The guide can explain in English and in their first language what informed consent forms are, why they are important in health care, and what patients can do if they do not understand information their doctors give them.

Adaptations for ABE/GED settings

Our advanced ESL as well as native-English speaking students are also likely to experience difficulties understanding and reading informed consent forms. To make the lesson more challenging for more advanced students, you may wish to assign two of the four reading texts at a time and ask the students to write a written response as well as discuss the readings in small groups. Ask students to choose 5-6 words they really want to remember from these readings. In pairs, students can work together to create a lesson activity that teaches the words to the rest of the class. Encourage the students to use visual props (e.g., transparencies that can be displayed on an overhead projector). Challenge the students to come up with creative ways to teach the words to their peers. Some possible activities the students might use include: role plays and skits, games, crossword puzzles, vocabulary quizzes, use of songs, or picture prompts.

Technology Tips

- National Cancer Institute, A Guide to Understanding Informed Consent
  This lesson drew information about informed consent from this useful website. The website is designed for researchers and doctors but features information (e.g., myths and realities about the nature of informed consent) that practitioners may find useful for creating lesson materials or for background information.

- eMedicineHealth.com, Patient Rights: Informed Consent
  This lesson also drew information about informed consent from this website that is more reader-friendly than the NCI site listed above.
INTRODUCTION TO INFORMED CONSENT

A. Pair Work.

Look at the chart below. Have you seen these documents or forms before?

Which ones do you know about? Which ones have you read and signed before? Check ☑ the appropriate boxes.

Find a partner and talk about your answers.

Add other official documents and forms that you and your partner know about.

<table>
<thead>
<tr>
<th>Document or form</th>
<th>I know about this one.</th>
<th>I have read and signed one before.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School permission form</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Employment contract</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Lease agreement</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Informed consent form</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Have you ever had problems reading official documents and forms? What happened? What did you do?

Share your answers with your partner.
B. Read and study. Focus on “informed consent” in health care.

Reading #1.

Please read the text in the box below.

In the United States, doctors must give you, as a patient, information about a particular treatment or test so that you can decide whether or not to have the treatment or test. This process of understanding the risks and benefits of a treatment or test is known as informed consent. When you sign an informed consent form, you are telling the doctor that you understand the information about a treatment or test.

Vocabulary Study. You can learn words by learning other words that have similar form and meaning (sometimes called derivatives). For example, let’s look at the words “informed consent”. What does “to inform” mean?

Some common derivatives of inform are information, informed, informative, and informant. Some derivatives of consent are consensus and consensual. These words are different parts of speech but share common meanings.

Study these words in the chart on the next page. Write down their meanings.
### Check your understanding

In your own words, explain what informed consent is.

<table>
<thead>
<tr>
<th>Part of speech</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>informant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>consensus</td>
<td></td>
</tr>
<tr>
<td>Adjective</td>
<td>informative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>informed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>consensual</td>
<td></td>
</tr>
<tr>
<td>Verb</td>
<td>inform</td>
<td></td>
</tr>
</tbody>
</table>
Reading #2.

Please read the text in the box below.

The process of informed consent is very important to your health care because you, as the patient, have the moral and legal right to make decisions about your own health and medical conditions.

Talk with a partner.

This paragraph says, “You, as the patient, have the moral and legal right to make decisions about your own health and medical conditions.”

What does this sentence mean to you? Do you agree with this sentence? Explain.

Complete the sentence below with your own idea.

*In today’s society, I think that people have the moral and legal right to*
Reading #3.

Please read the text in the box below.

There are four key parts of an informed consent process:

1. You must have the capacity to make the decision. This means you must be able to make the decision.

2. The doctor must give you information about the treatment or test. The doctor must tell you about the possible benefits and risks, and the likelihood that the benefits and risks will happen.

3. You must be able to comprehend the information the doctor gives you.

4. You must voluntarily grant consent. This means that you have the right to make your own decision about the treatment or test. No one can force you to make a certain choice (this is coercion). No one can threaten you to make a certain choice (this is duress). These actions are against the law.
Vocabulary Study: Legal Talk versus Everyday Talk.

When doctors and lawyers talk about informed consent, they often use words that can be hard to understand. They may use legal words that are not used in everyday talk.

Compare these lists.

<table>
<thead>
<tr>
<th>Legal Word</th>
<th>Everyday Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>coercion</td>
<td>force</td>
</tr>
<tr>
<td>duress</td>
<td>an unfair threat</td>
</tr>
<tr>
<td>to grant</td>
<td>to give</td>
</tr>
<tr>
<td>voluntarily</td>
<td>by choice</td>
</tr>
<tr>
<td>to consent</td>
<td>to agree</td>
</tr>
<tr>
<td>to inform</td>
<td>to tell</td>
</tr>
</tbody>
</table>

Talk to your partner. Why do you think everyday words are not used on informed consent forms?

If you didn’t understand a legal word on an informed consent form, what would you do?
Reading #4.

Please read the text in the box below.

The difficult language in informed consent forms can make it very hard for a patient to understand important information about a treatment or test. Before you sign, you should ask questions about the treatment or test. After you sign, you can still ask questions. You can also change your decision. Remember: keep asking questions until you have all the information you need to make a good decision.

Talk to your partner.

1. Why is it important to ask questions of your doctor?

2. Can patients ask questions after they sign an informed consent form? Why is this important?

3. Can patients change their mind about having the test or treatment after they sign an informed consent form? Why is this important?
Lesson 10: (ESOL) How Likely is Likely? Vocabulary for Talking about Probability

Disease Prevention and Screening

Tasks Addressed in this Lesson
- Be familiar with words that doctors often use to talk about likelihood and probability (e.g., likely, rare, certain)
- Ask doctors questions about health risks

Skills Focus
- Students will learn a range of adjectives that are used to convey likelihood and probability.
- Students will explore how words differ in the degree to which they convey the certainty of events.
- Students will explore ways that people interpret the same word differently based on context.

Purpose
This lesson is designed to familiarize students with the range of words that doctors often use to convey likelihood and probability. This lesson is organized around a series of pair-work exercises. These exercises introduce students to new vocabulary (e.g., likely, rare) and then provide multiple activities in which to apply this vocabulary knowledge. These exercises are intended to show students that the meaning of words such as likely and rare often differ from person to person, and thus it is critical that students feel prepared to ask their doctors what these words mean in terms of individual health risks and outcomes.

Steps

1. Preparation. Distribute a copy of the handouts beginning with What is likely to happen? (pages 7-14). Organize the students into pairs.

2. Pairwork: The handout for this lesson features 8 exercises for the pairs to complete.

   - Exercise 1: Warm-up
   This conversation activity asks students to talk about the activities they do in everyday life that involve likelihood and probability, e.g., playing the lottery. This warm-up introduces the lesson’s theme. Note: there is no critical need to introduce the terms likelihood or probability. To simplify the lesson’s focus, it’s fine to use a word such as chance or a phrase like Will it happen or not?

ABE/ESOL Level
High beginning to low-intermediate ESOL

Time
2 60-minute sessions

Materials
Handout (9 pages)

Key Vocabulary
<table>
<thead>
<tr>
<th>risk</th>
<th>certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>likely</td>
<td>probable</td>
</tr>
<tr>
<td>unlikely</td>
<td>definite</td>
</tr>
<tr>
<td>rare</td>
<td>fifty-fifty</td>
</tr>
<tr>
<td>impossible</td>
<td>improbable</td>
</tr>
<tr>
<td>possible</td>
<td>out of the question</td>
</tr>
</tbody>
</table>

HALL/NCSALL Health Literacy Study Circles Skills for Disease Prevention and Screening
- **Exercise 2: Vocabulary Study**
  This section introduces a set of words that convey likelihood or probability on a scale that shows how they range in meaning from “It will never happen” to “It will definitely happen.” Read the words aloud so that students can hear a model reading. Encourage students to use their dictionaries or translate the words into their first language, if necessary.

- **Exercise 3: Vocabulary Practice**
  This exercise asks the students to apply their knowledge of the new vocabulary words. The students are asked to think of things in their everyday lives that are “likely” or “rare” and so forth.

- **Exercise 4: Vocabulary Practice: Will it happen?**
  Like exercise #3, this exercise also asks the students to apply their knowledge of the new vocabulary words. Unlike the previous exercise, which used the new vocabulary words in general life contexts, this exercise uses the words in health-related contexts. Students are asked to think about the likelihood of eight different events. Each student writes down his or her own response using one of the new vocabulary words (e.g., likely, not likely, impossible). Then, each student finds a partner to compare responses. This exercise encourages students to see how people differ in their perceptions of “what is likely to happen.” Our decisions about “what is likely to happen” are a combination of **fact** (hard facts, cold evidence) and **feeling** (what we believe and feel might happen).

  **Note to teacher:** Most of the situations in exercise #4 are open to interpretation and do not have a “correct” answer. For example, in the first situation about playing the lottery, one person may feel it is likely that Pablo will win the lottery while another person may feel it is impossible. This exercise provides students with an opportunity to talk about these differences in interpretation. Situations #3 and #8, however, have correct answers.

  - About situation #3: When you flip a coin, there are only two possibilities – heads or tails, so there is an equal chance that a flip will result in heads.

  - About situation #8: Similarly, with the sex of a baby, there are only two choices, boy or girl, so there is an equal chance that it could be a girl.

- **Exercise 5: Vocabulary Study - Words with similar meanings**
  In this exercise, students learn synonyms for the words that were introduced in exercise 2. Students are asked to add these words to the scale. This provides students with an opportunity to check their understanding of the words’ meanings.
- **Exercise 6: Vocabulary Study: Adverbs that go with “likely” and “unlikely”**
  This exercise teaches the students a few adverbs that are commonly used with the terms *likely* and *unlikely*. If you wish, you may want to ask students to add these phrases to the scale in Exercise 2 as well. This shows students another way to convey differences in likelihood.

- **Exercise 7: Picture Story: What does ‘likely’ really mean?**
  This exercise is meant to help students think about how challenging it can be to figure out what a doctor means when she/he uses words like ‘likely’ and ‘rare.’ This exercise is also meant to help students think about the kinds of questions they can ask doctors to better understand what they mean when they say “likely” or “unlikely.” Ask the students to practice reading the conversation between the doctor and patient out loud. After students have had a chance to look at the picture story, they work in pairs to answer the questions at the end of the story.

**Story Overview:** A man goes to see his doctor because he keeps getting headaches. The doctor does an examination and tells the man that the cause is likely stress. She also says that the cause could be a tumor but this is unlikely. However, she tells the man that she wants to do more tests just to make sure. The man says okay and goes home. At home he starts to think about what the doctor said. He did not understand what the doctor meant by ‘likely’ and ‘unlikely.’ He is confused. He is afraid that he may have a tumor.

Here are some discussion prompts for beginning-level students who may need help comprehending the story:

- **Frame 1:** What is the man saying? What is he feeling? Who is he speaking to? Where are they? (Follow up: What is the doctor doing?)
- **Frame 2:** What is the doctor saying? What will the doctor do next?
- **Frame 3:** When is this happening? Why is the man in different clothes? What is the doctor saying? What is the man doing?
- **Frame 4:** Now, what is the doctor saying? What is the man thinking? What is he feeling? Why? (Follow-up: Has a doctor ever told you something about your health that made you worried or scared? What did you do?)
- **Frame 5:** What is the doctor saying? What does the man say? What do you think the man is thinking? What do you think he is feeling? Why?
- **Frame 6:** Where is the man now? What is he saying? What do you think he is feeling?
After discussing Frame 6, emphasize to the students that it is not always clear what doctors mean when they say “likely,” “unlikely,” or other related words. In fact, one study (Bryant & Norman, 1980) asked a group of doctors to say what “likely” meant in terms of numbers. They gave a range of anywhere between 40% and 75%!

Be sure that students understand the basic plot of the story before they answer the following discussion questions, which follow the story.

1. What happens in this story? Use your own words and tell the story to your partner.

2. What is the man thinking when he goes home after the exam? What do you think he is feeling? Why?

3. If this man were your friend, what would you tell him?

4. Has this experience ever happened to you? What did you do?

5. What kinds of questions can we ask a doctor if she or he talks about a health problem that is likely or unlikely to happen?

- **Exercise 8: Understanding information about health risks**
  This exercise provides an additional context for students to practice using the probability vocabulary. The teacher can organize the students into pairs or small groups to focus on one of the 3 tasks in Exercise 8. In pairs or small groups, students look at the pictures or graphs and fill in the blanks in the sentences that describe the pictures/graphs. The teacher can then facilitate a large group discussion in which each pair/small groups shares their answers. The teacher can also invite students to talk about whether the picture/graph made it easy to understand the message about risk. Also, note that the jar of marbles, the bar graph, and the line graph are common ways that doctors and health officials convey risk information to the public, so this exercise provides the students with an opportunity to develop important document literacy skills as well.

**Follow-up Activities**

A. **Short reading with journal writing.** Ask students to read “How likely is likely?” (found on page 15 of the student handouts) for homework or in class. This reading is about the lack of clarity around probability words such as “likely” and “unlikely,” a topic that was addressed in the picture story in exercise 8. You may wish to assign this reading for homework or for in-class reading, and then discuss the questions as a whole class. You may also wish to ask the students to spend some time responding to the discussion questions in their journals.
B. **Interview practice.** Ask students to show the picture story used in this lesson to one person outside class (a family member, a friend, co-worker). The student will then interview the person about what he/she thinks is going on in the story, using similar prompts to those used in the lesson. Students can ask the following questions (or make up their own):

1. What is the man thinking when he goes home after the exam? What do you think he is feeling? Why?
2. If this man were your friend, what would you say to him?
3. Has this experience ever happened to you? What did you do?

Ask students to share their interview responses in class. As a group, talk about similarities and differences in peoples' responses.

**Technology Tips**

- The picture story in this lesson is based on work by Kate Singleton, who has created a series of pictures stories for use in the adult ESL classroom. A link to Singleton’s work can be found at Web site noted below:


- Does your class want to talk more about the pros and cons of playing the lottery? Here is a link to an interesting feature produced by PBS and the television program *Frontline*. The link focuses on the California Lottery and is found at [http://www.pbs.org/wgbh/pages/frontline/shows/gamble/odds/california.html](http://www.pbs.org/wgbh/pages/frontline/shows/gamble/odds/california.html) (Accessed April 3, 2006)

**References**

Information in the following sources was adapted for use in this lesson:

Cambridge University Press. [Lesson 60 on Obligation, need, possibility, and probability]

What is likely to happen?

1 **Warm up.** Look at the activities below. Circle the activities that you like to do.

- play the lottery
- play poker
- read fortune cookies
- read horoscopes
- invest in the stock market
- bet on sports teams

Talk to a partner.

Ask questions about your partner’s choices. For example, **Why do you like to play the lottery?**

2 **Vocabulary Study.** The picture below shows a scale with words that you can use to talk about how likely it is that something will happen. Practice saying these words. Use a dictionary if you need help with their meanings.

<table>
<thead>
<tr>
<th>“It will never happen.”</th>
<th>“It will definitely happen.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>impossible</td>
<td>likely</td>
</tr>
<tr>
<td>rare</td>
<td>certain</td>
</tr>
<tr>
<td>unlikely</td>
<td>possible</td>
</tr>
<tr>
<td>equal chance</td>
<td>certain</td>
</tr>
</tbody>
</table>

3 **Vocabulary Practice.** Think of something in today’s world that...

- is certain to happen.
- is likely to happen.
- is possible.
- has an equal chance of happening.
- is unlikely to happen.
- is rare.
- is impossible.

Share your ideas with others in your class.
### Vocabulary Practice: Will it happen?

Read the situations below. Decide how likely each situation is. Use the adjectives from Vocabulary in your answer. For example, write rare or impossible or likely. Write your idea in the column “Your answer.”

Find a partner and ask for his or her ideas. Write down his or her responses.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Your answer</th>
<th>Your partner’s answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>⓪ You will win the lottery someday.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>① You flip a coin. It will turn up heads.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>② It will snow in the Amazon rainforest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>③ Maria got the chickenpox vaccine when she was a baby. She will get chickenpox as an adult.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>④ Andre smokes a pack of cigarettes a day. He will have health problems when he is older.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⑤ Martin exercises three times a week, eats a healthy diet, and is not overweight. Martin will get diabetes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⑥ Greg’s father has cancer so Greg will also have cancer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⑦ Lian is pregnant. She will have a baby girl.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share your answers with a partner. Compare. How are your answers the same or different?

### More Vocabulary Study: Words with similar meanings.

Below is a list of words that have similar meanings to words shown in Vocabulary.

Which of these words mean unlikely? Which words mean more likely? Add these words to the scale near the words that have the same meaning.

If you need help, use your dictionary or ask your teacher or a classmate for help.
Lesson 10: (ESOL) How Likely is Likely?  
Vocabulary for Talking about Probability (HANDOUTS)

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>definite</td>
<td>yes or no</td>
</tr>
<tr>
<td>fifty-fifty chance</td>
<td>maybe</td>
</tr>
<tr>
<td>probable</td>
<td>not probable</td>
</tr>
<tr>
<td>not possible</td>
<td></td>
</tr>
<tr>
<td>out of the question</td>
<td></td>
</tr>
</tbody>
</table>

Compare your scale with someone else’s scale to check your understanding of the word meanings.

6 More Vocabulary Study: Adverbs that go with ‘likely’ and ‘unlikely.’

If you feel strongly that something will or will not happen, you can say:

very or highly likely
very or highly unlikely

Also, note that:

not likely at all = unlikely

If you feel less strongly that something will or will not happen, you can say:

somewhat likely
somewhat unlikely
Work with a partner. Look at these pictures. Discuss the questions on the next page.

**Picture Story: What does “likely” really mean?**

1. **At the Doctor’s Office**
   - I get headaches a lot. Why?
   - I’ll do an exam... Okay...

2. **After the Exam**
   - It is likely stress...
   - ...Oh.
   - It is unlikely a tumor, but...

3. **At Home**
   - I want to do more tests, just to be sure.
   - Okay.
   - More tests? Oh no! Do I have a tumor?

© Maricel Santos/ Picture story format based on work by Kate Singleton (2002)
Questions about the story

Discuss the following questions with your partner.

1. What happens in this story? Use your own words and tell the story to a partner.

2. What is the man thinking when he goes home after the exam? What is he feeling? Why?

3. If this man were your friend, what would you tell him?

4. Has this experience ever happened to you? What did you do?

5. What questions should this man ask his doctor?
Understanding information about health risks. Sometimes doctors use pictures and graphs to help their patients understand what is likely or unlikely to happen to their health. Here are some examples.

Work with your partner. Look at each picture or graph. Work together to complete the sentences, using the words in the boxes.

Example #1

If we picked a marble from this jar, it is more unlikely that we would pick a black marble from the jar than a white marble. This means that it is likely that we would get Disease X.
Example #2

This graph shows that the risk of getting Disease X is not the same for _______ and _______.

Women have a ______ percent chance of getting Disease X, while men have a ______ percent chance of getting Disease X. This suggests that men are less _________ to get Disease X compared to women.
Example #3

This graph shows that you are more __________ to get Disease X as you get __________. If you are __________, you have about a __________ percent chance of getting Disease X.
Lesson 10: (ESOL) How Likely is Likely?                                                                 Page 17 of 18
Vocabulary for Talking about Probability (HANDOUTS)

Reading assignment: How likely is likely?

Read the paragraph and answer the questions below.

Imagine you are at the doctor’s office. The doctor says to you, “You must exercise more and eat a better diet. If you don’t, you are likely to get diabetes.” The doctor is talking about your risk of getting diabetes. Risk is the possibility that something bad or dangerous will happen. But what does the doctor mean by likely? If you don’t exercise and eat better, it doesn’t mean you’ll definitely get diabetes. And if you do exercise and eat a better diet, you may still get diabetes. How confusing!

Doctors often use words such as rare, likely, and unlikely, but they don’t realize that patients don’t always understand what they mean. If you don’t understand something, ask your doctor to explain it to you. Remember, it is impossible to predict exactly what will happen with our health. But if you make sure you understand the words the doctors use, you have a better chance of taking good care of your health.

1. What does the word “risk” mean to you?

2. Why are words such as likely often difficult to understand?

3. Have you ever talked to your doctor about your health risks? What happened?

4. What things can you do to make sure you understand your own health risks?
Lesson 11: (ABE) Introduction to Probability

Disease Prevention and Screening Task
Addressed in this Lesson
- Understand health messages that are based on probabilities

Skills Focus
- Students will practice calculating probability and estimating likelihood.

ABE/ESOL Level
Intermediate ABE

Time
2 hours

Materials
Handouts
Coins for flipping (1/pair)
Paper bags (1/pair)
Colored balls or candy (1 set of 20/pair)

Key Vocabulary
even chance
event
fifty-fifty
likelihood
outcome
probability
randomly selected
chance
odds
risk
statistician
weighted chance

Purpose
This lesson is designed to provide students with an introduction to the concept of probability. It includes hands-on activities to help students build understanding and calculate probability.

Prerequisites
This lesson assumes that students have some familiarity with fractions. Students are asked to understand fractions as expressions of probability; however no computation with fractions is required.

Steps
1. Introduce the concept of probability (Large group discussion)
   Show students the following list of statistics related to health risks. (You may wish to write the statistics on the board, or create an overhead or handout to share this information. Note that you will revisit these statements later in the lesson.)

   The American Cancer Society reports the following¹:

   Among women aged 40 to 59, the risk of developing breast cancer is 1 in 24.
   For women up to age 39, the risk is 1 in 207.

   Among men aged 40 to 59, the risk of developing prostate cancer is 1 in 39.
   For men up to age 39, the risk is 1 in 9879.

   Ask students the following questions:
   Have you seen these kinds of statements before?
   Where?
   (e.g., newspapers, doctors’ offices, magazines, etc.)
   What do you think when you see them?
   (e.g., They seem scary, I don’t understand)
   What makes them difficult to understand?
   (e.g., too many numbers, etc.)

¹Note: These statistics were reported as of February 2006 at http://www.cancer.org/downloads/STT/CAFF2005f4PWSecured.pdf. These statistic may change periodically; therefore you may wish to update them with information from the statistics section of the American Cancer Society website.
Point out that the idea behind these kinds of statements is something known as “probability”.

- The word “probability” refers to how likely or unlikely it is that something will happen.
- We sometimes refer to probabilities as the chances or odds of something happening.

Explain that we use probabilities to tell us how likely a particular outcome is to occur for a particular event. Clarify these terms with the examples listed below.

- An event can include things such as getting a gift, having a traffic-free morning commute, or having a snowstorm in your town. An event can also be:
  - A coin toss
  - Rolling a die or rolling two dice
  - Drawing a card from a deck of cards
  - Drawing a marble from a bag of different colored marbles
  - Spinning a spinner on a board game
  - Playing the lottery
  - Having a baby

- An outcome is the result of an event like those just described above.
  - For instance, a coin toss has two possible outcomes – heads and tails.
  - Rolling a regular six-sided die has six possible outcomes – 1,2,3,4,5 or 6.
  - Drawing a card from a deck of cards has 52 possible outcomes – since each card is different.
  - Playing the lottery has two outcomes – winning or losing.
  - Having a baby typically has two outcomes – a boy or a girl – but can also have outcomes like twins, triplets, etc.

- The probability of an outcome for a particular event is a number that tells us how likely a particular outcome is to happen. Lower probabilities mean that events are less likely, while higher probabilities mean that events are more likely.

For example, when I roll a die (an event), how likely is it that I will roll a 3 (a particular outcome)?
The probability of this outcome is the ratio of the number of ways I can roll a 3 (only one way) divided by the number of total possible outcomes when I roll a die:

---

Adapted from What is an event? available at:
http://www.mathleague.com/help/percent/percent.htm#whatisanevent.
(only one way to roll a three with only one die)
6 (the total number of outcomes possible when I roll a die)

(Note: If students are feeling confused at this point, let them know that you will do some activities in this lesson to make the idea of probability clearer.)

Explain what is meant by health outcomes.

- Health outcomes include a broad range of things, including giving birth to a healthy baby, living to 90, getting cancer, or having a heart attack.
- When medical people talk about the chance or risk of health outcomes, they are really talking about probabilities of these outcomes occurring. They are referring to how likely it is, for example, that someone will develop a certain disease.
- When doctors and other health professionals discuss health risks with a patient, they are using two sets of information.
  - Health Statistics. To understand health risks, doctors rely on what researchers have found out about how many and what types of people get certain diseases (e.g., men, women, smokers, older people, etc). Health statistics may also differ based on geography (country or city) and environmental factors (being exposed to things like pollution, chemicals).
  - Individual Factors. Next, doctors need to know about each patient. For example, they must consider a person’s age, current health, test results, exposures and behaviors, and family history.

Explain to students that they will now take part in some activities to help them understand probability and to make better sense of health messages about disease risk.

2. Coin Flipping³ (Large Group discussion and small group work)
   This activity uses the process of flipping a coin to help students understand a basic probability of 1 in 2 or a fifty-fifty chance.

Tell students that you will now look at a common example of probability with which students may be familiar – tossing or flipping a coin. Ask students the following questions:

How many of you have ever flipped a coin?
Why do people flip coins?
What are the possible outcomes?
Is flipping coins a fair game? Why?

³ This activity is adapted from Probability Games. Statistics in Your World, available at: http://www.rsscse.org.uk/pose/level1/.
Tell students that you will ask a volunteer to flip a coin.

- First ask students to raise their hands if they think the coin will come up “heads” (get a count) and then ask the same for “tails.”
- Then ask the volunteer to flip a coin.

Repeat these two steps. Call attention to the outcomes – were they the same or different in the two tosses?

Explain to students that statisticians (people who work with numbers and issues of chance and probability) are able to show that over time, the chance of getting heads is the same as the chance of getting tails. The probability of getting heads can be written as ½. The same fraction or ratio would be used for tails.

You may also want to note that if a woman is expecting a (single) baby, the probability of having a boy or a girl is also represented by this fraction – ½.

Point out that we can write the probability of getting heads (or tails) as ½ or as .50 or 50%. When the probability of an event is ½ or 50%, we say there’s a “fifty-fifty” chance of that event occurring. In this case, we have a fifty-fifty chance of getting heads (or tails). The probability of getting one side in a toss is the same as the probability of getting the other.

Explain that students will now have a chance to test whether what statisticians say is true – that there is a 50% chance of getting either heads or tails.

Divide the class into five groups. Have each group flip a coin 20 times and record their findings on a sheet. (You want the class to complete a total of 100 coin flips.) Each group should record their results in the Coin Flipping handout with tally marks in each column. When they have tossed the coin 20 times, the group should add up the marks in each column and note the totals at the bottom of the page as indicated on the handout.

Next, each group should report how many times they got heads and tails. You should list these totals on the board. Then add up the total for heads and for tails, and average each for the class. (If you had five groups each flipping a coin 20 times, you should divide by 100 to get an average). The average for heads and for tails should each be around 50%. (You may find that students report results such as 48 heads and 52 tails, or 49 heads and 51 tails. If you average these numbers, you should still come out at about 50.)

Ask if students agree with the statisticians about the 50% chance of getting heads or tails and why.

Note to Teachers: If your class has access to computers, you may wish to have students simulate coin flipping by using Ken White’s Coin Flipping site: http://shazam.econ.ubc.ca/flip/index.html. (Accessed April 2006)
3. **An Even Chance and a Weighted Chance (Large group discussion and pairwork)**

Explain *even* versus *weighted* chance with examples by presenting the following scenario to the class.

*Imagine that I want to choose one of you to help me, but I want to be fair and give you all an equal chance. How might I go about doing this?*  
(e.g., Put names in a hat and draw one without looking.)

Next, tell the class that you want them to determine the probability that X (name a student) will be chosen. Use the following scenario:

*Let’s say that I ask each of you to print your name on a piece of paper. We then put each piece of paper in a bag. What is the probability that X will be chosen?*  
(e.g., If there are 11 people in the class, the probability is one out of eleven or 1/11. If there are 20 people in the class, the probability is one out of twenty or 1/20.)

Move through as many options as are needed. Tell the class that this kind of selection process is known as a *random* process because each person has the same chance, or an *even chance*, of being chosen.

Next, give the class an example where the chances of being chosen are not even. Use the following scenario:

*Let’s say that I hold the same bag with everyone’s name on a piece of paper. This time, I tell you that I want a man (or a woman) to help me with the project. Imagine that my class has 20 people in it and 8 of them are men.*

- What are the chances of a man being chosen?
- What are the chances of a woman being chosen?
- Who is more likely to be chosen?
- Why?

The probability of choosing a man is 8/20; of a woman is 12/20. Therefore, it is more likely that a woman will be chosen because there are more women. Uneven chances like this are sometimes called *weighted* chances.

To review, write the following on the board:

- **Even chance** means each person has the same chance.  
- **Weighted chance** means not even; some people have a better chance of being chosen because there are more of them.
4. **Colored Balls Probability Activity**

This activity allows students to practice working with probabilities for multiple outcomes. In this activity, students are told the contents of a brown paper bag that contains 20 colored marbles or candies (such as M&Ms or Skittles) as follows:

- 6 blue balls
- 4 green balls
- 7 yellow balls
- 3 red balls

Ask students to work in pairs. Remind students that we determine probability by dividing the number of ways we can get a particular outcome by the total number of outcomes possible.

\[
\frac{\text{# of ways of getting particular outcome}}{\text{# of possible outcomes}}
\]

To make this formula clearer, use the balls scenario as an example:

*What is the chance of pulling a blue ball out of our bag of 20 balls? (6/20)*

Distribute the **Colored Balls Worksheet**. Ask pairs to complete the worksheet. You may wish to work on worksheet question 1 (see below) as a class and then leave pairs to complete the rest of the activity on their own. Circulate to see if students are carrying out the process correctly and to answer any questions that arise. An answer key is provided on the next page.
Colored Balls Worksheet (Answer Key)

1. What is the probability of choosing each color:
   (blue 6/20, green 4/20 or 1/5, yellow 7/20, red 3/10)

2. List the colors in order from least likely to be picked to most likely to be picked (or drawn).
   (red, green, blue, yellow)

3. Which color ball do you expect to pick first? Why?
   (Answers may vary – some may say yellow because they are the most numerous.)

   NOTE: The answers to questions 4, 5, and 6 will vary ONLY IF students DO NOT put the marble/candy back in the bag, as their worksheet indicates. You may want to point this out to students. If they, for example, eat the candy, then the number of items in the bag changes, as does the number of a particular color group.

4. Now, without looking in the bag, take out one ball. What color is it? Is it the color you predicted? List how many balls of each color remain in the bag, after you take out this ball.
   
   _____   blue
   _____   green
   _____   yellow
   _____   red

   How many balls are there in the bag now? [19]

5. Now, what is the probability of choosing each color? [all based on 19 total but with a change for one of the color groups]

   _____   blue
   _____   green
   _____   yellow
   _____   red

   How did these probabilities change from what you noted in question 1?

6. Given the contents of the bag now, which color do you think you are most likely to choose next? Which color are you least likely to choose next? Why?

   most likely: __________________   least likely: __________________

   NOTE: Students pick out a ball 3 times and answer a set of questions like 3-6 each time.
(Lesson plan continued)

Once students have completed the Colored Ball activity, ask them to share their experiences. Ask the following questions to prompt discussion:

*How well did you predict what color you would pick each time?*
*Would you make different predictions in the future?*
*What did you observe about how probabilities change?*

Be sure to point out that probabilities change as circumstances change – in this case, each time students drew a ball, the number of balls in the chosen color changed, and the total number of balls changed, so the probabilities for each color changed.

Summarize what students have observed so far:

- We have seen that the probability of an event is based on how likely that event is to occur.
- The *likelihood* of an event depends on how many ways that event can happen and how many possible outcomes there are.
- We have seen how the probability of two outcomes can be the same – or average out to be the same, as with flipping a coin and getting head or tails. In such a case, we talk about the chances of events happening as *even*.
- In the Colored Balls activity, we saw that chances can be uneven, or weighted, like the chances of getting the different colors from each bag.
- We have also seen how some probabilities (coin flipping) remain the same, because nothing changes over time, while other probabilities change because circumstances change (as with the colored balls).

5. **Analyzing health messages with probabilities (Large and small group work)**

Tell students that you will now revisit the statements that you saw at the beginning of the lesson. Show the statements to students again:

*The American Cancer Society reports the following:*

*Among women aged 40 to 59, the risk of developing breast cancer is \(1\text{ in } 24\).*  
*For women up to age 39, the risk is \(1\text{ in } 207\).*  
*Among men aged 40 to 59, the risk of developing prostate cancer is \(1\text{ in } 39\).*  
*For men up to age 39, the risk is \(1\text{ in } 9,879\).*
Ask students to read each of the statements again and then rank the statements in order from *most* likely to *least* likely. Have students write down their answers on a piece of paper – they may simply list the probabilities as follows:

1 in 24  
1 in 39  
1 in 207  
1 in 9,789

Once students have had a chance to write down their answers, ask for volunteers to tell which event they thought was most and least likely and why. **Accept all answers at this point. Do not confirm any answers as correct.** Some research in health risk communication has indicated that people with low math skills tend to automatically associate higher numbers in the denominator with greater risk.

Next, point out to students that information about health risks can be presented in a number of ways. One way is to use sentences, as they have just seen. Another is to use pictures to help represent probabilities. Distribute the handout **Another Look at Probabilities** to small groups of two or three students. Ask students to look at the pictures (groups of ○ and ✗) that correspond to each of the health risk statements noted above. Explain that in each picture (group), the ○’s represent people who do not have the disease, while the ✗ represents the person that does have the disease. Give students 5 to 10 minutes to review and discuss the pictures. Then ask students to review their ranking of the likelihood of the health statements and decide if they would like to make any changes based on the pictures.

6. **Conclusion**

Reassemble the whole class and ask students to comment on the following:

*How did your ranking of the statements change (if at all) after looking at the pictures?*

(Answers may vary, as some students may have interpreted the statements similarly in both representations, while others came to a different understanding through pictures. Some research has suggested that people often misinterpret these kinds of statements, thinking that larger numbers mean a risk is greater.)

Once students have shared their thoughts on the experience, and if no one has given the correct order, be sure to convey the correct order from most to least likely:

1 in 24  1 in 39  1 in 207  1 in 9,789

Explain that the larger the second number (or bottom number in a fraction), the less likely is the one event, since that event represents a smaller proportion of the total possible outcomes.
How do you prefer to have information about health risks presented to you – in sentences with probabilities or pictures, or both? Why?
(Answers will vary.)

Imagine that, at your next physical, your doctor talked to you about your risk of getting a certain disease and you didn’t understand what that risk meant (if it is a serious risk for you or not). What questions could you ask your doctor to help you better understand what your risk of getting the disease is?
(Answers might include: Do I have something like a 1 in million chance or a 1 in 100 chance of getting this disease? Can you draw me a picture to help me understand my risk of getting this disease?)

Follow-up Activities

A. Representing the Probability of Events: Ask students to think of five different events – they can be any kind of events (weather, winning the lottery, taking a trip, achieving a goal, buying something, getting a date with a special person, etc.). Have students:

   a. Give a fraction probability statement to indicate how likely the event is.
   b. Develop a graphic representation of how likely the event is (using pictures like those used in this lesson, showing the event as part of a pie or a cake, or any other form they choose).
   c. Present their work in the next class.

   You may wish to work through one student-generated example to be sure that everyone understands the assignment for homework.

B. Using Probabilities for Decision Making: Have students look at a story strip that depicts a couple about to decide whether or not to have an amniocentesis. (See the Materials for Follow-up Activity 2, which include instructions for using the ESOL Picture Story: Tough Decision, included at the end of this lesson.) Ask students to read the story and think about what advice they might give the couple, based on the probability statements provided. Ask students to prepare to explain how they arrived at their decision in the next class.

C. Exploring Health Risks: Have students explore the concept of health risks through Web sites designed to offer personal risk assessments. The following website offers links to assessments of risk for heart disease, diabetes, osteoporosis, cancer, and stroke. This activity might work well with a whole class in a computer lab.

Technology Tips

✓ SMILE Program Mathematics Index
   This site, provided by the Illinois Institute of Technology, is part of the Science and Mathematics Initiative for Learning Enhancement (SMILE) program that seeks to “enhance the elementary and high school learning of Science and Mathematics through the use of the phenomenological approach.” The site has links to a number of lesson plans that pertain to probability. Each lesson includes hands-on activities that promote experimentation, observation, and analysis. Visit the SMILE Web site at http://www.iit.edu/~smile/.

✓ Exploring Risk Factors
   The on-line GED 2002 Teacher’s Lesson Bank includes a lesson titled Protect Your Heart, which covers a discussion of risk factors for heart disease and stroke and provides students with practice in graphing and planning for healthy actions. Elements of the lesson can be adapted to pre-GED students. The lesson plan and materials are available at: http://www.floridatechnet.org/GED/LessonPlans/Science/sciencelesson35.pdf.
### Coin Flipping

<table>
<thead>
<tr>
<th></th>
<th>Heads</th>
<th>Tails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Colored Balls Worksheet

You have been given a bag of 20 colored balls. The bag contains

6 Blue
4 Green
7 Yellow
3 Red

1. What is the probability of choosing each color?

Blue _________________________

Green _________________________

Yellow _________________________

Red _________________________

2. List the colors in order from least likely to be drawn to most likely to be drawn.

____________________________________

____________________________________

____________________________________

____________________________________
3. What color do you expect to take out of the bag first? Why?

4. Now, without looking in the bag, take out one ball. What color is it? Is it the color you predicted? List how many balls of each color remain in the bag after you take out this ball.

   __________ blue
   __________ green
   __________ yellow
   __________ red

   **Note: Do not put the ball you just took out back into the bag.**

   How many balls are there in the bag now?

5. Now, what is the probability of choosing each color?

   __________ blue
   __________ green
   __________ yellow
   __________ red

   How did these probabilities change from what you noted in question 1?

6. Given the contents of the bag now, which color do you think you are most likely to choose next? Which color are you least likely to choose next? Why?

   most likely: __________ least likely: __________
7. Now, without looking in the bag, take out one ball. What color is it? Is it the color you predicted? List how many balls of each color remain in the bag after you take out this ball.

_________ blue
_________ green
_________ yellow
_________ red

Note: Do not put the ball you just took out back into the bag.

How many balls are there in the bag now?

8. Now, what is the probability of choosing each color?

_________ blue
_________ green
_________ yellow
_________ red

How did these probabilities change from what you noted in question 1?

9. Given the contents of the bag now, which color do you think you are most likely to choose next? Which color are you least likely to choose next? Why?

most likely: _______________  least likely: _______________
10. Again, without looking in the bag, take out one ball. What color is it? Is it the color you predicted? List how many balls of each color remain in the bag after you take out this ball.

_________ blue
_________ green
_________ yellow
_________ red

Note: Do not put the ball you just took out back into the bag.

How many balls are there in the bag now? ________________

11. What is the probability of choosing each color now?

_________ blue
_________ green
_________ yellow
_________ red

How did these probabilities change from what you noted in questions 1 and 11?

12. Given the contents of the bag now, which color do you think you are most likely to choose next? Which color are you least likely to choose next? Why?

most likely: ________________     least likely: ________________
Another Look at Probabilities

Among women aged 40 to 59, the risk of developing breast cancer is 1 in 24.

For women up to age 39, the risk of developing breast cancer is 1 in 207.

Among men aged 40 to 59, the risk of developing prostate cancer is 1 in 39.
For men up to age 39, the risk of developing prostate cancer is 1 in 9,879.
Materials for Follow-up Activity 2: Using Probabilities for Decision Making

Picture Story: Tough Decision

For the teacher:
This exercise is meant to help students think about the tough decisions we face when a doctor advises us to have a health test or a screening test. We need to think about the valuable information the test may give us, as well as any risks of having the test. This picture story is about a couple who have to make a tough decision about getting an amniocentesis, a test for pregnant women that enables you and your doctor to get information about the unborn baby. This test is usually done when a woman is about 4 months pregnant. The test can help the doctor learn certain things about the health of the baby, such as whether a baby has genetic or chromosomal disorders, like Down syndrome. The test is not regularly given to all pregnant women because there is a risk of miscarriage and infection. However, women who are going to be 35 or older when their baby is born are often advised to get the test, as the risk of chromosomal disorders increases with age.

Story Overview: A woman goes to see her doctor and learns that she is pregnant. The woman is very happy. The woman goes home and tells her husband the good news. They are very excited. Two months later, the woman goes back to the doctor for a check-up. The doctor tells her that she should think about amniocentesis because she is 36 years old. The doctor gives her some information about amniocentesis. The information includes data about the chances of having a baby with Down Syndrome for women of different ages. The information also talks about the risk of miscarriage or infection as a result of having the test. The woman looks worried. The woman goes home to talk to her husband. She does not know what to do. Her husband does not know what to do either.

Here are some discussion prompts for beginning-level learners who may need help comprehending the story:

Frame 1: Who are the two women? Where are they? What is the doctor saying to the woman? What do you think the woman (the patient) is feeling?

Frame 2: Where is the woman now? Who is she talking to? What are the two people feeling?

Frame 3: When is this happening? What is the doctor saying? What will the doctor do next? What do you think the woman (patient) is thinking?

Frame 4: What is this information? What does it mean? What makes this information hard to understand? (Follow-up: Have you ever gotten information like this from a doctor? Did it make sense? What did you do?)
Frame 5: What is this next information? What does it mean? What makes this information hard to understand? (Follow-up: Have you ever gotten information like this from a doctor? Did it make sense? What did you do?)

Frame 6: Where is the woman now? What are the people talking about? What do you think they are feeling now? Why?

After discussing Frame 6, emphasize to the students that the information about the risks and benefits of getting a test can sometimes be very confusing. It’s not always clear what the “right” thing to do is. This picture story provides the class with an opportunity to discuss what it means to make an “informed choice,” which can be defined as a person’s ability to make a choice based on accurate, clear, and useful information and based on a clear understanding of their health needs. Ask your students to talk about the meaning of this phrase. Encourage them to use their dictionaries or the Internet for information about the meaning of the words.

Be sure that students understand the basic plot of the story before they answer the following discussion questions.

1. What happens in this story? Use your own words and tell the story to your partner.

2. What is the woman thinking after the doctor tells her she should think about getting an amniocentesis? What do you think the couple is feeling? Why?

3. If this couple were your friends, what would you tell them?

4. Has this experience ever happened to you? What did you do?

5. What kinds of questions can we ask if our doctor recommends that we have a health test and we’re not sure what to do?
ESOL Picture Story: Tough Decision

At the doctor's office

March

At home

IM SO HAPPY!!

AT LAST! A BABY!

At the doctor's office

YOU'RE 36.

AMNIOCENTESIS?

LET'S TALK.

Okay.

May

Chances of Down Syndrome

Age 20-29: One in 1,250 children
Age 35: One in 400
Age 40: One in 100

Risk of miscarriage = Between 1 in 400 and 1 in 200
Risk of infection = Less than 1 in 1000

At home

WHAT SHOULD WE DO???

I DONT KNOW...

Source for information on amniocentesis: March Of Dimes, http://www.modimes.org
© Maribel Santos/ Picture story format based on work by Kate Singleton (2002)
### Lesson 12: (GED) Exploring Health Risks as Probabilities

<table>
<thead>
<tr>
<th>Disease Prevention and Screening Tasks Addressed in this Lesson</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Interpret information on health risks</td>
<td>Information on disease prevention and health risks is often communicated in mathematical terms, such as fractions (1/10) or ratios (1 in 200) or as percents (50% chance). This lesson provides students with a framework for understanding the likelihood of events, including the development of diseases or other health conditions. This lesson teaches students to recognize math expressions used to express probability. Students also practice interpreting probability expressions by converting among fractions, decimals, and percents.</td>
</tr>
<tr>
<td>• Use information on health risk to inform decision-making</td>
<td></td>
</tr>
</tbody>
</table>

**Skills Focus**

- Students will practice using and interpreting different mathematical expressions of probability.
- Students will practice using calculators to convert among fractions, decimals, and percents.

**ABE/ESOL Level**

GED

**Time**

2 to 2-1/2 hours

**Materials**

- handouts
- calculators

**Vocabulary**

- chance
- event
- odds
- outcome
- risk

**Purpose**

Information on disease prevention and health risks is often communicated in mathematical terms, such as fractions (1/10) or ratios (1 in 200) or as percents (50% chance). This lesson provides students with a framework for understanding the likelihood of events, including the development of diseases or other health conditions. This lesson teaches students to recognize math expressions used to express probability. Students also practice interpreting probability expressions by converting among fractions, decimals, and percents.

This lesson can be taught on its own or adapted as a follow-up to the ABE lesson: Introduction to Probability, included in the Study Circle+ lesson packet.

**Prerequisites**

This lesson assumes that students have some familiarity with fractions, decimals and percents. Activities provide students with opportunities to practice converting among these forms as expressions of probability.

**Steps**

1. **Introduction (Large group discussion)**

   Show students the following list of health news topics with statistics on health risks:
   - *Over the course of a lifetime, women have a 1 in 8 chance of developing breast cancer.*
   - *There is a 25 percent chance that a child born to parents who both carry a sickle cell anemia gene will have sickle cell disease.*
   - *Exercising three hours per week can lower your risk of heart disease by 30%.*

---

1. *Breast Cancer: The Basics.* Available at: [http://www.oncolink.org/types/article.cfm?c=3&s=5&ss=33&id=8320](http://www.oncolink.org/types/article.cfm?c=3&s=5&ss=33&id=8320)
Ask students the following questions:

- Have you seen or heard statements like this before? Where?
- What information do they tell us? What do these numbers mean?
- How useful do you find these statements? Why?

Point out that the idea behind these kinds of statements is something known as “probability”.

- The word “probability” refers to how likely or unlikely it is for something to happen.
- We sometimes refer to probabilities as the chance or odds of something happening.

Explain that we use probabilities to tell us how likely a particular outcome is to occur for a particular event. Explain the bolded terms below as suggested.

- An event can include things such as getting a gift, having a traffic-free morning commute, or having a snowstorm in your town.
- An event can also include the following:
  - a coin toss
  - rolling a die or rolling two dice
  - drawing a card from a deck of cards
  - drawing a marble from a bag of different colored marbles
  - spinning a spinner on a board game
- An outcome is the result of an event like those just described above.
  - For instance, a coin toss has two possible outcomes – heads and tails.
  - Rolling a regular six-sided die has six possible outcomes – 1, 2, 3, 4, 5 or 6.
  - Drawing a card from a deck of cards has 52 possible outcomes, since each card is different.
- The probability of an outcome for a particular event is a number that tells us how likely a particular outcome is to happen.

Present the following example to students:

*How likely is it that I will roll a 3 when I roll a die?*

The probability of this outcome is the ratio of the number of ways I can roll a 3 (only one way) divided by the number of total possible outcomes when I roll a die:

\[
\frac{1}{6} \quad \text{(only one way to roll a three with only one die)}
\]

\[
\frac{1}{6} \quad \text{(the total number of outcomes possible when I roll a die)}
\]

---

4 Adapted from *What is an event?* Available at: http://www.mathleague.com/help/percent/percent.htm#whatisanevent
Note to teacher: If students are feeling confused at this point, let them know that you will do some activities in this lesson to make the idea of probability clearer.

Explain the concept of health outcomes as suggested below.

- Health outcomes include a broad range of things, including giving birth to a healthy baby, living to 90, getting cancer, or having a heart attack.
- When medical people talk about the chance or risk of health outcomes, they are really talking about probabilities of these outcomes occurring. They are referring to how likely it is, for example, that someone will develop a certain disease.
- When doctors and other health professionals discuss health risks with a patient, they are using two sets of information.
  - Health Statistics. To understand health risks, doctors rely on what researchers have found out about how many and what types of people get certain diseases (e.g. men, women, smokers, older people, etc). Health statistics may also differ based on geography and environmental factors.
  - Individual Factors. Next, doctors need to know about each patient. For example, they must consider a person’s age, current health, tests results, exposures and behaviors, and family history.

2. Probability Vocabulary Review (Large group discussion and pairwork)

Present a list of some terms associated with probability:

- very likely, probable, impossible, highly probable, certain, unlikely, possible, very unlikely

Ask students to rank these terms according to certainty, from least certain to most certain. Ask for any other similar terms they may know that could be added to this list.

Remind students that, as noted above, probability applies to all sorts of events – everything from winning the lottery to what the weather will be like to the chances of getting a particular disease.

Using either an overhead or a handout, present students with a list of events like that below. (Feel free to modify the list to increase its relevance to your students).

- It will snow next Christmas Day.
- You will watch the news on television tonight.
- You will be on time for work tomorrow.
- You will see a zebra pulling a cart on the road on your way home tonight.
- You will buy a new pair of shoes this month.
- The weather will be cold tomorrow.
- You will win the lottery.
- You will go sky-diving this weekend.
Lesson 12: (GED) Exploring Health Risks as Probabilities

You will need new glasses in the next year.
Your teacher will speak to you in Thai during this class.

Ask students to take 5 minutes to work with a partner and assign one of the probability terms noted above to each statement. After 5 minutes, ask volunteers to share their answers. Point out, as will likely be clear from student responses, that some events – like buying new shoes or needing glasses -- will be more likely for some people than for others.

3. Introduce the Probability Scale (Large group discussion and pairwork)

Note that while we can talk about probability with words like very likely or impossible, very often probability is discussed in terms of numbers.

Point out that all probabilities fall between 0 and 1. A probability of 0 means that an event is impossible while a probability of 1 means that an event is certain to happen. Lower probabilities mean that events are less likely, while higher probabilities mean that events are more likely.

Draw the following scale on the board or an overhead transparency and explain its use as discussed below.

<table>
<thead>
<tr>
<th>The Probability Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>impossible</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0 %</td>
</tr>
<tr>
<td>fifty-fifty</td>
</tr>
<tr>
<td>.5</td>
</tr>
<tr>
<td>50%</td>
</tr>
<tr>
<td>certain</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>100%</td>
</tr>
</tbody>
</table>

Point out that the decimals on the probability scale correspond to percentages. So if an event had a probability of .9, we could say that the probability of that event is 90%, or that there is a 90% chance that that event will happen. When we hear statements about an event being 90% certain, we know that there is a very good chance that the event will occur. On the other hand, if something has a 10% chance of occurring, it is pretty unlikely that that event will happen. The number .5 represents what we often call a “fifty-fifty” chance (a 50% chance) – which means that it is as likely that an event will occur as it is likely that it will not occur.

In order to help us understand how likely an event is to happen, we can think about where it would fall on the probability scale. Ask students to revisit the list of events they looked at earlier in the lesson. Have students again work in pairs to assign a percentage to each event as a way of expressing the likelihood of that event. You may wish to focus on one statement as an example:
You will be on time for work tomorrow.
Earlier, I said that this event was very likely. Now, I might say that the probability of that event is 90% – since I’m on time for work almost every day and I feel very certain I will be again tomorrow.

Ask students to share some answers.

4. Review mathematical expressions of probability (Large group review and individual practice)

Explain that decimals and percents are two different ways of expressing probabilities. Probabilities can also be expressed as fractions. Write the following examples on the board for students to see as you review them.

For example, a probability of

\[.1 = 10\% = \frac{10}{100} (1/10) \] [1 in 10 chance of the event happening]
\[.5 = 50\% = \frac{50}{100} (1/2) \] [1 in 2 chance]
\[.25 = 25\% = \frac{25}{100} (1/4) \] [1 in 4 chance]

Remind the students that we often refer to these expressions as statistics. Health messages often contain statistics that we need to understand in order to fully understand those messages.

Distribute the Expressions of Probability worksheet and ask students to complete the table like the one below. Invite students to use calculators for this exercise. Depending on your students’ facility with these calculations, you may wish to review possible ways to get the equivalent expressions:

If you start with a decimal, turn it into a fraction

\[e.g. \ .30 = \frac{30}{100} = 30\% = 3 \text{ in } 10 \text{ chance} \] [reduce 30/100 to 3/10]

If you start with a fraction, divide the numerator by the denominator to get a decimal.

\[e.g., 1/6 = .1667 = \frac{17}{100} = 17\% = 17 \text{ in } 100 \text{ or } 1.7 \text{ in } 10 \text{ chance}\]

If you start with a percentage, turn it into a fraction, then get a decimal

\[e.g., 75\% = \frac{75}{100} (or \frac{3}{4}) = .75 = 3 \text{ in } 4 \text{ chance}\]

Review the answers (listed in the table below) as a class and answer any questions students may have.
Expressions of Probability – Answer Key

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Percentage</th>
<th>Fraction</th>
<th>Chance/Odds</th>
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<tbody>
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<td>(\frac{10}{100} = \frac{1}{10})</td>
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<tr>
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<td>2%</td>
<td>(\frac{2}{100} = \frac{1}{50})</td>
<td>1 in 50</td>
</tr>
</tbody>
</table>

5. Assessing the likelihood of events (Four corners and pair work)

In this activity, you will ask students to consider four causes of death (car accident, plane crash, being hit by a car, being struck by lightning). Students will choose which cause they think poses the greatest risk to the average person in the U.S. and then position themselves in an area of the room associated with that cause. Students then think about their choices and discuss how their perceptions of risk are developed. Finally, students brainstorm questions they can ask their doctors to help clarify health risk messages.
List the following four potential causes of death on the board or overhead.

- Car accident
- Plane crash
- Being hit by a car or other vehicle
- Being struck by lightning

Ask students to think silently about which cause of death they think is most likely; that is, which cause poses the greatest risk to the average person in the U.S. over the course of a lifetime. Assign each cause of death to one corner of the room. Place a piece of newsprint in each corner with the name of the cause of death on it. Give students 2 minutes to move to the corner that corresponds to the cause of death that they think is most likely (not necessarily to them – but generally speaking).

Once students have arrived at their chosen location, ask volunteers to explain their choices to the whole class. Ask students to note what factors influenced their choice of the most likely event.

Next, ask students to split into pairs and give each pair a set of 4 post-it notes with the following statistics on them (1 statistic per note):

- 1 in 83,930
- 1 in 4,023
- 1 in 247
- 1 in 608

On the newsprint in each corner, ask students to post the statistic that they think corresponds to the probability of each cause of death/event. Once students have done this, you can reveal the correct matching statistic for each cause of death. Ask students to comment on what they notice about their predictions and the actual probabilities.

<table>
<thead>
<tr>
<th>Cause</th>
<th>lifetime odds</th>
</tr>
</thead>
<tbody>
<tr>
<td>car</td>
<td>1 in 247</td>
</tr>
<tr>
<td>air</td>
<td>1 in 4,023</td>
</tr>
<tr>
<td>pedestrian</td>
<td>1 in 608</td>
</tr>
<tr>
<td>lightning</td>
<td>1 in 83,930</td>
</tr>
</tbody>
</table>
Note: These statistics are from the National Safety Council (NSC).\textsuperscript{5} They are based on data from the National Center for Health Statistics and U.S. Census Bureau.

6. Review student perceptions of risk (Large group discussion)

Pose the following questions to the class for discussion.

\emph{How did your perceptions of risk (your ideas before seeing the statistics) differ from the statistics?}  
(e.g., I thought it was riskier to be a pedestrian than to be in a car.)

\emph{What kinds of things influence how you view the risk of events such as these?}  
Answers may include:\textsuperscript{6}  
Personal experience  
Cultural attitudes and beliefs  
What we see in newspapers, magazines, and on TV  
Not understanding science well  
Whether something is familiar (diabetes) or exotic (West Nile virus)  
Whether something is common (flu) or dreaded (cancer)  
Whether something is a natural risk (lightning) or man-made (chemical contaminants)

\emph{What kinds of things might influence how you feel about health risks?}  
Answers may be similar to those above, and may include comfort with habits, such as smoking, eating, exercise, etc.

Point out that researchers who have looked at our understanding of risk have noted that our perception of risk is influenced by whether a hazard is present (e.g., whether there are reports of West Nile virus in our state or city), how much we are exposed to the hazard (e.g., how often we actually fly on an airplane), how much we feel threatened by the hazard, plus how much control we feel we have over whether or not the event occurs\textsuperscript{7}.

\textsuperscript{5} The NSC website explains lifetime odds as follows: one year odds are approximated by dividing the 2001 population (285,093,813) by the number of deaths. Lifetime odds are approximated by dividing the one-years odds by the life expectancy of a person born in 2001 (77.2 years).  
http://www.nsc.org/lrs/statinfo/odds.htm

\textsuperscript{6} Adapted from \textit{Communicating About Risk: Implications for Public Health and Clinical Practice} by James Hyde, Associate Professor, Tufts School of Medicine Presented at The American College of Preventive Medicine, San Antonio, Texas February 20, 2002  
http://www.hsph.harvard.edu/healthliteracy/slides/hyde_01.html

\textsuperscript{7} Adapted from \textit{Communicating About Risk: Implications for Public Health and Clinical Practice} by James Hyde, Associate Professor, Tufts School of Medicine Presented at The American College of Preventive Medicine, San Antonio, Texas February 20, 2002  
http://www.hsph.harvard.edu/healthliteracy/slides/hyde_01.html
7. **Conclusion: Improving communication with doctors about health risks (Small group discussion)**

Point out that, so far in this lesson, students have explored the concept of probability and ways that probability can be expressed – as words (likely, very likely, etc.) and numbers (fractions, percents, decimals and odds).

To conclude the lesson, you will ask students to think about how they can improve their understanding of risk when they meet with health professionals.

Distribute the *Talking About Risk in Health Care Settings* handout. Ask students to work in groups of 3 to focus on one of the 5 scenarios listed on the handout. You may wish to assign scenarios to groups to be sure that all 5 scenarios are discussed. Ask students to think about what questions they could ask the doctor in response to the health risk message the doctor tells each patient.

Give students around 10-15 minutes to discuss the problems and prepare to share their ideas with the class. When groups are ready, ask a representative from each group to share ideas and record them on the board.
Talking About Risk in Health Care Settings  
(Teacher Version)

1. Mario’s father died of prostate cancer, so his doctor has told Mario that he is “at risk” of getting the disease too. What questions could Mario ask to more clearly understand his risk of getting the disease?  
(e.g., How likely is it that I will get cancer? Can you use numbers or show me on a scale? What can I do to reduce my risk?)

_Do you think Mario should be concerned about his risk of prostate cancer? Why?_  
(Answers will vary – Just because he’s at risk doesn’t mean he will get it. There may be things he can do to lower his risk.)

2. Joyce goes to the doctor for a check-up. During the visit, her doctor tells Joyce that given her age, current health and family history, she has a 1 in 200 chance of developing a certain type of cancer. Joyce has never heard this kind of information before and is confused by the numbers. What could she ask the doctor to do to make his message clearer?  
(e.g., What does 1 in 200 mean – is that very likely, not very likely, almost certain? Can you show me a picture? What can I do to reduce my risk?)

_Do you think Joyce is at great risk of developing cancer? Why?_  
(Answers may vary: 1 in 200 doesn’t seem like a great risk to me. Or, 1 in 200 sounds risky to me.)

3. Simon has a problem with his heart and needs surgery. The doctor said that there’s a 30% chance that the operation will not work. What questions could Simon ask to learn more about the risks involved in his surgery?  
(e.g., What does 30% mean? What is the chance that the surgery will work? What if I don’t do the surgery? (This last question is not pertinent to interpretation of probability but relevant to the conversation overall.)

_Do Simon’s surgery sound very risky to you? What would you advise him to do?_  
(Answers will vary. Some people may feel that a 70% chance of success is enough, while others may not.)

4. Elena has arthritis. Her doctor gave her a new medicine and said that there’s a 60% chance that the medicine will help her. What questions can Elena ask to understand what this means.  
(e.g., So, there’s still a 40% chance it won’t work? What are the side effects? What will happen to me if I don’t take this medicine? Are there others I can take?)

_Do you think it’s a good idea for Elena to take the medicine? Why?_  
(Answers will vary. Some people may feel that 60% is not good enough, especially if there are side effects of the medicine.)
In bringing the discussion to a close, you will want to highlight the following:

- It is especially important to ask questions in a doctor visit when you are discussing the risk of getting a disease, or the risks of a certain treatment or procedure.

- What doctors tell us about risk – the probability, or statements like being “at risk” - will mean different things to different people. For some, a 70% chance of success is good enough, while for others it may not be. Get information from your doctor, ask questions so you understand your situation, and then do what’s comfortable for you.

Conclude the lesson by directing students to an appropriate follow-up activity.

Note to teacher: Following this lesson, you may wish to prepare a summary handout based on this discussion for students to have for future reference when visiting a doctor. You may wish to include the following points:

- Ask for the risk message in a different form. For example, if the doctor uses a 1 in X statement, ask to hear that as a percent.

- Ask for a picture to represent risk – a shaded pie chart, for example.

- If the doctor explains the risk of a problem occurring, ask what the risk of things being O.K. is – eg, if there’s a 40% chance that a drug won’t work, then what is the likelihood that it will work?

- If the doctor talks about a change in risk – e.g., 30% decrease or 40% increase – ask what the risk is before the increase or decrease.

- Ask the doctor to show the risk on a probability scale like the one used in class.

- Ask the doctor to repeat, speak more slowly, or use simpler words.

- Tell the doctor what you have understood and ask if this is correct.

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8 List adapted from “Strategies to help patients understand risks” by John Paling. BMJ volume 327, September 2003. Available at www.bmj.com
Follow up activities

A. Probability and Health Risk Review Activity. Have students complete the Probability and Health Risk Review Activity, which follows this lesson plan, and return it to you as a check on their understanding of the material covered in the lesson.

B. Probability in the News. Ask students to look through newspapers and magazines to find expressions of probability and present them to the class – explaining what the issue is, how the probability is presented, alternatives for presenting it (e.g., percent, fraction, picture) and how the student views the risk involved – high, low, etc. E.g.,: A recent quote from Newsweek: ‘If you smoke a pack a day for 20 years or more, you have a 50 percent chance of dying from smoke-related disease.’

C. Research on Risk. Have students research the risks associated with a topic of their own interest such as a particular disease (e.g., diabetes) or an activity (e.g., smoking, sky diving).

Technology Tips

✓ Presenting Risk with Visual Aids
This website offers a useful introduction to the concept of risk via a moving visual presentation of risk. If you have a computer lab available to you and your students, this site might serve as an alternative introduction to this lesson. https://www.besttreatments.org/risk

✓ Risk Charts
Particularly for GED students, you may wish to explore the website described below, which has links to a series of charts that show the risk of death due to cancer. The charts can provide practice in table reading skills as well as information for further discussion of risk.

Risk Charts: Putting Cancer in Context
Risk charts are simple, low-tech, visual tools that put disease risk into context. Schwartz and her colleagues have created examples of risk charts that show how many people out of 1000 will die of a particular disease within the next 10 years. There are separate charts for men and women, smokers and non-smokers, with risk data for people ages 20 to 90. The charts not only are appealing to look at, but also easy to understand. You can find examples and more information about risk charts at the Journal of the National Cancer Institute's Web site: http://www.jncicancerspectrum.oupjournals.org/cgi/content/full/jnci;94/11/799?ij.

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9 Statement by Dr. Norman Edelman, American Lung Association’s chief medical officer. In “The Deadliest Cancer.” Newsweek, August, 22, 2005, p. 44.
✓ **Risk Statistics**
This British website offers relevant statistical resources to support lessons or lectures—statistics of comparative risks and a variety of charts that present risk in different formats (tables, bar charts, etc.).
http://www.hse.gov.uk/education/statistics.htm#death

✓ **Manage My Health: Assess My Health Risks**
This website from Harvard Pilgrim Health Care provides links to a series of sites that allow a person to assess their health risk in multiple areas, including cardiac health, diabetes, cancer, stroke, osteoporosis, and more.
http://www.harvardpilgrim.org/portal/page?_pageid=213,38394&_dad=portal&_schema=PORTAL

✓ **Making sense of risk information on the Web**
Although the language used in this website may be a bit complex for your students, this website may serve as a useful resource for you as you guide your students in exploring and interpreting risk information on the web. The author suggests some useful pieces of information/questions to consider when reviewing risk information.
http://bmj.bmjjournals.com/cgi/content/full/327/7417/695

✓ **Exploring Risk Factors**
The on-line GED 2002 Teacher’s Lesson Bank includes a lesson titled *Protect Your Heart* (Lesson 35), which covers a discussion of risk factors for heart disease and stroke, and provides students with practice in graphing and planning for healthy actions. Elements of the lesson can be adapted to pre-GED students. The lesson plan and materials are available at:
http://www.floridatechnet.org/ged/LessonPlans/Science/Science.htm

**ESOL Tips**

Students may benefit from practice in using the language of risk. You may want to ask them to role-play scenarios such as those included in the *Talking About Risk in Health Care Setting* activity. You may also want to include some discussion of how risk is perceived and discussed in other cultures. For example, do people openly discuss risks, especially those pertaining to health? Do doctors discuss risk in terms of numbers or in other ways?
### Expressions of Probability

Complete the table below by filling in the missing values. Follow the example provided.

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Percentage</th>
<th>Fraction</th>
<th>Chance/Odds</th>
</tr>
</thead>
<tbody>
<tr>
<td>.10</td>
<td>10%</td>
<td>( \frac{10}{100} = \frac{1}{10} )</td>
<td>1 in 10</td>
</tr>
<tr>
<td>.30</td>
<td>75%</td>
<td>( \frac{1}{6} )</td>
<td>1 in 9</td>
</tr>
<tr>
<td>.05</td>
<td>.1%</td>
<td>( \frac{7}{8} )</td>
<td>9 in 10</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Talking About Risk in Healthcare Settings

1. Mario’s father died of prostate cancer, so his doctor has told Mario that he is “at risk” of getting the disease too. What questions could Mario ask to more clearly understand his risk of getting the disease? Do you think Mario should be concerned about his risk of prostate cancer? Why?

2. Joyce goes to the doctor for a check-up. During the visit, her doctor tells Joyce that given her age, current health, and family history, she has a 1 in 200 chance of developing a certain type of cancer. Joyce has never heard this kind of information before and is confused by the numbers. What could she ask the doctor to do to make his message clearer? Do you think Joyce is at great risk of developing cancer? Why?

3. Simon has a problem with his heart and needs surgery. The doctor said that there’s a 30% chance that the operation will not work. What questions could Simon ask to learn more about the risks involved in his surgery? Does Simon’s surgery sound very risky to you? What would you advise him to do?

4. Elena has arthritis. Her doctor gave her a new medicine and said that there’s a 60% chance that the medicine will help her. What questions can Elena ask to understand what this means? Do you think it’s a good idea for Elena to take the medicine? Why?
At her annual physical, Mrs. Sanchez's doctor tells her that her risk of developing a certain disease is about 1 in 50.

1. Mrs. Sanchez does not understand what this statistic (1 in 50) means. What are two questions that she might ask her doctor to help her better understand her situation/risk of getting this disease?

2. What is the probability of her getting the disease, expressed as a decimal and a percent?

3. Do you think Mrs. Sanchez is at a “high risk” for this disease? Why?

4. Once Mrs. Sanchez understands what 1 in 50 means, what other questions might she ask her doctor?
SESSION THREE:
Integrating Health Literacy Skills into Instruction
Skills for Disease Prevention and Screening

SESSION THREE:
Integrating Health Literacy Skills Into Instruction

HEALTH LITERACY STUDY CIRCLES*
HALL/NCSALL 2007

Rima Rudd, Sc. D.
Lisa Soricone, Ed. D.
Maricel Santos, Ed. D.
Overview: Session Three

Session Three activities focus on how to address the literacy skills needed for disease prevention and screening activities. During this session, you will help participants define lessons they might develop and then consider the broader task of developing unit plans.

About this Session

The first two sessions of this Study Circle focused on helping participants enrich their understanding of health literacy skills related to disease prevention and screening. During Session Three, participants will have an opportunity to review the sample lessons they taught and consider other health literacy lessons they can develop. They will begin to outline a health literacy unit and consider a set of lessons that fit with the needs of their students.

Introductory Activities

This session, like others, begins with a welcome and presentation of the session objectives and agenda.

Discussion and Analysis Activities

The discussion and analysis activities begin with participants’ experiences teaching the sample lessons distributed in Session Two. After you introduce the idea of health literacy units, participants begin outlining their own health literacy units by considering the lists of health literacy skills related to disease prevention and screening that they identified during Session Two.

Planning Activities

You will ask participants to list the lessons they want to teach in their health literacy unit and to choose one lesson idea. Working in pairs, participants review a lesson plan template and outline their own lessons.
As in previous sessions, you should encourage participants to work together between sessions to complete the assignment.

**Closure Activities**

At the end of Session Three, as in previous sessions, you will facilitate a review and evaluation activity. Participants will review the discussion methods that were used during this study circle and complete a session evaluation. Be sure to give the participants time to complete the session evaluation forms.
The Group Discussion Methods

Throughout the Study Circle+ you will use a variety of discussion methods to present information and facilitate activities. We hope that participants will find these methods helpful and consider using them in their own classrooms. Therefore we ask you to keep in mind that you serve as a role model. As you facilitate the Study Circle+ activities, you will be modeling these discussion methods for participants to use in the future.

The discussion methods used in Session Three include:

- **Pair-work followed by large group discussion**: Participants work together in pairs to share details, often about an experience. Mutual sharing enables the pairs to process or analyze their ideas. They then prepare more general statements for presentation to a larger group. The large group sharing activity follows this more intimate work and enables all participants to hear the key issues discussed.

- **Private reflection**: Private reflection provides some time for participants to collect their thoughts and generate ideas on paper about a topic before they share their ideas.

- **Small Group Work**: This method is used to foster group collaboration.

- **Walk-about**: This activity gives participants an opportunity to view the work completed by small groups.

- **The Dance and the Balcony**: This activity is a metaphor for analyzing the group discussion methods used during the session. The purpose of this activity is to highlight the different ways activities were structured during the session and to encourage teachers to consider using some of these methods in their own classes.
Overview: Session Three

Objectives
During this session, participants will:

- Analyze the experience of teaching a sample health literacy lesson
- Delineate key health literacy skills to be addressed in ABE/ESOL classes
- Develop ideas for health literacy units
- Begin to develop original lesson plans focused on health literacy skills

Time
- 3 hours

Session Three Agenda

Introductory Activities (15 minutes)
- Welcome and Review of Session Two
- Review Session Three Objectives and Agenda

Discussion & Analysis Activities (1 hour, 45 minutes)
- Review and Discuss the Sample Lessons Taught
- Consider Ideas for Health Literacy Units
- Outline a Health Literacy Unit
- ~ Take a 10-Minute Break ~

Planning Activities (45 minutes)
- Consider Units and Lessons
- Develop a Lesson Plan

Closure Activities (15 minutes)
- Session Review
- Session Evaluation
Materials and Preparations

- Newsprints (flipcharts) and markers
- Overhead Projector (optional)
- Post-It notes
- Photos related to disease prevention and screening

Newsprints (flip charts) or overhead transparencies (3)

The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In these notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints for this session are included in this booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Work Group Lists of Skills and Concepts (from Session 2)</td>
<td>• Lesson Ideas</td>
</tr>
<tr>
<td>• Photos</td>
<td></td>
</tr>
</tbody>
</table>

Handouts (8)

Make copies of the following handouts before the session begins. The handouts for each session are located after the session booklet.

1. Session Three Objectives and Agenda
2. Developing a Health Literacy Unit
3. My Health Literacy Unit Ideas
4. Pair Work Directions
5. Lesson Plan Template
6. Lesson Reflection Sheet (to be completed after teaching a lesson between Sessions Three and Four)
7. Session Three Evaluation Form

From Session Two (Sample Lesson Packet):
8. Post-Teaching Reflection Sheets that participants filled out after teaching a sample lesson
Session Three: Integrating Health Literacy Skills Into Instruction

Photo © Jon Crispin
INTRODUCTORY ACTIVITIES (15 minutes total)

Welcome & Agenda
(15 minutes)
Discussion Methods: Presentation by facilitator
Handouts: Session Three Objectives and Agenda

Welcome the group and review Session Two
Remind participants of the focus of Session Two. They engaged in analyses of disease prevention and screening tasks, barriers, and needed skills. Participants had an opportunity to examine sample lessons that address literacy skills needed for disease prevention and screening. Participants chose a sample lesson they wanted to teach and before this meeting (hopefully) taught that lesson with students in their own classrooms.

Provide an Overview of Session Three
During this session, participants will reflect on their teaching experience. Next they will consider other lessons for developing a health literacy unit. Finally, they will focus on the assignment to develop one lesson and teach that lesson before Session Four.

Distribute the Session Three Objectives and Agenda
- Review the objectives and agenda and briefly describe the session activities.
- Ask if anyone has additional comments or questions.
DISCUSSION & ANALYSIS ACTIVITIES
(1 hour and 45 minutes total including a 10-minute break)

Review and Discuss the Sample Lessons Taught
(30 minutes)
Discussion Methods: Pair work and large group discussion
Handouts: Post-Teaching Reflection Sheets (from the Sample Lesson Packet)

Work in pairs to review the Post-Teaching Reflection Sheets (15 minutes)
Participants will first work in pairs and then move to a full group discussion to identify insights gained from their teaching experiences.

- Ask participants to take out their completed Post-Teaching Reflection Sheet (from the Sample Lesson Packet). Allow a few minutes for participants to complete their reflection sheet if they have not done so.
- Ask participants to work with a partner who teaches in the same area (ESOL, ABE, or GED), works with the same learner level, or taught the same sample lesson.
- Ask pairs to share and discuss their responses to the questions on the Post-Teaching Reflection Sheet.
- Offer a 5-minute notice and ask pairs to take the last 5 minutes to consider the insights they gained – about teaching health literacy skills and/or about their students’ needs – as a result of teaching these lessons.

Bring the full group back together to share highlights of their pair discussions (15 minutes)
- Pose the following questions to the full group and ask those who answer to name the lesson they taught.
  What did you learn about teaching health literacy skills from this experience?
  What did you learn about your students’ needs from this experience?
- Before you move on to another person, ask for comments from someone else who taught the same lesson.
Consider Ideas for Health Literacy Units
(20 minutes)

**Discussion Methods:** Facilitated presentation, walk-about, private reflection, small group and large group discussions

**Handouts:** Developing a Health Literacy Unit
My Health Literacy Unit Ideas

**Postings:** Work Group Skill Lists from Session Two (vocabulary and reading, math, planning and oral language)
Disease Prevention and Screening Photos

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**Overview of Units (10 minutes)**

Offer an overview of the remaining study circle sessions. Explain that participants have had opportunities to define and identify specific health literacy skills – those skills their students need to be more successful as they engage in disease prevention and screening activities.

- Point out that Session Three begins the work of designing units and planning lessons.
- Define a “health literacy unit” as:
  
  *A set of 6 – 8 separate but related lessons that address a set of skills needed to effectively engage in disease prevention and screening activities.*

- Distribute the handout titled Developing a Health Literacy Unit and briefly review the examples of different ways to group lessons and generate unit ideas:
  - A unit can focus on a specific set of health literacy tasks with lessons addressing the skills needed for those tasks.
  - A unit can focus on a specific set of health literacy skills (such as interpreting statements of risk) with lessons using materials and examples that pertain to prevention and screening.

- Briefly review the handout and the examples of different ways to group lessons and generate unit ideas (by concepts, tasks, or skills).

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**Walkabout and Reflection (10 minutes)**

- Distribute the handout titled My Health Literacy Unit Ideas.
- Post the newsprints listing disease prevention and screening skills that participants completed during small group work in Session Two.
Post the series of photos related to prevention and screening activities that are provided in the materials section for Session Three.

Ask participants to walk about and review these items to generate ideas for health literacy units focused on disease prevention and screening.

Ask participants to think about the specific health literacy skills their students need to develop and the lessons participants could develop to address those skills.

Remind participants to consider the readings they did on numerical aspects of prevention and screening.

Ask participants to work alone and use the next 10 minutes for private reflection and note taking on their handout (not to be shared or handed in).

Note that this activity forms the basis for the next group discussion activity.

Outline Health Literacy Units
(40 minutes)

Discussion Methods: Small and large group discussions
Handouts: None

Overview (5 minutes)

Explain that participants will now have an opportunity to exchange their initial ideas for creating health literacy units.

Remind participants to keep the focus on skills for disease prevention and screening, not health content.

Ask if anyone is interested in working on math/probability skills, and form a group or groups of three around this focus.

Others should form small groups consisting of 3 people who have not had a chance to work together before.

Small Group Discussions (15 minutes)

Provide directions for work:

• Share and test out your health literacy unit ideas. Name the focus of your unit and sketch out the lessons to be included in the unit.
• Remind participants that their ideas need not be fully developed in order to share them; it is fine to share tentative or sketchy ideas.
• Give everyone a chance to speak.
• Share suggestions for lessons or activities (such as materials, field trips, or guest speakers).
  - Visit different groups to provide support and suggestions. You may need to help people focus on skills and not on health content. If needed, remind group members that they need not become experts in preventive or screening measures, but should instead focus their attention on the kinds of things people need to do to prepare to engage in prevention and screening activities.

**Full Group Discussions** *(20 minutes)*
- Ask each group to share the unit ideas that they discussed.
- If there is time, ask one or two volunteers to describe his/her unit in more detail by listing the focus of several lessons within the unit.
- Explain that after the break, participants will choose ideas for lessons they want to develop and teach in their classrooms.

**TAKE A 10-MINUTE BREAK**
PLANNING ACTIVITIES (45 minutes total)

Consider Lessons
(15 minutes)

**Discussion Methods:** Private reflection and large group sharing

**Posting:** Lesson Ideas

During the rest of this session, you will help participants develop and prepare to teach their own health literacy lessons.

*Introduce the assignment and provide time for private reflection*  
(5 minutes)

Tell participants that the assignment to be completed before Session Four is to develop and teach a lesson focused on literacy skills related to disease prevention and screening.

- Ask participants to review their unit outlines (lesson and unit ideas) and choose one lesson that they want to develop and teach before the next meeting.
- Check on progress. This activity may take between 5 and 10 minutes. When most participants appear to have chosen a lesson, move on to the next activity.

*Post Lesson Ideas* (10 minutes)

- Post a newsprint titled *Lesson Ideas* and ask for a volunteer to be the recorder.
- Ask each participant to briefly name his or her lesson idea and identify the skills the lesson addresses.

### Lesson Ideas

<table>
<thead>
<tr>
<th>Participant's Name</th>
<th>Lesson Idea</th>
<th>Skill Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Develop Lesson Plans

(30 minutes)

**Discussion Methods:** Pair work

**Handouts:**
- Pair Work Directions
- Lesson Plan Template
- Lesson Reflection Sheet

**Ask participants to work with a partner (20 minutes)**

Explain that during the next 20 minutes, participants will work in pairs to review a lesson plan template and shape the lessons they plan to teach.

- Ask the partners to begin by exchanging contact information (names, phone numbers, email addresses) and set up a date/time to talk to each other between sessions.
- Distribute the three handouts: Pair Work Directions, Lesson Plan Template and the Lesson Reflection Sheets. Ask participants to follow the directions provided.
- Walk around the room and check in with different pairs to see how they are doing. You should also note questions that come up so you can address them in the large group discussion.
- Give a 5-minute warning before you ask people to come back together as a group.

**Ask participants to come together for questions and answers about the assignment (10 minutes)**

- Take time to address questions about the assignment and the handouts.
- Remind participants that they need to bring TWO copies of their lesson plans and their completed Lesson Reflection Sheets to Session Four.
- Wish participants good luck with their lessons and encourage them to work with their partners.
CLOSURE ACTIVITIES (15 minutes total)

Session Review and Evaluation
(15 minutes)
**Discussion Methods:** Facilitated full group discussion

*Content Review*
- Offer an overview of key content discussed in this session. Alternatively, you may want to ask if anyone in the group is willing to summarize key content areas or comment on insights or new information gained.

*Discussion Method Review*
- If needed, remind participants of the *Dance and the Balcony* activity.
- List the discussion methods used during this session, and invite participants to identify the methods that they feel would be effective in their own classrooms. Use the table below to help you facilitate this discussion.

<table>
<thead>
<tr>
<th>Session Three Discussion Methods</th>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair Work</td>
<td>Review and discuss the sample lessons taught; review lesson template; plan to teach lessons you have developed</td>
</tr>
<tr>
<td>Walk-About</td>
<td>Consider and then share ideas for health literacy units</td>
</tr>
<tr>
<td>Private Reflection</td>
<td>Reflect on skills and write down unit ideas; reflect on lesson ideas</td>
</tr>
<tr>
<td>Small Group Work</td>
<td>Develop unit ideas</td>
</tr>
</tbody>
</table>

*Session Evaluation and Closing Notes*
- Distribute the Session Three Evaluation Forms and ask the participants to complete and return the evaluations before they leave.
- Thank the participants for their contributions in this session.
- Take a minute or two to address any logistical issues related to Session Four.
- Be sure to post the date, time, and place for Session Four.
The National Center for the Study of Adult Learning and Literacy (NCSALL) is a collaborative effort between the Harvard Graduate School of Education and World Education. The University of Tennessee, Portland State University, and Rutgers University are NCSALL’s partners. NCSALL is funded by the Educational Research and Development Centers program, Award Number R309B60002, as administered by the Institute of Education Sciences (formerly Office of Educational Research and Improvement), U.S. Department of Education. The contents of this publication do not necessarily represent the positions or policies of the Institute of Education Sciences, or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
Skills for Disease Prevention and Screening

Session Three Materials

Newsprints (flip charts) or Overhead Transparencies (4)
The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In the session notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints are included in the session booklet. The set of photos can be posted as they are presented here, or copied and distributed as handouts.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Work Group Lists of Skills and Concepts (from Session 2)</td>
<td>• Lesson Ideas</td>
</tr>
<tr>
<td>• Photos</td>
<td></td>
</tr>
</tbody>
</table>

Handouts (8)
Make copies of the following handouts before the session begins.
1. Session Three Objectives and Agenda
2. Developing a Health Literacy Unit
3. My Health Literacy Unit Ideas
4. Pair Work Directions
5. Lesson Plan Template
6. Lesson Reflection Sheet (to be completed after teaching a lesson between Sessions Three and Four)
7. Session Three Evaluation Form

From Session Two (Sample Lesson Packet):
8. Post-Teaching Reflection Sheets that participants filled out after teaching a sample lesson
Photos for Disease Prevention and Screening

All Photos © Jon Crispin

These photos are provided as part of the Session 3 Activity, Consider Ideas for Health Literacy Units. You should feel free to post the pictures as they are presented here, or to make photocopies of them to share with each participant.
Get the Flu Shot!

The reasons are all around you.

Influenza can lead to serious complications and even death for people in high risk groups. Protect yourself and those around you.

Get the flu shot. Not the flu.

Canadian Coalition for Influenza Immunization
www.influenza.cpha.ca

© Jon Crispin
Skills for Disease Prevention and Screening  
Session Three

Objectives

During this session, participants will:
- Analyze the experience of teaching a sample health literacy lesson
- Delineate key health literacy skills to be addressed in ABE/ESOL classes
- Develop ideas for health literacy units
- Begin to develop original lesson plans focused on health literacy skills

Session Three Agenda

Introductory Activities (15 minutes)
- Welcome and Review of Session Two
- Review Session Three Objectives and Agenda

Discussion & Analysis Activities (1 hour, 45 minutes)
- Review and Discuss the Sample Lessons Taught
- Consider Ideas for Health Literacy Units
- Outline a Health Literacy Unit
- ~ Take a 10-Minute Break ~

Planning Activities (45 minutes)
- Consider Units and Lessons
- Develop a Lesson Plan

Closure Activities (15 minutes)
- Session Review
- Session Evaluation
Developing a Health Literacy Unit

During this study circle, you have had opportunities to define and identify specific health literacy skills – those skills your students need in order to understand and participate in health activities related to disease prevention and screening. You have taught a sample health literacy lesson and will now consider how to develop a health literacy unit.

Think of a health literacy unit as...

A set of 6 – 8 separate but related lessons that address a set of skills needed to effectively engage in disease prevention and screening activities.

Consider some different ways you might group lessons to generate unit ideas. For example:

- A unit can focus on an overall concept, such as risk. The lessons in the unit can address various health literacy tasks and skills that relate to risk, such as understanding risk factors, assessing personal disease risk, or interpreting mathematical expressions of risk, such as “1 in 10,” “a 30% chance,” or “three times as likely.”

- A unit can focus on a specific set of health literacy tasks with lessons addressing the skills needed for those tasks. For example, a unit might focus on following directions to prepare for a health screening (e.g., colonoscopy).

- A unit can focus on a specific set of skills (for example, reading charts and tables) with lessons that incorporate materials related to disease prevention and screening.
My Health Literacy Unit Ideas

This exercise is designed to help you decide which skill areas to focus on in a health literacy unit. Note that your ideas need not be fully developed; it is fine for you to note tentative or sketchy ideas.

1. Consider your findings from the needs assessment you completed with your students after Session One and your experience teaching a sample lesson. What are some of the health literacy skills your students need or want to learn?

2. Think about how you might create a unit (six to eight related lessons) to address the skills you listed above. What might be the focus of your unit? What lessons might you include? Briefly note some ideas below.
Pair Work Directions

This Lesson Plan Template was developed and used to create the sample lessons included in this study circle. Please use this template to create your own lessons. This will provide some consistency for shared work and for reviews.

In pairs:
- Review the Lesson Plan Template together.
- Review the Lesson Reflection Sheet.
- Discuss the assignment and write down any problems you anticipate.
- Sketch out your lessons and provide some assistance and/or feedback to your partner.
The Lesson Plan Template *

Overview

The sample lessons in this packet follow an organizational format that you are encouraged to use when developing your own health literacy lessons.

Keep in mind that the health literacy lessons are focused on health-related tasks and skills. Each lesson begins with a statement about the purpose of the lesson, followed by a step-by-step explanation of the lesson. The left-hand column includes a list of specific health literacy tasks and the skills focus of your lesson.

Tasks – Health literacy tasks that people are expected to accomplish include such things as taking preventive action, making a decision about getting a screening test, and taking follow-up action after a screening test.

Skills – In order to accomplish health literacy tasks, people need a variety of skills. Lesson plans should focus on reading, writing, speaking, listening, and math skills, as well as efficacy and advocacy. Some examples include reading a chart or a map of a hospital, filling out medical forms, communicating with medical professionals, or interpreting expressions of health risk.

The left-hand column also includes information about the estimated duration of the lesson, materials needed, and key vocabulary and expressions to be covered.

Finally, the lessons feature additional teaching tools, such as:

Follow-Up Activities – Optional follow-up activities that you can use to extend the ideas and skills learned in the lesson.

Technology Tips – Ideas for integrating the use of the Internet into the lesson and description of valuable health-related resources available on the Internet.

ESOL Teaching Tips – Ideas and suggestions for adapting the lessons for teachers working with ESOL learners.

Advanced ABE/GED Teaching Tips – Ideas and suggestions for adapting the lessons for teachers working with advanced ABE or GED learners.

* Adapted from the HEAL: Breast and Cervical Cancer Curriculum, developed by World Education in cooperation with the Centers for Disease Control and Prevention, 2002
## LESSON PLAN TEMPLATE *

~ Please bring two copies of your lesson plan to Session Four ~

**Lesson Title:** ___________________________________________

<table>
<thead>
<tr>
<th>Disease Prevention and Screening Tasks Addressed in this Lesson</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>Steps</td>
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<td>5.</td>
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</table>

Skills Focus

• 3.

• 4.

• 5.

<table>
<thead>
<tr>
<th>ABE/ESOL Level</th>
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<th>Time</th>
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<td>8.</td>
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<table>
<thead>
<tr>
<th>Materials</th>
<th>Follow-Up Activity</th>
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<table>
<thead>
<tr>
<th>Key Vocabulary and Expressions</th>
<th>ESOL Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technology Tips</td>
</tr>
</tbody>
</table>

* Reference: The HEAL: Breast and Cervical Cancer Curriculum, developed by World Education in cooperation with the Centers for Disease Control and Prevention, 2002. Used with permission.
Lesson Reflection Sheet

Instructions: After you have designed and taught your own lesson, please complete this handout and bring it with you to Session Four. You can use these notes to help you present your lesson to other participants during Session Four.

Your Unit Focus:

Your Lesson Title: ______________________________

Class Level: ______________________________

1. Briefly describe your lesson, including its objectives and skill focus.

2. Describe how your students responded to your lesson. What aspects of the lesson went well? What aspects did not go as well?

3. What other related lessons might you teach to shape a health literacy unit?
Skills for Disease Prevention and Screening

Session Three Evaluation Form

Please complete the following evaluation and turn it in before you leave today.

1. What was the most valuable insight, practical idea, or specific information that you gained from today's session?

2. How would you improve this session?
SESSION FOUR:
Planning Lessons, Units, and Evaluations
Skills for Disease Prevention and Screening

SESSION FOUR: Planning Lessons, Units, and Evaluations

HEALTH LITERACY STUDY CIRCLES
HALL/NCSALL 2007

Rima Rudd, Sc. D.
Lisa Soricone, Ed. D.
Maricel Santos, Ed. D.
About this Session
In some respects, the study circle process thus far has put the “cart before the horse,” having participants experiment with teaching lessons before developing an overall plan for integrating health literacy skills into their work.

The activities and follow-up assignment for Session Four will enable participants to move the “cart” back behind the “horse.” You will lead discussions about a health literacy unit – a set of six to eight lessons focused on the literacy skills needed for disease prevention and screening activities. Participants will also consider a variety of ways to measure and document unit success and their students’ skill development.

Introductory Activities
The introductory activities of Session Four are designed to help participants understand the structure and content of the session. Once again, you will begin the session with a welcome and presentation of the objectives and agenda. Be sure to allow a few minutes for any questions or comments from the last session.

Discussion and Analysis Activities
The discussion and analysis activities of Session Four provide opportunities for participants to share their teaching experiences and lesson ideas, and to consider a health literacy unit plan. Participants then step back from the unit they have outlined to think about the results that they hope to achieve. You will help them consider ways to measure success.

Planning Activities
The planning activities prepare participants to outline a unit and an evaluation plan. Participants will develop draft plans between Sessions Four and Five and prepare to share their drafts in the final session of the Study Circle+. Once again, you will ask participants to form partnerships to discuss the assignment between sessions.
Closure

During the closure activities, as in previous sessions, you will conduct two summaries. One summary is focused on content and the other is focused on discussion methods. You will also ask participants to complete a written evaluation.

The Group Discussion Methods

The Discussion Methods used in Session Four are designed to establish a relaxed atmosphere for sharing and for discussion. The following discussion methods are used during this session.

- **Facilitated Small and Large Group Work**: Participants work in pairs, small groups, and facilitated large groups.

- **Brainstorming**: Participants generate ideas and solutions without commentary on individual items so they can freely suggest and then examine a broad range of topics.

- **The Dance and the Balcony**: Participants review and analyze the discussion methods used during this session.
Overview: Session Four

Objectives
During Session Four, participants will:
- Analyze the experience of teaching new health literacy lessons
- Discuss lesson plans and unit ideas
- Examine and prepare to use a template as a planning tool
- Generate ideas for measuring success
- Prepare for the assignment between sessions

Time
3 hours

Session Four Agenda

 Introductory Activities (15 minutes)
- Welcome and Review of Session Three
- Review Objectives and Agenda

Discussion & Analysis Activities (130 minutes including the break)
- Share Teaching Experiences
- Share Unit Ideas
- ~ Take a 10-Minute Break ~
- Examine the Unit Template
- Develop an Evaluation Plan

Planning Activities (20 minutes)
- Review the Assignment: Outline of Unit Design and Evaluation Plan

Closure Activities (15 minutes)
- Session Review
- Session Evaluation
Materials and Preparations

- Newsprints (flipcharts) and markers
- Overhead Projector (optional)
- Post-It notes

Newsprints (flip charts) or overhead transparencies (2)

The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In these notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints for this session are included in this booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Unit Ideas</td>
</tr>
<tr>
<td></td>
<td>• Evaluation Options</td>
</tr>
</tbody>
</table>

Handouts (4)

Make copies of the following handouts before the session begins. The handouts for each session are located after the session booklet.

1. Session Four Objectives and Agenda
2. Unit Plan Packet (16 pages) – contains the following:
   - Unit Plan Packet Cover Sheet
   - Unit and Evaluation Plans: Issues to Consider
   - Overview: The Health Literacy Unit Template
   - Health Literacy Unit Template
   - Sample Health Literacy Unit
   - An Evaluation Plan for Your Health Literacy Unit
   - Evaluation Plan Template
   - Sample Evaluation Plan
3. Session Four Evaluation Form

From Session Three

4. Lesson Reflection Sheet (the handout with notes on teaching a new lesson)
Session Four: Planning Lessons, Units, and Evaluations

Photo © Jon Crispin
INTRODUCTORY ACTIVITIES (15 minutes total)

Welcome & Agenda

(15 minutes)
**Discussion Methods:** Presentation by facilitator  
**Handouts:** Session Four Objectives and Agenda

*Welcome the group back to session and briefly review Session Three*
Remind participants that during Session Three, they shared their experiences teaching sample health literacy lessons. They identified other skills they could teach in their classrooms and considered ways that related lessons could be grouped into health literacy units. Between Sessions Three and Four, participants worked with partners, developed and taught their own health literacy lessons.

*Provide an overview of Session Four*
Now, participants will again share their experiences teaching lessons that they created. Participants will then shift their attention to the development of health literacy units focused on skills for disease prevention and screening activities. They will also consider possible ways to evaluate the effectiveness of their units.

*Distribute the Session Four Objectives and Agenda*
- Review the objectives and agenda and briefly describe the session activities.
- Ask if anyone has additional comments or questions.
DISCUSSION & ANALYSIS ACTIVITIES
(2 hours and 10 minutes total including the break)

Share Teaching Experiences
(30 minutes)
Discussion Methods: Small group work and discussion
Handouts: Lesson Reflection Sheet (handout from Session Three)

Ask participants to work in small groups to discuss their teaching experiences

- Ask participants to form small groups of two to three to share experiences teaching their own health literacy lessons. Ask participants to use the questions on their Lesson Reflection Sheets to guide their discussions.
- Ask participants to take about 5 minutes each to give a brief overview of their lessons and allow time for reactions and questions from other group members. Each overview should include:
  - The focus or theme of the lesson
  - A brief description of the lesson (objective, skill and activity)
  - A brief description of their students’ reactions to the lesson
- When people are meeting in small groups, try to sit with each group for a few minutes. Alert the groups when 5 minutes remain.

Note to Facilitator: If you have the time and resources to make copies of lessons, you may want to collect copies of the participants’ lessons. Consider making copies of these materials to create a lesson packet for each participant. This can be handed out during Session Five. Alternatively, during Session Five, you might help participants set up a listserv so that they can post lessons and units.

Share Unit Ideas
(15 minutes)
Discussion Methods: Facilitated full group discussion
Facilitate a full group discussion about unit ideas

- Reconvene the full group and ask the participants to consider how their teaching experiences might help them design their health literacy units. You might state:
  
  The needs of your students will likely shape your unit ideas.
And then ask:

_How has your classroom profile and your own teaching experience helped you shape your ideas for a unit on literacy skills for disease prevention and screening activities?_

- Tell participants that you would like to create a list of their ideas for health literacy units so that everyone can see the range of ideas.
  - Ask a volunteer to record the list on a newsprint or overhead transparency titled Unit Ideas.
  - Ask each participant to name the focus/theme of the health literacy unit he or she is planning.
- Ask a volunteer to comment on any patterns or areas of overlap on the list. For example, several units may focus on communication skills like talking with doctors about prevention and screening.
- You may want to suggest other examples:
  - How to Locate Resources and Information on Disease Prevention and Screening
  - Screening Tests: Ask Questions, Make Decisions, and Understand Results
- If there is time, ask a volunteer to sketch out the sequence of lessons that constitute his or her unit.

**Review the Unit Plan Packet**

(15 minutes)
**Discussion Methods:** Facilitated presentation
**Handouts:** Unit Plan Packet

**Distribute and review Unit Plan Packet**

- Allow a few minutes for participants to skim through the Unit Packet.
- Explain that these materials were developed as tools to help participants plan and evaluate their units. This packet includes the following materials:
  - Unit Plan Packet Cover Sheet
  - Unit and Evaluation Plans: Issues to Consider
  - Overview: The Health Literacy Unit Template
  - Health Literacy Unit Template
• Sample Health Literacy Unit
• An Evaluation Plan for Your Health Literacy Unit
• Evaluation Plan Template
• Sample Evaluation Plan

- Explain that everyone will draft a health literacy unit using the Unit Template as a guide. Participants should feel free to adapt the template to suit their own teaching needs and styles. They should plan to bring copies of their unit plans to Session Five.
- Allow a few minutes for participants to review the Health Literacy Unit Template and to ask questions for clarification. If participants need more time to review the template, tell them that you will be available during the break to answer any additional questions.
- Explain that, after the 10-minute break, participants will discuss ways that they can measure their students’ success in developing health literacy skills.

**TAKE A 10-MINUTE BREAK**

**Develop an Evaluation Plan**

(1 hour)

**Discussion Methods:** Brainstorming, small group discussions, large group summation

**Handouts:** Sample Health Literacy Unit
Sample Evaluation Plan

**Brainstorm ways to measure success** *(15 minutes)*

Facilitate a brief brainstorming activity focused on evaluation activities.

- Begin by asking the participants to think about how they generally determine the success of the lessons and units they currently teach.
- Ask a volunteer to record ideas on a newsprint or overhead transparency entitled Evaluation Options.
- Encourage participants to generate ideas, and remind them that ideas will be listed without critique or commentary. Remind participants to focus on evaluating literacy skills related to disease prevention and screening.
- Anticipate a list that includes many of the following:
Administer a test
Provide practice opportunities and observe
Ask students to role-play
Ask students how confident they feel about trying a particular task (such as making an appointment over the phone).
Give assignments that require students to apply the new skills
Ask students to report back when they have applied new skills

Consider Knowledge, Perceptions, Skills, and Actions (10 minutes)
Tell participants that they will now consider additional ways to measure success for their health literacy units by looking at the Sample Health Literacy Unit. Tell the participants that the unit design may offer a focus on:

- **Knowledge**, such as new vocabulary
- **Perceptions**, such as increased sense of ability to ask questions
- **Skills**, such as the ability to prepare a folder with needed information and evidence
- **Actions**, such as participating in prevention and screening activities

Define and Measure Success (20 minutes)
Introduce small group work focused on the sample unit by asking participants to form working groups of four to five.

- Ask the groups to read the Sample Health Literacy Unit so that they can all use the same example as they consider evaluations.
- Ask the groups to review the Sample Unit Plan and turn to the Sample Evaluation Plan.
- Suggest that the groups focus on three questions:
  *What will the students be able to do after you teach this unit?*
  Remind participants to consider the variety of health literacy skills included in the example.
  *Does the focus on knowledge, perceptions, skills, and actions cover the kinds of changes you hope to see among your students?*
What can you do to document that these changes have taken place in students’ knowledge, perceptions, skills, and actions?

- Make yourself available to help groups who need assistance thinking of possible strategies and methods for assessing and documenting changes.
  
  You might help them consider the following assessment activities: role-play, paper and pencil tests, demonstration, tutoring others, presentation to another class, use of journals.

**Summarize the work completed (15 minutes)**

- After the participants have had an opportunity to share their ideas in small groups, reconvene the full group and offer the following summary point:
  
  *Because of the new lessons and activities used in your classes, your students might experience a number of changes as they build health literacy skills.*

- Ask participants to list examples:
  
  - One way to measure mastery of a skill
  - One way to measure an action taken outside the classroom
PLANNING ACTIVITIES (20 minutes total)

Review the Assignment: Outline of Unit and Evaluation Plans
(20 minutes)
Discussion Methods: Brief presentation
Materials: Unit Plan Packet

Briefly list accomplishments to date (5 minutes)
- Note that participants have:
  - Conducted a needs assessment with their students
  - Identified skills their students are interested in developing
  - Taught lessons focused on health literacy skills in their classes
  - Considered a unit plan
  - Considered “success” and how to measure it

Review Assignment (15 minutes)
Tell the group that they will now bring all of these elements together to draft a health literacy unit and a plan for evaluating success. Note that the health literacy unit should focus on skills needed for disease prevention and screening activities.

Encourage participants to use the Unit Template and the other materials in the packet distributed earlier to draft their unit and evaluation plans.
- Ask participants to review the Unit Plan Packet in a bit more depth.
- Take time to answer questions and address issues or concerns.
- Ask participants to look specifically at the Unit Template. Suggest that participants do their best to use the template, but note that they may modify it as needed to better suit their individual styles.
- Ask participants to meet or have phone discussions with their previous partners over the next week to discuss any problems, review plans, and share observations.

Remind participants to bring two copies each of their unit and evaluation plans to the next session.
CLOSURE ACTIVITIES (15 minutes total)

Session Review and Evaluation
(15 minutes)
**Discussion Methods:** Facilitated full group discussion and session evaluations
**Handouts:** Session Four Evaluation Forms

**Content Review**
Ask if anyone is willing to summarize key content areas or comment on insights or new information covered during this session. You or the volunteer will likely highlight the following:
- New lessons and teachers’ classroom experiences
- Unit template
- Definitions of “success” and measurement issues

**Methods Review**
- If needed, remind participants about the Dance and the Balcony activity.
- Refer to the following list to help you facilitate a brief discussion and evaluation of the different discussion methods used during this session.

<table>
<thead>
<tr>
<th>Session Four Discussion Methods</th>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitated large and small group work</td>
<td>Share teaching experiences, share ideas for health literacy units and measurement options</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>Consider ways to measure success</td>
</tr>
<tr>
<td>Dance and the Balcony</td>
<td>Review discussion methods used during this session</td>
</tr>
</tbody>
</table>

**Session Evaluation**
Distribute the Session Four Evaluation Forms and ask the participants to complete and return the evaluations before they leave.
Closing Notes

- Thank the participants for their contributions to this session.
- Take a minute or two to address any logistical issues related to Session Five.
- Be sure to post the date, time, and place for Session Five.
- IF you have decided to do the expanded Session Five, remind participants of the altered schedule. Let them know who the speaker(s) will be and ask them to prepare some questions for the discussion.
Skills for Disease Prevention and Screening
Session Four Materials

Newsprints (flip charts) or Overhead Transparencies (2)
The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In the session notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints are included in the session booklet.

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<td></td>
<td>▪ Unit Ideas</td>
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<tr>
<td></td>
<td>▪ Evaluation Options</td>
</tr>
</tbody>
</table>

Handouts (4)
Make copies of the following handouts before the session begins.

1. Session Four Objectives and Agenda
2. Unit Plan Packet (12 pages) – contains the following:
   ▪ Unit Plan Packet Cover Sheet
   ▪ Unit and Evaluation Plans: Issues to Consider
   ▪ Overview: The Health Literacy Unit Template
   ▪ Health Literacy Unit Template
   ▪ Sample Health Literacy Unit
   ▪ An Evaluation Plan for Your Health Literacy Unit
   ▪ Evaluation Plan Template
   ▪ Sample Evaluation Plan
3. Session Four Evaluation Form

From Session Three
4. Lesson Reflection Sheet (your notes after teaching your own lesson)
Skills for Disease Prevention and Screening
Session Four

Objectives

During this session, participants will:

- Analyze the experience of teaching new health literacy lessons
- Discuss lesson plans and unit ideas
- Examine and prepare to use a template as a planning tool
- Generate ideas for measuring success
- Prepare for the assignment between sessions

Session Four Agenda

Introductory Activities (15 minutes)
- Welcome and Review of Session Three
- Review Objectives and Agenda

Discussion & Analysis Activities (130 minutes)
- Share Teaching Experiences
- Share Unit Ideas
- ~ Take a 10-Minute Break ~
- Examine the Unit Template
- Develop an Evaluation Plan

Planning Activities (20 minutes)
- Review the Assignment: Outline of Unit Design and Evaluation Plan

Closure Activities (15 minutes)
- Session Review
- Session Evaluation
Unit Plan Packet Cover Sheet

The materials in this packet were designed to help you create a unit plan and an evaluation plan for that unit. You can use this packet as a guide for the assignment.

This packet includes the following materials:

1. Unit and Evaluation Plans: Issues to Consider
2. Overview: The Health Literacy Unit Template
3. Health Literacy Unit Template
4. Sample Health Literacy Unit
5. An Evaluation Plan for Your Health Literacy Unit
6. Evaluation Plan Template
7. Sample Evaluation Plan

Your assignment for Session Five

Use this Unit Plan Packet to help you:

1. Create a draft of your health literacy unit plan
2. Create an outline for evaluating your health literacy unit

~ Please bring two copies each of your completed unit and evaluation plans to Session Five ~
Unit and Evaluation Plans:  
Issues to Consider

A number of issues may influence how you choose to design a unit and a plan for evaluating it. Review the items outlined below before completing your assignment for Session Five.

**Time:** Think about how much time in your classes you can realistically devote to skills related to disease prevention and screening. You might have time for only a few lessons; you may want to carve out a lesson a week; you may have a full week or a month.

**Integration:** Review other lessons you currently use or might develop that would provide some context or support for your plan. For example:

- You may already have a lesson on asking for clarification at work/at children’s school, and you could build on this lesson as you translate the same skills into medical or social service settings.
- You might currently do a life skills lesson on finding community resources for free services and need only create a lesson that focuses on finding free screening opportunities.
- You may find that you already do lessons on percentages /fractions and only need to relate examples to expressions of health risk.

**Resources:** You will want to consider the resources you have available or might locate to help you develop and carry out your plans. For example, you might already have or might easily find authentic materials, community health resources, possible guest speakers, Web sites and publications on specific topics or articles with background information on health.

**Challenges:** You will need to anticipate problems you might encounter in carrying out your plans, and think about how to overcome them. You may face issues such as having relatively little discretionary time because you must prepare students for GED tests; you may find that other program staff do not understand the point of health literacy skill development and are therefore not supportive.
**Process**

The process of developing a plan is an iterative one. We develop goals and plans based on those goals. However, some goals are not easily achievable. Therefore, we suggest that once you have drafted your unit and evaluation plans you cycle back and review the goals and objectives. You may have to modify your goals and/or your objectives based on the time you have. You might have to increase time for the unit by building in practice time between lessons. Allow yourself time to review and revise your plans.

Review and assess the goals and objectives you have set and the lessons/activities you’ve designed to achieve them. Be sure that they are logically connected. Consider the following questions:

1. Is the goal achievable within the time available?
2. Will the objectives listed lead to the goals you’ve defined?
3. Will the lessons and activities help accomplish those objectives?
4. Will you be able to determine if the unit has been successful with the evaluation plans you’ve outlined?
Overview:
The Health Literacy Unit Template

The Health Literacy Unit Template is adapted from an organizational format developed by John Dirkx and Suzanne Prenger (1997). The template features the following components:

**Thematic focus and/or title**
The thematic focus is the grouping of health literacy tasks addressed in the unit. The focus will be a subset of one of the three critical areas addressed in the Health Literacy Study Circle Series: Access and Navigation; Chronic Disease Management; and Disease Prevention and Screening.

For example, if you are working with Disease Prevention and Screening, you might consider a thematic focus on screening tests. This might include lessons that cover locating screening resources, asking questions of doctors about screening tests, and understanding test results. As another option, you might prefer to focus on skills related to locating and understanding information on disease risk. Such a focus might include lessons on Web searching, understanding probabilities, and consulting with medical professionals.

**Student population**
Identify the student population (e.g., beginning ESOL, pre-GED, and parents in a family literacy program) and the skill level (e.g., beginning literacy, advanced math) so that others will know for whom the health literacy unit was designed.

**Major tasks addressed in this unit**
Identify the various tasks related to disease prevention and screening that will be addressed in the six to eight lessons. Health literacy tasks are those activities that people are expected to accomplish, such as getting medical screening tests. These tasks may come from the discussions you have had with your students and the table you reviewed in Session Two of this Study Circle (Table of Disease Prevention and Screening Tasks and Underlying Skills).

**Inspiration for unit**
Write down your students’ words, or describe one of their experiences that prompted you to think about the need for this health literacy unit. This will help you focus on students’ concerns and needs as you plan the health literacy lessons.

---

Unit objectives
State the learning objectives that guide your decisions about which six to eight lessons will make up this unit. Objectives should be specific, achievable, and measurable. One such objective might be: students will be able to fill out a medical history form. Another might focus on efficacy building: students will indicate that they feel more confident about being able to ask questions for clarification.

Lesson ideas
Identify six to eight lesson topics that will help you achieve your unit objectives. You may want to create all of your own lessons, or you may want to include lessons developed by others. You may wish to consider how the lessons are sequenced. Ask yourself, How do my lessons build on each other? Should certain lessons come before others?

One effective way to help learners acquire complex health literacy skills is to identify the prerequisite skills needed for a particular task, and determine where your learners have mastered them. For example, if you want to teach a lesson on understanding health risk statements, you will likely want to teach lessons that review fractions and percentages before talking about probability.

Skills to be addressed
In order to accomplish health literacy tasks, people need a variety of skills. Lesson plans should focus on reading, writing, speaking, listening, and math skills, as well as efficacy and advocacy. Some examples include reading a chart or table, filling out a form, communicating with medical professionals, and understanding health information.

Group discussion methods
Identify the discussion methods you might want to use with each lesson. Various methods might include pair work, individual reflection and writing, small group discussions, and brainstorming. You will then be able to review the list of discussion methods in the unit to determine if you have used a variety of instructional formats to address various learning styles.
# Health Literacy Unit Template

<table>
<thead>
<tr>
<th>Thematic focus and/or title of unit:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Student population and level:</td>
<td>Major tasks addressed in this unit:</td>
</tr>
<tr>
<td>Inspiration for unit:</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit objectives: Learner will...</th>
<th>Lesson ideas (6-8):</th>
</tr>
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<tbody>
<tr>
<td>•</td>
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<td></td>
<td>8.</td>
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</table>

<table>
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<tr>
<th>Skills to be addressed (e.g., reading, writing, math, oral communication, self-efficacy, self-advocacy)</th>
<th>Group Discussion Methods (e.g., pairwork, brainstorming, small group discussion, individual presentations, role play)</th>
</tr>
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</table>

## Sample Health Literacy Unit

| **Thematic focus and/or title of unit:** | Health Screening Tests |
| **Student population and level:** | Intermediate ABE |
| **Major tasks addressed in this unit:** |  |
|  | • Discuss risk for disease with a doctor |
|  | • Discuss screening tests with a doctor |
|  | • Outline possible test findings and plan for each type of finding |
|  | • Make decisions about getting screening tests |
|  | • Understand screening results |
|  | • Make plans for follow-up |

**Inspiration for unit:** Many of my students are middle-aged and overweight and have not recently had blood pressure and cholesterol checks. They have concerns about paying for screening tests, and find numbers in results confusing.

**Unit objectives:**

|  |  |
|  |  |
|  | • Learners will be able to understand concepts such as numerical ranges and statements of probability as they pertain to health risks. |
|  | • Learners will be able to formulate questions about screening tests to ask a doctor. |
|  | • Learners will be able to design action plans for different possible screening test findings. |
|  | • Learners will be able to use a decision matrix tool for making decisions about obtaining screening. |

**Lesson ideas:**

|  |  |
|  |  |
|  | 1. Vocabulary building: Review names of screening tests, the parts of the body to which they pertain, and the diseases for which the tests screen. |
|  | 3. Practice interpreting health risk statements that students locate in the news/magazines/newspapers. |
|  | 4. Create skits that help students practice questions for a health professional about the need for, and results of, screening tests. |
|  | 5. Assess student interests and make sample action plans – e.g., for better diet, exercise. |
|  | 6. Use the Study Circle+ sample lesson on decision-making. |

**Skills to be addressed:**

| **Oral communication:** | Request clarification |
| **Plan:** | Develop an action plan |
| **Read:** | Health information |
| **Write:** | Skits and action plans |
| **Use tools:** | Phonebooks, Web |
| **Self-efficacy:** | Feel confident about asking a doctor to explain the purpose of a screening test and what results can reveal |

**Group Discussion Methods:**

|  |  |
|  |  |
|  | • Pair-work |
|  | • Brainstorming |
|  | • Small group discussion |
|  | • Individual presentations |
|  | • Role play |
An Evaluation Plan for Your Health Literacy Unit

Many evaluators suggest that we focus on two levels of evaluation: process evaluation and outcome evaluation.

**Process Evaluation**
Carol H. Weiss, a well-known expert on evaluation, defines process evaluation as “a study of what goes on while a program is in progress.”* The purpose of this evaluation will be to understand whether the teaching process is going as planned, whether the students are as engaged as anticipated, and whether activities you designed to build skills are indeed accomplishing what you had hoped they would. Process evaluations enable us to pause and redesign our plans as needed.

**Outcome Evaluation**
As Weiss notes, outcome evaluation looks at “whether or not the program produced the intended program effects.”** In this instance, an outcome evaluation will determine whether or not your unit has achieved what you had hoped it would. In your outcome evaluation, you will want to consider the effect of the unit on students’ skills, knowledge, attitudes/beliefs, and actions.

**How to Draft an Evaluation Plan**
The attached two-page template provides one way of organizing your plans for evaluating your unit. Ultimately, you may prefer to use a different format. The purpose of this exercise is to allow you the opportunity to think through what you want to evaluate for your unit and how you might go about doing it. The partially filled in template is provided as an example.

**Notes on Process Evaluation**
We rarely have the time and luxury to evaluate everything. You will need to determine when feedback is most useful. Consider those aspects of your lessons, such as planned activities or time for practicing a new skill, that you will want to most closely examine. Consider how you might get feedback from students as well as peers. For instance, you might have an informal discussion with your students after a lesson. Ask them, “What did you learn?” or “Did you have enough time?” or “What did you value most/least?” You might also ask a colleague to observe a lesson and students’ reaction to it, to be able to share insights with you.

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** Ibid, p.334.
Notes on Outcome Evaluation

Outcome evaluations help you determine whether a lesson or a full unit achieved the results you had hoped it would. Many evaluators urge us to focus on proximal and distal outcomes. *Proximal outcomes* are those close at hand that can be evaluated immediately, such as increased knowledge, perceptions, and skills. *Distal outcomes* are those that come a bit later and that generally focus on results when new knowledge, perceptions, and skills are applied to real life circumstances. The Study Circle+ authors have proposed a framework for capturing these different outcomes as a way of organizing your evaluation plan. Again, this is one of many ways to organize evaluation plans.
## Evaluation Plan Template

<table>
<thead>
<tr>
<th>Unit Focus/Theme:</th>
<th>Sequence of lesson topics:</th>
</tr>
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<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Major Objectives:</th>
<th>Students will be able to do the following:</th>
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</table>

<table>
<thead>
<tr>
<th>Level of Evaluation</th>
<th>Possible Evaluation Questions</th>
<th>Evaluation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Evaluation</td>
<td>Do the lessons address student needs?</td>
<td>[How can I get information to answer my evaluation questions?]</td>
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<tr>
<td></td>
<td>Are students engaged in lessons?</td>
<td></td>
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<tr>
<td></td>
<td>Do the activities help students increase their knowledge?</td>
<td></td>
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<tr>
<td></td>
<td>Do the activities help students change their perceptions?</td>
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<tr>
<td></td>
<td>Do the activities help students develop new skills?</td>
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</tbody>
</table>
## Evaluation Plan Template (p. 2)

<table>
<thead>
<tr>
<th>Level of Evaluation</th>
<th>Possible Evaluation Questions</th>
<th>Evaluation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Evaluation</strong></td>
<td><strong>Proximal Outcomes:</strong> Have students acquired new knowledge, perceptions, attitudes, and/or skills?</td>
<td>[How I will get feedback]</td>
</tr>
<tr>
<td></td>
<td>• Did students increase knowledge? (e.g., vocabulary)</td>
<td></td>
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<td></td>
<td>• Did students change perceptions? (e.g., increased self efficacy for interacting with social service staff)</td>
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<td></td>
<td>• Did students develop new skills? (e.g., fill out family health history form)</td>
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<td></td>
<td><strong>Distal Outcomes:</strong> When, where, and under what circumstances have students applied new knowledge and new skills?</td>
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<tr>
<td></td>
<td>• What actions have students taken outside the class?</td>
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<td></td>
<td>• Have students taught or helped others?</td>
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<td></td>
<td>• What benefits have students reported?</td>
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</tbody>
</table>
Sample Evaluation Plan

Unit Focus/Theme:
Health Screenings

Goal: Build skills needed for understanding, participating in, and taking follow-up action on, health screening tests

Objectives:
- Learners will be able to understand concepts such as numerical ranges and statements of probability as they pertain to health risks.
- Learners will be able to formulate questions about screening tests to ask a doctor.
- Learners will be able to design action plans for different possible screening test findings.
- Learners will be able to use a decision matrix tool for making decisions about obtaining screening.

Sequence of lessons
1. Needs assessment: Identify barriers students face to understanding health risks and participating in screening tests.
2. Vocabulary building: Review names of screening tests, the parts of the body to which they pertain, and the diseases for which the tests screen.
3. Web research: Look up on-line information on tests discussed in class and present findings in class.
5. Review and practice interpreting health risk statements that students locate in the news/magazines/newspapers. [Use one of Study Circle+ lessons on probability.]
6. Create skits that help students practice questions for a health professional about the need for, and results of, screening tests.
7. Assess student interests and make sample action plans – e.g., for better diet, exercise.
8. Use the Study Circle+ sample lesson on decision-making.

Level of Evaluation | Evaluation Questions | Evaluation Measures
--- | --- | ---
Process Evaluation | Do the lessons address student needs? Are students engaged in lessons? Is there sufficient time for students to practice and build skills? | 1. Observation: Match unit goal with findings from needs assessment; ask students what they see as their needs.
2. Class activity: Ask students to provide feedback on the unit lessons.
## Sample Evaluation Plan (p. 2)

| Outcome Evaluation | **Proximal:**  
| Did the students increase their knowledge?  
| Did the students change their perceptions?  
| Did the students increase their skills?  
| **Distal:**  
| Have students applied new skills?  
| | 1. Class activity: Ask students to match screening test name with associated body part/system and diseases for which test screens.  
| | 2. Math test: Ask students to convert expressions of risk into percents, decimals, and ratios.  
| | 3. Observation: Ask students to role-play a patient who needs to ask the doctor about the purpose and possible results of a screening test.  
| | 4. Action planning: Ask students to outline pros and cons of participating in a particular kind of screening and potential actions that correspond to different test outcomes.  
| | 1. Ask students to keep a journal and describe the actions they have taken for themselves or for others.  
| | 2. Ask students to write a story.  
| | 3. Ask class to tally action taken by members of the class. |
Skills for Disease Prevention and Screening

Session Four Evaluation Form

Please complete the following evaluation and turn it in before you leave today.

1. What was the most valuable insight, practical idea, or specific information that you gained from today’s session?

2. How would you improve this session?
SESSION FIVE:
Developing Strategies for Success
Skills for Disease Prevention and Screening

SESSION FIVE: Developing Strategies for Success

HEALTH LITERACY STUDY CIRCLES
A Facilitator’s Guide

HALL/NCSALL 2007

Rima Rudd, Sc. D.
Lisa Soricone, Ed. D.
Maricel Santos, Ed. D.
Overview: Session Five

About this Session
This closing session of the Study Circle+ Guide on Disease Prevention and Screening provides an opportunity for participants to review their health literacy units and evaluation plans. In addition, as is noted below, this last session has an option for an expansion – a two-hour continuation after lunch, to meet and talk with a public health practitioner about prevention and screening. At the end of Session Five, you will encourage participants to stay in touch and continue the work they have started in this study circle.

Introductory Activities
The introductory activities are designed to help participants understand the structure and content of the session. It is especially important at this time to address any remaining questions or comments from the prior sessions.

Discussion and Analysis Activities
The discussion and analysis activities enable participants to share their health literacy units and evaluation plans. Participants offer and receive a peer review of their health literacy units and evaluation plans during this first activity. Participants then analyze the barriers and supports to the integration of health literacy skills related to disease prevention and screening into their programs.

Planning Activities
These brief activities focus on how participants can keep in touch with each other beyond the study circle.

Closure
The closure activities are critically important for several reasons. These activities give participants time to reflect on this experience as a whole,
and to recognize what they have achieved and what the experience has meant to them. You will lead the following closing activities:

- Ask participants to review the Study Circle objectives.
- Conduct an evaluation of the study circle experience using an exercise called Head, Heart, Hands & Feet.

(Optional) Expanded Session

The optional afternoon session, as noted above, is three hours long and includes a one-hour break for lunch and two hours of activities.
The Group Discussion Methods

The Discussion Methods used in Session Five are designed to let participants share their teaching plans with each other, and to stimulate participants’ thinking about the context in which they will be implementing health literacy skill development.

The discussion methods for this session include:

- **Partnerships for Peer Review:** Participants work in pairs so that each member can offer a peer review in a comfortable and relatively private discussion.

- **“Corners” discussion:** Participants form groups by moving to a corner of the room that represents a specific focus or perspective. Participants have a discussion with others in their corner and then come back together as a group to share ideas from the different perspectives. This format is useful when the activity requires participants to consider multiple viewpoints on a topic or to problem-solve from multiple perspectives.

- **Brainstorm:** Participants generate solutions and ideas.

- **Walk-about:** Participants post their ideas and circulate to review the ideas of other groups. The group is then brought together to analyze the range of ideas.

- **Head, Heart, Hands & Feet:** This exercise uses a stick figure of a person as a framework for responding to a set of evaluation questions related to insights, skills, “take home” lessons, and likes and dislikes. Participants first respond to the questions on Post-It notes. Then they place their Post-It notes on specific parts of the stick figure to indicate insights gained (head), skills developed (hands), what they liked (heart), what they would like to discard (feet), and useful ideas they will take with them from the study circle (basket). This exercise is designed to encourage participants to talk about the range of positive and negative elements of their Study Circle+ experience.
Overview: Session Five

Objectives
During Session Five, participants will:
- Share and critique unit and evaluation plans
- Identify supports and barriers to the integration of health literacy skill development into instruction
- Develop strategies for staying in touch and supporting one another’s work in health literacy

Time
- 3 hours

Session Five Agenda

Introductory Activities (10 minutes)
- Welcome
- Review Objectives and Agenda

Discussion & Analysis Activities (2 hours)
- Share Plans and Strategies
- ~ Take a 10-Minute Break ~
- Identify Barriers and Supports
- Develop a Strategy for Action

Planning Activities (10 minutes)
- Keep In Touch

Closure Activities (40 minutes)
- Summary
- Final Evaluation

Optional Expanded Session (3 hours including lunch)
Materials and Preparation

- Newsprints (flip charts) and markers
- Overhead projector
- Dot stickers (4 per participant)
- Post-It notes (10 per participant)

Newsprints (flip charts) or overhead transparencies (2)

The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In the session notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints are included in the session booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Head, Heart, Hands, &amp; Feet Diagram</td>
<td>• Identify Barriers and Supports</td>
</tr>
</tbody>
</table>

Handouts (6)

Make copies of the following handouts before the session begins. The handouts for each session are located after the session booklet.

1. Session Five Objectives and Agenda
2. Kurt Lewin and the Force Field Analysis
3. Skills for Disease Prevention and Screening – Goals and Objectives
4. Study Circle+ Discussion Methods
5. Head, Heart, Hands, & Feet

From Session One:
6. List of Study Circle Participants

Optional (from Session Four): Copies of health literacy lessons written by participants (one complete packet for each participant).
Session Five: Developing Strategies for Success
INTRODUCTORY ACTIVITIES (10 minutes total)

Welcome, Session Objectives, and Agenda

(10 minutes)
Discussion Methods: Presentation by facilitator

Welcome the participants back and offer a brief review of Session Four

Remind participants that they shared their experiences creating and teaching new lessons during the last session. They continued the discussion with a focus on developing health literacy units and ways to measure success. Between Sessions Four and Five, participants were asked to outline their own health literacy units and draft an evaluation plan.

Provide a brief overview of Session Five

During this final session, participants will review their health literacy units and evaluation plans with each other. They will analyze the barriers and supports to the integration of health literacy skill development into their programs. Participants are urged to stay in touch and continue the work they have started in this study circle.

Distribute the Session Five Objectives and Agenda

- Review the objectives and agenda and briefly describe the session activities.
- Ask if anyone has additional comments or questions.
DISCUSSION & ANALYSIS ACTIVITIES
(2 HOURS total including a break)

Share Plans and Strategies (Peer Review)
(50 minutes)
**Discussion Methods:** Full group discussion and partnerships for peer review

*Ask participants to discuss the challenges they faced as they drafted their unit and evaluation plans (15 minutes)*

- As a large group, ask participants to discuss the challenges they faced as they completed this assignment. Encourage participants to take notes on this discussion and write down any ideas that are particularly helpful for their own teaching situation.
- Use the following two questions to guide this discussion:
  1. *What challenges did you face with this assignment?* (For example: My class is structured for open enrollment and it is hard for me to imagine how I might carry out a unit when new students drop in all the time.)
  2. *Did anyone else face this same issue?*

*Introduce the Partnerships for Peer Review Process (5 minutes)*

- Explain that participants will now have a chance to see how others developed a unit and share thoughts, questions, and suggestions.
- Propose the following guidelines for giving feedback:
  1. Ask questions for clarity before you offer suggestions for change.
  2. Offer ideas and suggestions but not criticism.
  3. Share what has worked for you in similar situations, as appropriate.
  4. Tell the author what you like about the unit and evaluation plan.
- Ask participants if they would like to add anything else to the list.

*Ask participants to work in pairs (30 minutes)*

- Ask participants to pair up to discuss their health literacy units and evaluation plans.
- Ask participants to take about 10 minutes to read their partner’s unit and then devote 10 minutes to discussing each plan.
Suggest the following questions for consideration:
1. What are the strengths of the unit and evaluation plan?
2. Is there anything that needs clarification in the unit and evaluation plan?
3. What other skills might be included as part of this unit?
4. What additional activities can you suggest for teaching the skills included in this unit?
5. What other ways of evaluating the effectiveness of this unit can you suggest?

Tell participants that after the break, they will focus on identifying supports and barriers related to their health literacy work.

**TAKE A 10-MINUTE BREAK**

**Identify Barriers and Supports**

(30 minutes)

**Discussion Methods:** Brief background reading, “Corners” discussion

**Handout:** Kurt Lewin and the Force Field Analysis

**Materials:** Newsprint

**Introduce the Force Field Analysis** *(5-8 minutes)*

Hand out the brief description of Kurt Lewin and the Force Field Analysis and ask people to read for background.

Tell participants that the next activity will be used to help them identify some of the barriers they may face as they try to integrate and sustain a focus on health literacy skill development in ABE/ESOL programs. It also provides an opportunity for groups to consider how to remove existing barriers.

**Establish Groups for “Corners” Discussion** *(5 minutes)*

Assign participants to one of four levels of analysis – Individual, Classroom, Program, and Community – and ask each group to generate a list of those factors specific to that level that might either support or hinder the integration of health literacy skill development into instruction.
1. **Individual**: How do your own teaching limitations or strengths hinder or support the integration of health literacy into instruction?

2. **Classroom**: How does the classroom format hinder or support the integration of health literacy into instruction?

3. **Program**: How does your program or center hinder or support the integration of health literacy into instruction?

4. **Community**: How do community factors hinder or support the integration of health literacy into instruction?

**Participants work in their “Corners” (20 minutes)**

Give each group a blank page of newsprint and ask each group to note the assigned level (individual, classroom, program, community) on the newsprint.

- Ask participants to focus on their assigned level and generate as many supports and barriers as they can. Ask for two volunteers in each group: one to facilitate and another to record. While the four groups are discussing barriers and supports, circulate around the room so that you can observe the activity.

- Provide a 5-minute warning so that the groups can prepare their newsprints. Ask the groups to post their newsprint on the wall once they are finished.

**Identify Barriers and Supports**

**Level of Focus**: Individual, Classroom, Program, or Community

| Barriers | Supports |
Develop a Strategy for Action

(30 minutes)
**Discussion Methods:** Walk about for highlighting and review, large group discussion
**Materials:** Dot stickers

**Introduce the activity (5 minutes)**
Explain that the next activity focuses on a review and analysis of ideas. Participants will highlight those barriers that are of immediate concern and those supports that are essential for the integration of health literacy skills related to disease prevention and screening into instruction.

- Give each participant four dot stickers.
- Ask the groups to walk about the room and read the lists of barriers and supports generated by the other groups.
- After they have reviewed all of the lists, ask them to place dots next to TWO BARRIERS that they consider to be of immediate concern and TWO SUPPORTS that they feel are essential to successful integration.
- Participants can also add new barriers and supports to the list.
**Walk-about (10 minutes)**
Remind the participants to read the notes on all of the newsprints before deciding what to highlight. As the walk-about is wrapping up and the participants are settling back into their seats, the facilitator (or a volunteer) should do a quick tally of the stickers to determine the barriers and supports that participants identified as being the most important.

**Facilitate a large-group discussion: Analysis of priorities (15 minutes)**
- Ask volunteers to comment on the barriers and supports that received the most stickers. You (the facilitator) may wish to note whether the highlighted items were concentrated in one particular level, such as the classroom level, or whether they were distributed across the levels.
- Tell the participants that the force field analysis now focuses on removing barriers and developing supports.
- You might want to pose the following questions to start the discussion:
  1. *Look at the barriers we have identified as most important.*
     - What could you do to address these barriers as an individual? As a work group?
  2. *Look at the supports we have identified as most important.*
     - What could you do to strengthen these supports as an individual? As a work group?
PLANNING ACTIVITIES (10 minutes total)

Keep in Touch
(10 minutes)
**Discussion Methods:** Full group discussion
**Handouts:** List of Participants

*Discuss opportunities for participants to keep in touch and continue their health literacy work*
Ask if everyone has the List of Participants. If not, provide copies.

- Note that the Health Literacy Study Circle was designed to foster a community of practitioners who are interested in integrating health literacy skills in the ABE/ESOL field. Read the following list and ask the participants to consider working together to:

  3. Exchange unit and lesson ideas.
  4. Meet at adult education conferences to exchange lesson ideas.
  5. Develop a presentation at an adult education conference.
  6. Determine how to offer workshops to other teachers in their programs.

- Ask participants what arrangements they would like to make at this point. For example, they might:
  7. Set up a list-serve so that participants can email one another about their ideas and questions.
  8. Set up a regular monthly email exchange for unit and lesson ideas.
  9. Post lesson ideas on a list-serve.

- IF participants wish to take any of these actions, one participant would have to volunteer to setup the list-serv.
CLOSURE ACTIVITIES (30 minutes total)
This closing activity offers a brief overview of the entire Study Circle and introduces a new evaluation exercise.

Study Circle Summary
(10 minutes)
Discussion Methods: Full group discussion
Handouts: Skills for Disease Prevention and Screening – Goals and Objectives
Study Circle Discussion Methods

Distribute two handouts
- Distribute the handout titled Skills for Disease Prevention and Screening – Goals and Objectives (originally included in the materials in preparation for Session One).
- Distribute the handout titled Study Circle Discussion Methods. Point out that participants may want to refer to it for the next activity and keep it as a reference for their own teaching.

Pose the following questions to review accomplishments and activities
What have you learned about health literacy skills?
What can you do now to continue this work?

Final Evaluation
(20 minutes)
Discussion Methods: Head, Heart, Hands, & Feet exercise
Handouts: Head, Heart, Hands, & Feet

Conduct the Head, Heart, Hands, & Feet Activity (15 minutes)
Explain that this evaluation activity gives participants an opportunity to reflect on their Study Circle experience. This activity also serves as a summary evaluation of the study circle for you, the facilitator.
- Post the Head, Heart, Hands, & Feet newsprint (see the handout).
- Distribute the handout titled Head, Heart, Hands & Feet and read each question to the group.
- Give each participant 10 Post-It notes and ask them to write at least one comment for each part of the diagram.
- Ask the participants to post their notes on the newsprint diagram.
**Review the Post-It notes (5 minutes)**

- When all notes are posted, ask a volunteer to read the notes for each part to the whole group.
- Suggest that participants may want to use this kind of activity in their classes when appropriate.

**Closing Notes**

- Thank group members for their participation, hard work, and interest in health literacy education.
- Encourage the participants to stay in touch with each other and continue sharing their health literacy ideas and experiences.

**(Optional) Expanded Session Five**

Note that this expanded session includes a one-hour break for lunch and two hours of activities in the afternoon.

Please continue to the next page if you and the participants have decided in advance to expand this session to a full day (for example, 9:00 - 3:00).
EXPANDED SESSION (2 hours total)

Overview: Session Objectives
(5 minutes)

Welcome the participants back from lunch and begin the afternoon session with a brief overview of the next two hours. Explain that the session will consist of a meeting with a public health official (or officials). During the meeting, the official will provide a brief discussion of the following issues:

- Public health responsibilities for prevention and screening
- Prevention and screening issues of most concern to the community within which the teachers work
- The prevention and screening resources / opportunities available in the community

Explain that, following the presentation, you wish to provide an opportunity for an open dialogue between the public health and adult education sectors. Participants will thus have an opportunity to ask questions of the official, and the official will likely have some questions to ask of the participants.

Introductions
(20 minutes)

Ask participants to introduce themselves and include the following information:

- Name
- Program/agency
- Type of classes they teach
- Special characteristics of their students (e.g., Somalian refugees, mothers receiving welfare, older citizens, teen parents, etc.)
- Some common health concerns expressed by students related to disease prevention and screening
Presentation by Guest Speaker
(15 to 20 minutes)

Introduce the official(s) to the participants.
- Monitor the time so that the speaker does not go much over the allotted time.

Two-Way Q & A
(30 to 45 minutes)

Open the two-way question and answer discussion.
- Begin the discussion by inviting participants to direct questions to their visitors. Ask speakers to address some of the items from the list of concerns, if these are not already covered during the course of the Q & A.
- Be sure to clarify any jargon or acronyms (e.g., ABE, ESOL) that might come up in this discussion so that your visitors fully understand terms used.
- Facilitate this discussion to ensure that all participants have an opportunity to respond if they wish. (Make sure no one dominates the conversation.)
- Allow some time for the speakers to pose questions to the group.

Discussion of Future Collaborations
(30 minutes)

Ask participants and the visitors to share some ideas for possible future collaborations or ways of making use of connections developed in this session.

Some examples might include:

1. Pilot testing health materials with ABE/ESOL students at participants’ programs
2. Use programs as a point of distribution for prevention and screening announcements
3. Co-sponsored community events on prevention and screening
Closing Comments
(5 minutes)

*Bring the meeting to a close.*

- Ask if anyone has any final questions or comments.
- Thank the speakers for their time in joining this meeting.
  Encourage all attending to pursue opportunities for future collaboration or exchange.
The National Center for the Study of Adult Learning and Literacy (NCSALL) is a collaborative effort between the Harvard Graduate School of Education and World Education. The University of Tennessee, Portland State University, and Rutgers University are NCSALL’s partners. NCSALL is funded by the Educational Research and Development Centers program, Award Number R309B60002, as administered by the Institute of Education Sciences (formerly Office of Educational Research and Improvement), U.S. Department of Education. The contents of this publication do not necessarily represent the positions or policies of the Institute of Education Sciences, or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
Skills for Disease Prevention and Screening

Session Five Materials

Newsprints (flip charts) or Overhead Transparencies (2)
The following pages should be prepared on newsprint (flip charts) or copied on overhead transparencies. In the session notes, we typically refer to these materials as newsprints, but feel free to use overhead transparencies instead. Examples of most newsprints are included in the session booklet.

<table>
<thead>
<tr>
<th>To be prepared ahead</th>
<th>To be completed during the session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, Heart, Hands, &amp; Feet Diagram</td>
<td>Identify Barriers and Supports</td>
</tr>
</tbody>
</table>

Handouts (6)
Make copies of the following handouts before the session begins.
1. Session Five Objectives and Agenda
2. Kurt Lewin and the Force Field Analysis
3. Skills for Disease Prevention and Screening – Goals and Objectives
4. Study Circle+ Discussion Methods
5. Head, Heart, Hands & Feet

From Session One:
6. List of Study Circle+ Participants

Optional:
7. Copies of health literacy lessons written by participants (one complete packet for each participant).
Head, Heart, Hands, & Feet

~ Draw this diagram on newsprint ~
Skills for Disease Prevention and Screening
Session Five

Objectives
During Session Five, participants will:

- Share and critique unit and evaluation plans
- Identify supports and barriers to the integration of health literacy skill development into instruction
- Develop strategies for staying in touch and supporting one another’s work in health literacy

Session Five Agenda

Introductory Activities (10 minutes)
- Welcome
- Review Objectives and Agenda

Discussion & Analysis Activities (120 minutes)
- Share Plans and Strategies
- ~Take a 10-Minute Break ~
- Identify Barriers and Supports
- Develop a Strategy for Action

Planning Activities (10 minutes)
- Keep in Touch

Closure Activities (40 minutes)
- Summary
- Final Evaluation
Kurt Lewin and the Force Field Analysis

Sociologist Kurt Lewin is often called the “grandfather of behavioral sciences” for his research on and insights about how people make changes in their lives. He worked primarily with groups of people rather than with individuals, and examined what made change difficult or easy. His work set the foundation for peer counseling, group therapy, and focus groups.

Lewin suggested that when we consider helping people make change, we must first concentrate on what people are most comfortable with. He envisioned individuals functioning within a “force field” that is full of both negative and positive forces. Some of these forces are pressures for change and some of these forces support things just the way they are. Lewin recognized that most people are uncomfortable with change.

When we conduct a force-field analysis, we examine the forces that support change and the forces of stasis, or leaving things just as they are. Lewin, working within situations that considered change as positive, labeled the forces for change as positive and the forces for stasis as barriers to change, or negative.

Consider a smoker. Carla knows that smoking is harmful to her health (positive force, for change). Her children remind her of this all the time (positive force, for change). At the same time, she enjoys smoking (negative force, against change). Her friends at work all gather together for talk and a smoke during work breaks (negative force, against change).

Lewin suggests that if we just add more positive forces, we create tension for people.

For example: Carla’s eldest is taking a health course and brings home pictures of lungs of people who smoke. Carla immediately wants a smoke to calm her nerves!

However, if we remove the negative forces, change becomes easier.

For example: Carla’s work place offers an innovative smoking cessation program at no cost. Friendship groups are encouraged to attend together.

Lewin suggests that we can support change best if we focus on removing barriers as a first step.

Note: This theory is discussed in NCSALL Report #12, Persistence Among Adult Basic Education Students in Pre-GED Classes by J. Comings, A. Parrella and L. Soricone.
Skills for Disease Prevention and Screening: Goals and Objectives

Study Circle\(^+\) Goals:
The overall goal of the Health Literacy Study Circle\(^+\) is to build the capacity of adult education instructors to incorporate health literacy skills into their curriculum and instruction.

The goal for the Disease Prevention and Screening Study Circle\(^+\) is to prepare participants to help their students develop basic skills needed to engage in disease prevention and screening activities. These skills include:

- Understanding and acting on public health recommendations
- Taking disease prevention actions
- Making informed decisions about participating in screening tests
- Asking questions to clarify screening test results
- Planning for and take appropriate follow-up actions

Study Circle\(^+\) Objectives:
Participants in the Disease Prevention and Screening Study Circle\(^+\) will:

1. Develop a shared definition of “health literacy”.
2. Identify the activities people engage in related to disease prevention and screening.
3. Identify literacy related barriers and issues faced by people as they engage in disease prevention and screening activities.
4. Identify health literacy skills needed to accomplish the many tasks involved in disease prevention and screening activities.
5. Teach, modify, and critique sample lessons designed to build students’ literacy and numeracy skills related to disease prevention and screening.
6. Create and pilot a lesson based on students’ needs.
7. Outline a sequence of lessons for a health literacy unit and an evaluation plan.
8. Develop strategies for incorporating health literacy skills into classroom activities.
# Study Circle+ Group Discussion Methods

This handout summarizes the different discussion methods used during this Health Literacy Study Circle+. You may want to keep this list as a reference and use or adapt any methods that are appropriate for your own teaching.

<table>
<thead>
<tr>
<th>Session One Discussion Methods</th>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentation</strong></td>
<td>Introduction and Overview</td>
</tr>
<tr>
<td><strong>Pair Discussion with Brief Report</strong></td>
<td>Review of readings and health literacy</td>
</tr>
<tr>
<td><strong>An Expanding Discussion</strong></td>
<td>Our own experiences and observations</td>
</tr>
<tr>
<td><strong>Trigger and Facilitated Large Group Discussion</strong></td>
<td>DVD</td>
</tr>
<tr>
<td><strong>Review, Analysis, and Group Discussion</strong></td>
<td>Prepare to conduct the In-Class Needs Assessment and to engage in the on-line risk assessment</td>
</tr>
<tr>
<td><strong>The Dance and the Balcony</strong></td>
<td>Reflect on the study circle discussion methods and structured activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session Two Discussion Methods</th>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large Group Discussion</strong></td>
<td>Reviewing results of in-class activity; listing of tasks; reviewing group work</td>
</tr>
<tr>
<td><strong>Small Group Work</strong></td>
<td>Identifying skills related to disease prevention and screening tasks</td>
</tr>
<tr>
<td><strong>Walk About</strong></td>
<td>Review of group work</td>
</tr>
<tr>
<td><strong>Paired Discussion</strong></td>
<td>Sample Lesson Review</td>
</tr>
</tbody>
</table>
### Session Three Discussion Methods

<table>
<thead>
<tr>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pair Work</strong></td>
</tr>
<tr>
<td>Review and discuss the sample lessons taught; review lesson template; plan to teach lessons you have developed</td>
</tr>
<tr>
<td><strong>Walk-About</strong></td>
</tr>
<tr>
<td>Consider and then share ideas for health literacy units</td>
</tr>
<tr>
<td><strong>Private Reflection</strong></td>
</tr>
<tr>
<td>Reflect on skills and write down unit ideas; reflect on lesson ideas</td>
</tr>
<tr>
<td><strong>Small Group Work</strong></td>
</tr>
<tr>
<td>Develop unit ideas</td>
</tr>
</tbody>
</table>

### Session Four Discussion Methods

<table>
<thead>
<tr>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facilitated large and small group work</strong></td>
</tr>
<tr>
<td>Share teaching experiences, share ideas for health literacy units and measurement options</td>
</tr>
<tr>
<td><strong>Brainstorming</strong></td>
</tr>
<tr>
<td>Consider ways to measure success</td>
</tr>
<tr>
<td><strong>Dance and the Balcony</strong></td>
</tr>
<tr>
<td>Review discussion methods used during this session</td>
</tr>
</tbody>
</table>

### Session Five Discussion Methods

<table>
<thead>
<tr>
<th>Activity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Group Discussion</strong></td>
</tr>
<tr>
<td>Discuss challenges with the assignment</td>
</tr>
<tr>
<td><strong>Partnership for Peer Review</strong></td>
</tr>
<tr>
<td>Discuss unit and evaluation plans</td>
</tr>
<tr>
<td><strong>Force Field Analysis And “Corners” Discussion</strong></td>
</tr>
<tr>
<td>Identify barriers and supports that affect health literacy skill development in ABE/ESOL programs</td>
</tr>
<tr>
<td><strong>Walk-About</strong></td>
</tr>
<tr>
<td>Review results of small group work</td>
</tr>
<tr>
<td><strong>Head, Heart, Hands &amp; Feet</strong></td>
</tr>
<tr>
<td>Study Circle evaluation and feedback</td>
</tr>
</tbody>
</table>
Head, Heart, Hands, & Feet

**Head**
What information did you learn or insights did you gain during this Study Circle+ (e.g., new knowledge, ideas, concepts)?

**Heart**
What about the Study Circle+ made you feel good? What did you enjoy?

**Hands**
What skills did you gain?

**Feet**
What activities or materials would you like to “kick out” (leave out) or change?
Note that suggestions here may be related to discussion methods and/or content (e.g., readings, hand-outs, topics).

**Basket**
What is the most useful idea or concept that you will take away from this Study Circle+?