

Acute Respiratory Infection (ARI)

Lesson Plan

Module 5 of 6

<p><i>Repeat Picture 2.2B</i></p> <p><i>Health worker is showing the mother the calendar to remind her when to give her child pills.</i></p>	<p><i>REPEAT Picture 4.3 A</i></p> <p><i>Mother washing hands to prevent cough and when caring for a child.</i></p>
<p><i>Repeat Picture 3.2A</i></p> <p><i>Mother cleaning the child's nose with a cloth.</i></p>	<p><i>Repeat Picture 5.4B</i></p> <p><i>A mother cooking with a fire and smoke leaving out the vent holes.</i></p>

Insert FH and USAID and other logos here.

Acute Respiratory Infections

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Health managers: please review all text in GREEN and make changes as necessary before translating or giving to the illustrator. Use the same local names and images for the main characters ([**Mother A**] and [**Mother B**]) as used in Module 1, 2 and 3. Once changes have been made, delete all text in green (Notes for the Health Manager). You may use the illustrations I have inserted for ASPIRE and the other activities, or substitute with your own images. Please ask the illustrator to complete any of the illustrations that are missing, or contain the text, "do not copy." *Yellow font indicates the instructions for the illustrator. After the illustrations are complete, remove all yellow descriptions and insert the images.* Flipchart pages are formatted for a Top-of-page BOUND FLIPCHART. This means that the details come before each picture page. This allows the facilitator to read the back of the chart for the details while the audience views the corresponding picture. If you are not using a bound flipchart, pages may need to be rearranged. Make the images as large as possible and use as much of the space on the page as possible. Captions should be small (12-13 size font), allowing as much room as possible for the images. Images should be pre-tested in the community before being finalized. After pre-testing and adapting images based on test results please send developed flipcharts to mhanold@fh.org, cwetzel@fh.org, and jhettinger@fh.org for approval before printing. If flip chart files are too big to send via FH email, post them on this online website: (<http://www.yousendit.com/>) or send it on a CD via DHL to the FH DC office.

Lessons, stories, and activities in the *Acute Respiratory Infection Lesson Plan* complement the information provided in *Acute Respiratory Infection Leader Mother Flipchart*.

Understanding the Lesson Plan



Each lesson begins with **objectives**. These are behavior, knowledge, and belief objectives. Reinforce each of these objectives during the lesson. There are four types of objectives. Each objective is described below.

Our main goal is for caregivers to **practice healthy behaviors**. For this reason, most objectives are behavioral objectives written as action statements. These are the practices that we expect the caregivers to follow based on the key messages in the flipchart.

A few objectives are **knowledge** objectives. We want mothers to be able to name the danger signs as well as how germs transmit respiratory infection. The caregivers must memorize these things during the lesson, using the pictures as a reminder.

Most lessons contain a **belief** objective. We know that beliefs and attitudes affect our practices. Many times, a person's inaccurate belief or worldview hinders them from making a healthy behavior change. In this module we are reinforcing the belief that each child's life is valuable and of great worth. If caregivers do not believe that their children are valuable, they will be less likely to provide special care to sick children.

Many lessons contain **behavioral determinant objectives**. Behavioral determinants are reasons why people practice (or don't practice) a particular behavior. There are eight possible behavioral determinants as identified in the Barrier Analysis¹ surveys done in each region. The surveys identify the most important determinants for each behavior. By reinforcing the determinants that have helped the doers (caregivers in the community already practicing the new behavior), we are able to encourage the non-doers (caregivers who have not yet tried or been able to maintain the new practices). We also help non-doers (caregivers who are not practicing new behaviors) to overcome obstacles that have prevented them from trying or maintaining the practice in the past.

Under the objectives, the lesson **materials** are listed. The facilitator should bring all of these materials to the lesson. Materials marked with an asterisk (*) are required for the lesson's Activity. The Activity Leader will organize these materials. See below for more information.

A small picture identifies each exercise (section of the lesson plan). Pictures remind non-literate Mother Leaders of the order of the activities. For example, when it is time to lead the game the lesson plan shows a picture of people laughing (see below). This is a cue to non-literate mothers to begin the lesson with a game. Review the descriptions below for more information.



The first activity in each lesson is a **game**. Games help the participants to laugh relax and prepare for the new teaching. Some games review key messages that the participants have already learned. Some games promote the belief objectives.



Following the game is the **attendance and troubleshooting** section. All facilitators will take attendance. The troubleshooting questions only apply to facilitators training others (promoters).² The promoter follows up with any difficulties that the Leader Mothers had teaching the previous lessons. Refer to the role play in Module 1, Lesson 1 for more information.

¹ See <http://barrieranalysis.fhi.net> for more information.

² In the MYAP program, paid staff are called promoters. The role of the promoters is to train Leader Mothers to facilitate lessons with their neighbors. A few exercises, noted above, are only for promoters and do not need to be used by the Leader Mothers when sharing with their neighbors.

Next, the facilitator opens the **flipchart to the first picture** of the lesson. He or she reads the story printed on the back of the flipchart, adding more details and descriptions as desired.



Discussion questions follow each **story**. These questions help the facilitator to find out the caregivers current practices (related to the lesson). This section is marked by the A (ask) in the ASPIRE method.³ This section is for discussion not for teaching. Be sure to let everyone voice his or her opinion.



The second, third and fourth picture in each lesson are for teaching the key objectives of the lesson. After turning to the second flipchart page [the S (Show) in ASPIRE], ask “What do you see in this picture?” Let the participants respond and describe what they think the flipchart pictures are telling them.

Next, explain the key messages written on the back of the flipchart. The key messages also appear as captions on the flipchart pages. Be sure to explain each picture using the additional bullets printed on the back of the flipchart (or in the lesson plan). The lesson plan contains **additional information** for the trainer. The additional information does not need to be discussed during the lesson unless it directly relates to questions by the participants.



After the fourth picture of the lesson, is an **activity**. Activities are “hands on” exercises to help the participants understand and apply what they have learned. Most of these activities require specific materials and preparations. The needed materials (those with an asterisk in the materials section) are the responsibility of the Activity Leader (see below). If the activity leader is sick, the facilitator is responsible to bring these materials.

The **Activity Leader** meets with the facilitator ten minutes before **each lesson** to discuss the needed materials for the next lesson’s activity. The Activity Leader is responsible to talk with the others (Leader Mothers or neighbors) during the “Attendance and Troubleshooting” to organize the materials needed for the next meeting, asking mothers to volunteer to bring the items. The facilitator will lead the activity, but the Activity Leader will support her by organizing the volunteers and aiding the facilitator as needed during the activity. Elect a new Activity Leader during the fifth lesson.

After the activity, the facilitator completes the **P and I of the ASPIRE method**. The ASPIRE method is used to reinforce participatory methods of teaching. It is explained in detail in Module 1, Lesson 2.

³ For more information about the ASPIRE method review Module 1, Lesson 2.



In the **probe** section, the facilitator asks about obstacles that prevent the caregivers from trying the new practices. They discuss these obstacles and then move to the next section.



The facilitator **informs** the caregivers of ways to overcome their concerns. The facilitator gives more information or a different perspective to help the caregivers understand how to move forward.

Practice and Coaching

Next is **Practice and Coaching**. This section is required for the training of Leader Mothers. We want to make sure that they understand the material and can present it to others. In this activity, the promoter will observe Mother Leaders as they practice teaching in pairs. The Promoter will coach those who are having difficulty.

Finally the facilitator completes the **R and E of the ASPIRE method**.



The facilitator **requests** a commitment from the Leader Mother (or caregivers) to begin practicing the new behaviors they have discussed. If they agree, the caregivers should make a verbal commitment. It is up to the caregivers to make a choice. Do not force them to make a commitment if they are not ready.



The last section is where the facilitator **examines** (or requests an update on) the Leader Mother's (or caregivers') commitments from the previous lesson. Were they able to keep their commitments? Have they been practicing behaviors they learned in the last lesson? The facilitator offers support and encouragement to help them maintain their commitments.

All lessons follow the pattern described above. Lessons can be adapted as needed to fit the needs of your care group. Lessons should not exceed two hours in length. However, some lessons may take longer than others. The suggested time for each section is listed below.

Section name	Time needed for this section
Game	10 minutes
Attendance and Troubleshooting	15 minutes
Story and Ask (picture 1)	10 minutes
Show and Explain (picture 2)	5 minutes
Show and Explain (picture 3)	5 minutes
Show and Explain (picture 4)	5 minutes
Activity	15 minutes
Probe	10 minutes
Inform	5 minutes
Practice and Coaching	20 minutes
Request	10 minutes
Examine	10 minutes
	2 hours

Acknowledgements

Many thanks to the illustrators including (your local illustrator's name), Octavio Gonzales and Petra Röhr-Rouendaal. Carolyn D. Wetzel and Julie A. Davis are greatly appreciated for reviewing and editing the materials. Games used in the lessons are available through the HIV/AIDS Alliance. See below for full details.

- International HIV/AIDS Alliance. (2002). *100 Ways to Energize Groups: Games to Use in Workshops, Meetings and the Community*. Available at www.aidsalliance.org.
- Röhr-Rouendaal, Petra. (1997). *Where There is No Artist: Development Drawings and How to Use Them*. London, UK:Intermediate Technology Publications.

Suggested Citation: Hanold, Mitzi J. (2010) *Acute Respiratory Infection Leader Mother Flipchart*. Washington DC. Food for the Hungry (FH), made possible through support provided by the Office of Food for Peace, Bureau of Democracy, Conflict, and Humanitarian Assistanances, and the U.S. Agency for International Development under the terms [insert Award Number⁴]. The opinions expressed herein are those of the authors and do not necessarily reflect the view of the U.S. Agency for International Development.

⁴ Please adapt the MYAP Award No and add relevant logos as described in your country's USAID branding document (Award No DRC = FFP-A-00-08-00072; Award No ETH = FFP-A-00-08-00082-00; Award No Moz = FFP-A-00-08-00086). Delete this note and all other notes in green after you have added the appropriate logos and information.

Lesson 1: Respiratory Infections Defined, Effects and Danger Signs



- Caregivers will be able to identify a dripping nose, cough, and trouble breathing as respiratory infection (infections of the respiratory tract including the nose, throat, and lungs).
- Caregivers will give special care for a child with respiratory infection at home.⁵
- Caregivers will take their child to the health clinic immediately if one of the following danger signs is seen:
 - This child is breathing much faster than normal (fast breathing).⁶
 - The lower chest wall goes in when the child breathes in (chest in-drawing).
 - When the child inhales, there is a harsh noise (stridor).
 - Coughing for more than 30 days (confirm with MOH recommendations for number of days).
 - Fever
 - Or any of the childhood danger signs (covered in Module 3, Lesson 5): unable to suck, swallow or drink, child vomits every time he eats or drinks, child does not respond when touched or spoken to, and convulsions.⁷
- If a child appears to be breathing too fast, neighbor mothers will quickly visit the Leader Mother on the way to the clinic, to confirm fast breathing using the Breath Counter. If the Leader Mother is not available, neighbor mother will continue to the health clinic.⁸
- Caregivers will believe that severe respiratory infection (infection when danger signs are present) can result in death if left untreated in infants and children (increased perceived severity).⁹

Materials:

1. Attendance Registers
2. Acute Respiratory Infection Leader Mother Flipchart
3. Breath Counters and timers for each Leader Mother (DRC only)
4. Seven rocks and a watch or phone that shows minutes and seconds (Mozambique only).

⁵ Specific home care practices are discussed in Lesson 3.

⁶ Fast breathing is defined in more detail in Lesson 2.

⁷ Baseline: [DRC - 12%; MOZ – 25%] of mothers knew at least three signs of childhood illness.

⁸ This objective is for DRC only.

⁹ Perceived severity is a behavioral determinant in barrier analysis. For more information visit www.barrieranalysis.com. Health managers: If you have completed a Barrier Analysis survey on this behavior, adapt the objective and messages in this lesson to match your findings.

Lesson 1 Summary:

- Game: Cough, Sneeze, Sniff
- Attendance and Troubleshooting
- Share the story and ask about current practices: **Hardship** Has a Cough
- Show pictures and share key messages on flipchart pages 6-11 about Respiratory Infection Defined, Mild and Severe Respiratory Infections, and Danger Signs of Severe Respiratory Infections.
- Activity: Chest In-drawing and the Breath Counter
- Probe about possible barriers
- Inform about possible solutions to barriers
- Practice and Coaching in pairs
- Request a commitment
- Examine practices related to deworming.

	1. Game: Cough, Sneeze, Sniff – 10 minutes
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1. Ask the women to stand (or sit) in a circle. Each woman in the circle must have a chair or mat to sit on so that there are no empty seats or mats in the circle.
2. The facilitator stands in the middle of the circle (without a chair or mat).
3. The facilitator assigns each woman a sound. Woman 1 is a sneeze, woman 2 is a sniff, woman 3 is a cough, woman 4 is a sneeze, and woman 5 is a sniff, etc until you have assigned each woman one of the three sounds.
4. The facilitator makes a sound (a sniff, cough, or sneeze) and all of the women assigned that sound must move to a new seat.
5. For example, if the facilitator sneezes, all of the sneezes must get up and take an open seat. They cannot stay in the same seat. However, the facilitator in the middle will also try to take an open seat. One person will not have a seat – that person then becomes the new facilitator.
6. The new facilitator stands in the middle of the circle and makes a sound (a sneeze, sniff or cough) and again the people in that group must find a new seat that is open.
7. Repeat the game so that everyone has a chance to move, make noise, and laugh.

Now that we are energized, let's begin our lesson.

	2. Attendance and Troubleshooting – 15 minutes
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1. Promoter fills out attendance sheets for each Leader Mother and neighbor group (beneficiary group).
2. Promoter asks if any of the Leader Mothers had problems meeting with their neighbors.
3. The Promoter helps to solve the problems mentioned.
4. Promoter thanks all of the Leader Mothers for their hard work and encourages them to continue.
5. Promoter asks the group's Activity Leader¹⁰ to discuss the needed items for next week's activity and solicit volunteers.

Story: **Hardship** has a Cough (Picture 1.1) – 10 minutes

3. Story

- Read the story on page 4 of the flipchart.
- In the story, **Hardship** begins to cough and his nose fills with thick liquid. His chest looks different. His lower chest wall goes in when he inhales. Chest in-drawing is a sign of pneumonia.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

The rainy season comes and **Hardship** begins coughing. His nose is full of **thick yellow liquid**¹¹. After three days, **Mother B's husband** notices that **Hardship's** chest looks different. His lower chest sinks when he inhales. "Should we take **Hardship** to the clinic?" **Mother B's husband** asks. "Is this sickness serious?" **Mother B's husband** does not know.

4. Ask

- Read the questions on page 4 of the flipchart.
- Ask the first question to find out if women can identify the local name for respiratory infection.
- Ask the last two questions to find out their beliefs about the danger signs and severity of respiratory infection.
- We hope that participants respond in this way: **Mother B's husband** should take **Hardship** to the clinic. If a caretaker notices any unusual change in their child's body or behavior, it is best to take them to the clinic. However, this page is for discussion, not for teaching.
- **Encourage discussion. Don't correct "wrong answers."** Let everyone give an opinion. You will correct their inaccurate beliefs in the flipchart pages that follow.
- After the participants answer the last question, move to the next flipchart page by saying, "Let's compare your thoughts with the messages on the following pages."

¹⁰ The Activity Leader should arrive ten minutes prior to each care group meeting to get the description of the activity and the list of needed items from the promoter.

¹¹ Use a local word for mucus or snot (U.S. slang for mucus in the nose).

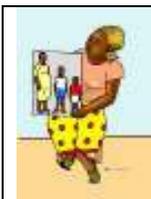


- ? What is the child's sickness?
- ? Should he take the child to the clinic? Why?
- ? What are the danger signs?

Respiratory Infections Defined (Picture 1.2) - 5 minutes

5. Show:

- Ask the caregivers to describe what they see in the pictures on page 7.



- ? What do you see in these pictures?

6. Explain:

- Share the key messages using flipcharts pages 6 and 7.
- Use the captions on the flipchart to remind you which images represent each point.

Copy the text below directly from the flipchart once it is translated. The text matches exactly the text in the flipchart.

- Respiratory infections are a sickness of the nose, throat, and chest.
 - In this picture, we see the respiratory organs inside **Hardship**'s body.
 - The arrows point to the nose, throat, and lungs.
 - The nose, throat and lungs help the body to breathe.
- This sickness fills the nose, throat, and lungs with thick liquid.
 - Within one or two days a child can become very sick.
 - In this picture, **Hardship** has a respiratory infection.
 - The thick liquid fills the passages in his nose, throat and lungs.
 - When there is sickness, the thick liquid may turn yellow or green.
- The thick liquid causes coughing and a dripping nose.
- **Hardship** has difficulty breathing because of the thick liquid.
 - To get rid of the thick liquid, **Hardship** coughs, and his nose drips.
 - Coughing pushes the liquid out of the lungs and throat.

Additional Information for the Trainer

Upper and Lower Respiratory Tract

- Upper respiratory infections (nose, pharynx, and larynx [organs at the top of the throat]) are frequent but not usually life-threatening.
- Lower respiratory infections (trachea (throat), lungs and bronchi (branches within the lungs) are responsible for severe illnesses such as influenza, pneumonia, tuberculosis, and bronchiolitis.

DHS Survey 2007 (DRC)

- Among children under five, 15% had symptoms of acute respiratory infection (ARI) during the two weeks preceding the survey. Twenty three percent (23%) of these infections were in children ages 6-11 months.

DHS Survey 2003 (Mozambique)

- Among children under five, 10% of them had cough and rapid breathing in the two weeks preceding the survey. The prevalence of cough with rapid breathing was highest in children 2 to 48 months).

Lungs

- Two sponge-like organs in the chest. Blood flowing through the lungs picks up oxygen from inhaled air and releases carbon dioxide, which is exhaled. Air enters and leaves the lungs through the bronchial tubes (branches in the lungs).

Mild and Severe Respiratory Infections (Picture 1.3) - 5 minutes

7. Show:

- Ask the caregivers to describe what they see in the pictures on page 9.

	? What do you see in these pictures?
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8. Explain:

- Share the key messages using flipcharts pages 8 and 9.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Some respiratory infections are mild. Children with mild infections can be cared for at home.
 - Mother A is breastfeeding Of Great Worth. She gives hot drinks [substitute with locally available nutritious drinks that can be given to children] and soft foods to help soothe the child's throat.
- Some respiratory infections are severe. If the child is not taken to the clinic immediately, the child will die.
 - This child has fever. That's a danger sign.
 - The mother does not take the child to the clinic.
 - She continues to work.
 - The child dies because he did not receive treatment.
- If you see a danger sign, the infection is severe. Go immediately to the clinic.
 - This mother knows fever is a danger sign.
 - She took the child to the clinic on the same day and received treatment.
 - The child got better and is healthy now.
- ? What danger signs have we learned in previous lessons?
 - Unable to suck, swallow or drink
 - Child vomits every time he eats or drinks
 - Child does not respond when touched or spoken to
 - Convulsions

Additional Information for the Trainer

Child Mortality

- Twenty percent of all deaths in children under age five are from respiratory infection (pneumonia, bronchiolitis and bronchitis). Most of these deaths (18% of the 20%) are from pneumonia.¹²
- Bronchiolitis and Bronchitis are infections of the small air passages (bronchi) within the lungs.
- Pneumonia is an infection of the alveoli (small air sacks at within the lungs). These sacks fill with fluid cutting off oxygen to the body.

Children at Risk

- Infants born too small (low birth weight), malnourished, those who are not breastfed, and children living in a small crowded spaces are more likely to have severe respiratory infection.¹³

Treatment

- Respiratory infection is caused by germs, either a virus or bacteria. Do not treat a virus infection with antibiotics. The treatment will not help or cure the illness.

¹² World Health Organization. *Acute Respiratory Infections in Children*. Available: http://www.who.int/fch/depts/cah/resp_infections/en/. Visited 03/08/2010.

¹³ (same reference as above)

- Medications like paracetamol may help to lessen the symptoms, but the body must fight virus infection on its own without medication.
- A full treatment of antibiotics will cure bacterial infections.

Asthma

- Some children and adults have a condition called asthma that causes constant breathing problems. Irritants like smoke, dust, mold, and certain types of flowers and plants cause asthma.
- Symptoms include shortness of breath (feeling you cannot inhale enough air), rapid pulse, wheezing, and coughing.
- Cleaning the house, putting animals outside, and removing plants and flowers from near the house may help to reduce the symptoms. Certain medications can reduce symptoms. There is no cure for asthma.

Danger Signs of Severe Respiratory Infection (Picture 1.4) – 5 minutes

9. Show:

- Ask the caregivers to describe what they see in the picture on page 11.

	<p>1. What do you see in these pictures?</p>
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10. Explain:

- Share the key messages using flipcharts pages 10 and 11.
- Use the captions on the flipchart to remind you which images represent each point.

<p>The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.</p> <ul style="list-style-type: none"> • When you see signs of severe infection, take the child immediately to the clinic. <ul style="list-style-type: none"> ○ Take the child on the same day that you see the sign. • When the child breathes in, there is a harsh noise. <ul style="list-style-type: none"> ○ Listen to the child’s breathing when he is calm. ○ If you hear a noise when the child breathes out or is crying, this is not a danger sign. • The child is breathing faster than normal. The lower chest goes in when the child breathes in. These are signs of pneumonia. <ul style="list-style-type: none"> ○ His breath is fast like a runner’s breath.

- Normally when a child breathes in, the chest and stomach move out.
- Child coughs or has difficulty breathing for more than 30 days.
- Child has fever or any other childhood danger sign.

Additional Information for the Trainer

Lower chest In-drawing

- Mild chest in-drawing is normal in young infants because their chest bones are soft. However, severe chest in-drawing (very deep and easy to see) is a sign of pneumonia.
- Chest in-drawing occurs when the effort the child needs to breathe in is much greater than normal.
- In normal breathing, the upper and lower abdomen move OUT when the child breathes in. If the lower abdomen (just under the ribs) goes in when the child breathes in, this is chest in-drawing.
- If chest in-drawing is seen only when the child cries or is feeding, this is not a danger sign. If only the soft tissue between the right and left ribs goes in when the child breathes, this is not a danger sign.
- Chest in-drawing is a danger sign if it occurs continually when the child is calm. For a video example, see the following website:
<http://www.youtube.com/watch?v=Zlf40C7IGIO>

Pneumonia

- Fast breathing and chest in-drawing are danger signs for pneumonia.
- Worldwide, pneumonia kills more children than any other illness – more than AIDS, malaria, and measles combined.¹⁴
- (DRC only) Fifteen countries have 75% of the world's cases of pneumonia. DRC is one of those 15 countries with 3 million cases (2004).¹⁵

Cough for 30 days

- This may be a sign of tuberculosis, asthma, or whooping cough.

Stridor

- Stridor is a sign of a group of infections called croup. Croup infects infants and children under age 6. It causes a barking cough and whistling sound when the child breathes in. In severe cases, croup can be fatal.

¹⁴ Pneumonia: The forgotten killer of children. The United Nations Children's Fund (UNICEF)/World Health Organization *WHO), 2006. Available: http://www.unicef.org/publications/index_35626.html

¹⁵ Personal communication from I. Rudan, Associate Professor, University of Edinburgh, November 2005, based on Rudan, I., C. Boschi-Pinto, T. Wardlaw, E. White Johansson and H. Campbell, 'The Global Distribution of Clinical Episodes of Pneumonia in Children Under Five Years of Age' (submitted for publication).



11. Activity: In-drawing and the Breath Counter – 15 minutes

Help mothers to identify fast breathing, stridor, and lower chest in-drawing by reviewing the definitions and examining children in the group.

1. Stridor:

- a. Review the definition: when the child breaths in there is a harsh noise. If you hear wheezing when the child breathes out or is crying, this is not a danger sign. Listen when the child breathes in.*
- b. Ask the mothers to look at their children under the age of two.*
- c. Identify when the children are breathing in. (When children are breathing in their belly and lower chest wall moves out).*
- d. Do any of the children make a harsh noise when breathing in?*

2. Chest In-drawing:

- a. Review the definition: the lower chest goes in when the child breathes in.*
- b. Ask the mothers to lift the shirts of their children under the age of two. Identify when the children are breathing in.*
- c. Watch their lower chest move in and out.*
- d. Do any of the children have chest in-drawing?*

3. Fast Breathing:

- a. Review the definition: the child is breathing faster than normal. His breath is fast like a child that has been running. Listen for fast breathing when a child is resting. If the child is breathing fast only when crying or excited, this is not fast breathing.*
- b. A health worker can identify fast breathing using a watch and counting the child's breath. If a child takes too many breaths in one minute, the child has severe respiratory infection (pneumonia) and needs to begin treatment immediately.*
- c. Ask the mothers if any of their children are breathing faster than normal.*
- d. Remind mothers to take the child immediately to the clinic if they see danger signs.*

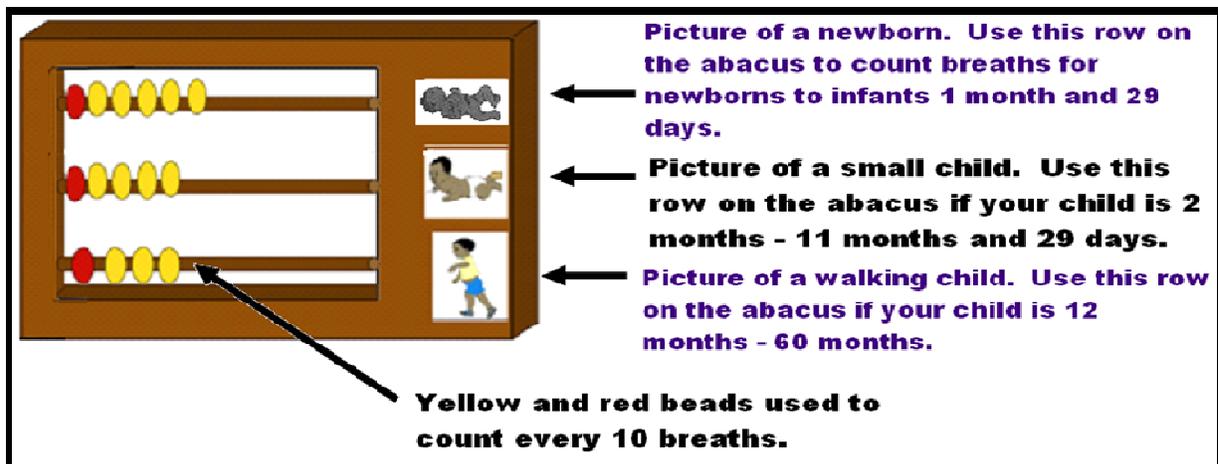
Optional: Use a watch or cell phone to count breaths. Count breaths in pairs.

1. Woman A: She will look at the minutes on the watch. As soon as the minute changes, she will tell Woman B to begin counting. She will tell Women B when to stop counting (when 60 seconds (1 minute) is over).
2. Woman B: She will count aloud every time the child inhales. Give her seven rocks to hold. She will begin counting when Woman A tells her to begin. She will count breaths (inhales) in groups of ten. As soon as she reaches 10, she places one rock on the ground. She continues counting beginning with one and counting to 10. Every time she reaches 10, she places a rock on the ground. When the 60 seconds (1 minute) is over, she counts the number of rocks on the ground. (She does not place any more rocks on the ground unless she has reached 10 breaths as the timer ends.)
3. Use the chart below to determine if the child is breathing too fast for his or her age. If the child has fast breathing based on their age, take the child immediately to the health clinic.

Child's age	Fast Breathing
Birth – 1 month and 29 days	6 or more rocks (60 breaths)
2 months – 11 months and 29 days	5 or more rocks (50 breaths)
12 months to 60 months	4 or more rocks (40 breaths)

The Following information about the breath counter and timers is for DRC only. Mozambique can delete the text describing the abacus counter.

Spend at least 1 hour training Leader Mothers on the use of the Breath Counter. You may want to do this training at a separate meeting. Do not train mothers in the neighbor groups or those who do not have Breath Counters.



1. **Give each Mother a timer and Breath Counter abacus.**
 - a. Explain: Newborns breathe faster than older children. As the infant ages, their breathing slows down. For this reason, the rate of fast breathing is different depending on the age of the child.¹⁶

2. **Explain the different rows of the Breath Counter.**
 - a. The image on top is a newborn baby. If you have a newborn baby or a child that is younger than 1 month and 29 days, use the beads on this row to count breaths. If the child is 1 month and 30 days (two months), use the second row.
 - b. The second image shows a child lifting up his head. A child begins lifting his head when he is about six months. Use this row to count your child's breaths if your child is 2 months to 11 months and 29 days. If the child is 11 months and 30 days (12 months), use the next row.
 - c. The last image shows a child walking. After 12 months, children begin to walk. Use this row on the abacus to count the breaths for your child if they are 12 months to 60 months.

3. **Ask each mother to give the age of her youngest child.**
 - a. Ask each mother to identify the row for her child.
 - b. Continue until each mother is able to correctly identify the row for her child.
 - c. What if a mother does not know the exact age of her child? Help the Leader Mothers to understand how to estimate the ages of children comparing the day of birth to seasonal events or births of others in the community who have a known birth date.

4. **Explain to the mothers that they will move one bead for every 10 breaths.**
 - a. Before they begin counting, they should move all the beads away from the pictures of children (to the left).
 - b. Help the mothers to move the beads to the left side.

5. **Practice counting 1 to 10 and moving one bead at a time to the opposite side of the counter.**
 - a. They only need to move beads on one row, the row that represents the age of the child they are assessing.
 - b. Repeat until everyone is moving the beads correctly.

6. **Calm the child before beginning the count. (Ask women to work in pairs and select a young child whom they will use to practice counting breaths).**
 - a. Instruct each pair to select one child 60 months or younger, remove their shirt and lay them on their backs. It is easiest to count breaths by watching the stomach of the child lying on their back.

¹⁶ Breathing rates change at high altitude. Please check with MOH officials for breath per minute rates for each age group to confirm that you are using the correct rates based on altitude.

- b. Ask each mother to calm her child. If the child is crying or will not lie down, use a different child. The breath counter only works when counting breaths for a calm child.

7. Help each pair of mothers to count breaths (without using the beads).

- a. Begin counting when the child's breathes in (the stomach comes out). Count every time the stomach comes out or the mother sees the child breathe in.
- b. Tell the mothers to count to 10, and then begin counting again with from one to 10.
- c. Let the mothers practice counting breaths only (without using the beads).
- d. Help those who are having trouble. Make sure they are only counting once for each breath. If they count one breath for an inhale and one breath for an exhale, the count will be wrong. Only count each time the child breathes IN.

8. Now help each pair count breaths using the abacus.

- a. One mother should watch the child's stomach and count while the other woman moves the beads every time the woman reaches 10 breaths.
- b. Ask each pair to count breaths, making sure they are counting correctly.

9. Explain how to use the timer to the women.

- a. (Refer to instructions that come with the UNICEF timer).
- b. Explain that the battery in the timer cannot be replaced. For this reason, keep the timer in a safe place where children and adults cannot play with the timer.
- c. When the battery ends, the timer will not work. FH will not replace the timer.
- d. A watch or phone can be used to replace the timer.
- e. Explain the difference between the two beeps. One beep tells you that you are halfway finished. The second beep tells you that you must stop counting.

10. Tell the women if they are in the middle of counting and have not moved the last bead they should leave it on the left side.

- a. For example if they are counting and reach seven when the final beeping comes, they will NOT move the bead to the right.
- b. They can move the bead only if they reach 10.

11. Ask each pair of women to start the timer and count breaths.

- a. Remind them to move all the beads to the left to start.
- b. Remind them to use the correct row on the abacus.
- c. Remind them to count each INHALE.
- d. Remind them to count EVERY inhale. They should not talk or skip breaths once the timer has started.
- e. Only move a bead if you have reached 10.
- f. Continue counting until the timer makes the final beep.

- 12. When the women have finished, look at the abacus.**
- a. Has anyone moved the red bead?
- 13. Explain to the mothers that the red bead is a sign of severe respiratory infection. It is a sign of pneumonia. If they count and they move the red bead before the final beeping, the child has fast breathing and should go immediately to the health clinic.**
- a. Ask women to continue practicing. Each woman should practice using the timer and counting breaths.
- 14. Leader Mothers should instruct all mothers in the neighbor groups to come to the Leader Mother's house on the way to the clinic if they believe the child has fast breathing. The Leader Mother will confirm if the child has fast breathing for their age. If the child does NOT have fast breathing or any other danger sign, give special care to the child at home.**

	<p>12. Probe – 10 minutes</p>
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? What do you think about these ideas? Do you think this advice would be difficult to follow? Is there anything that might stop you from following this guidance?

Ask mothers to talk to a woman sitting next to them for the next five minutes. They should share any personal concerns that they have with these practices. Together they should try to find solutions to these worries and problems. After five minutes, ask the Leader Mothers to share what they have discussed.

	<p>13. Inform – 5 minutes</p>
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Help find solutions to their concerns. Encourage them to try these new practices. If a woman offers a good solution to another woman's concern, praise her and encourage other mothers to consider using this solution when they talk with others.

Possible concerns:

Health managers: please add possible concerns and solutions that might be common in your area.

14. Practice and Coaching – 20 minutes

1. Ask Leader Mothers to share the teachings they have learned today. They will share with another woman in the care group using the ASPIRE method.
4. One Leader Mother will share the teachings from the first two flipchart pages of the lesson. After ten minutes, the Leader Mothers will switch roles. The other Leader Mother will share teachings from the third and fourth flipchart pages of this lesson.
5. Tell the Leader Mothers listening to the message that they should give one objection to the lesson; one reason that they think these messages would be difficult for them.
6. The Leader Mothers sharing the message should try to help the women overcome this obstacle.
7. The Promoter should watch, correct, and help the Leader Mothers who are having trouble.
8. When everyone is finished, answer any questions that the mothers have about the materials, or today's lesson.



15. Request – 10 minutes

? Are you willing to make a commitment to the teachings you have heard today? What is your commitment?

Ask each mother to say aloud a new commitment that she will make today. Each mother can choose the commitment that is most important to her.

For example:

- *I commit to take my child to the clinic on the same day if I see a danger sign.*
- *I commit to teaching my husband and children the danger signs.*
- *I commit to saving money for transport to the clinic in case my child has a severe respiratory infection.*



16. Examine – 10 minutes

Ask each mother one-on-one about her commitments.

? What was your commitment at the last lesson? Have you kept that commitment? How – what did you do?

Finally, ask each mother one-on-one about her practices in the last two weeks:

- *When was the last time your child was dewormed?*
- *(For those who are pregnant) have you taken a deworming pill?*
- *Has your child been ill? What have you done to help them recover?*

Lesson 2: Tuberculosis and Treatment for Severe Respiratory Infection



- For all severe respiratory infections, caregivers will give the correct and full dose of treatment according to the schedule recommended by the health worker.
- For all severe respiratory infections, caregivers will not share the treatment with others or stop the treatment even if the child improves.
 - If only half of the medicine is given, the illness will return even stronger and may not respond to medication the second time.
 - Caregivers will return quickly to the clinic if the child's health does not improve.
- Caregivers will treat severe respiratory infection (respiratory infection with danger signs present) immediately.
- Caregivers will take an adult to the clinic to be tested for tuberculosis if any of the following signs are seen:
 - Night sweats with fever
 - Sudden loss of weight
 - Coughing for more than two weeks
 - Coughing up blood
- Caregivers will take a child to the clinic if they seen signs of tuberculosis:
 - Sudden loss of weight
 - Fever
 - Loss of interest in feeding
- If one person in the house is diagnosed with tuberculosis, everyone else in the house will go to the clinic for a tuberculosis test.
- Caregivers will believe that only full treatment (giving all the medicine) will cure the infection (**action efficacy**).¹⁷
- Caregivers will believe that the life of their child is valuable and should be protected with proper treatment.

Materials:

1. Attendance Registers
2. Acute Respiratory Infection Leader Mother Flipchart
2. Find out the cost of antibiotic treatment and tuberculosis treatment. Ask at a local pharmacy, health workers at the health clinic, or a mother who has recently purchased treatment for a severe respiratory infection.*

Lesson 2 Summary:

¹⁷ Health managers: If you have completed a Barrier Analysis survey on this behavior, adapt the objective and messages in this lesson to match your findings.

- Game: Simon Says
- Attendance and Troubleshooting
- Share the story and ask about current practices: The Neighbor Asks for Treatment
- Show pictures and share key messages on flipchart pages 14-19 about immediate treatment, complete treatment, and tuberculosis.
- Activity: The Germ Song
- Probe about possible barriers
- Inform them of possible solutions to the barriers
- Practice and Coaching in pairs
- Request a commitment
- Examine practices related to mild and severe respiratory infection.

	<p>1. Game: Simon Says – 10 minutes</p>
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1. Repeat the "Simon Says" game from Module 4, Lesson 4. Use the symptoms of respiratory infection as actions (see below). Health Managers replace the name Simon with a common local name.
2. Ask the women to stand in a circle.
3. The object of this game is to do what Simon says.
4. Today Simon is describing the symptoms of respiratory infection. The women should only do the activity if the facilitator begins with, "Simon says..." For example, "Simon says, cough three times." "Simon says, sneeze two times." "Simon says, rub your throat (sore throat)" "Simon says, put your hand on your forehead (headache)"
5. Do several "Simon says..." then give an instruction without mentioning Simon. "Simon says, cough two times. Rub your forehead." Those who rub their forehead must leave the circle.
6. Continue giving new commands until only one person remains.

Now that we are energized, let's begin today's lesson.

	<p>2. Attendance and Troubleshooting – 15 minutes</p>
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1. Promoter fills out attendance sheets for each Leader Mother and neighbor group (beneficiary group).
2. Promoter asks if any of the Leader Mothers had problems meeting with their neighbors.
3. The Promoter helps to solve the problems that they mention.

4. Promoter thanks all of the Leader Mothers for their hard work and encourages them to continue.
5. Promoter asks the group's Activity Leader¹⁸ to discuss the needed items for next week's activity and solicit volunteers.

The Neighbor Asks for Treatment (Picture 2.1) – 10 minutes

3. Story:

- Read the story on page 12 of the flipchart.
- In the story, Hardship is receiving treatment for pneumonia. (In Lesson 1, he had chest in-drawing, a sign of pneumonia). He has taken four days of treatment. He already looks better. One of Mother B's neighbors wants to take the last three pills to treat her child.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

Mother B received medication at the clinic for Hardship's breathing problems. He had pneumonia. After four days of treatment, Hardship is doing much better. Now Hardship's chest does not go in when he inhales. A neighbor comes to visit. "You still have three pills and Hardship looks healthy," the neighbor says. "My child has a cough. Can you share your pills with me?"

4. Ask:

- Read the questions on page 12 of the flipchart.
- Ask the first question to review the details of the story.
- Ask the second question to find out what the women believe about completing the full treatment of medication.
- Ask the last question to find out if the women gave their child the full treatment during the last illness.
- We hope the participants respond in this way: The neighbor wants the medication because she believes Hardship is cured. However, this is not true. Hardship has improved, but he must take the all the medicine (full treatment). Otherwise, the illness will return quickly. Mother B should not share Hardship's treatment with her neighbor.
- **Encourage discussion. Don't correct "wrong answers."** Let everyone give an opinion. You will correct their inaccurate beliefs in the flipchart pages that follow.
- After the participants answer the last question, move to the next flipchart page by saying, "Let compare your thoughts with the messages on the followings pages."

¹⁸ The Activity Leader should arrive ten minutes prior to each care group meeting to get the description of the activity and the list of needed items from the promoter.

	<ul style="list-style-type: none"> ? Why does the neighbor want the medication? ? Should Mother B share Hardship's treatment? ? The last time your child was sick, did you give all the medicine?
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Treat Severe Infection Immediately (Picture 2.2) – 5 minutes

5. Show:

- Ask the caregivers to describe what they see in the pictures on page 15.

	<ul style="list-style-type: none"> ? What do you see in these pictures?
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6. Explain:

- Share the key messages using flipcharts pages 14 and 15.
- Use the captions on the flipchart to remind you which images represent each point.
- Ask the question at the bottom of the flipchart to find out if the women believe that medicine will cure infection (action efficacy). Action efficacy is a behavioral determinant in Barrier Analysis.¹⁹ If the women do not believe that medication will cure the illness, they will not change their behavior. (If they believe sickness is caused by infidelity or witchcraft, they will not take their children to receive medicine).
- Reinforce the positive reasons for belief mentioned by women. Some possible reasons for belief include: Medication has healed my child in the past. Many children in this community have taken medication and are now well. The doctors recommend this treatment. Germs cause sickness. Medicine kills germs. Therefore, I believe treatment works.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Begin treatment for severe infection immediately.
 - Give treatment on the same day that you see the danger signs.
 - **Mother A** gives **Of Great Worth** her first treatment before she leaves the health clinic.
- Give the treatment exactly the way the health worker explained.
 - The health worker is telling Mother A to give **Of Great Worth** one pill, each morning for **10 days**.

¹⁹ To find out more about barrier analysis, see the following website: <http://barrieranalysis.fhi.net/>

- The black X's represent the days she should give treatment.
- Even if the child looks better, continue giving treatment all the days recommended by the health worker.
 - The black X's show the days **Mother A** gave treatment.
 - **Mother A** continues to give one pill each morning even if her child seems better.
 - Some respiratory infections require **10 days** of treatment.
 - Some respiratory infections like tuberculosis require 6 months of treatment.

? Do you believe that medicine will cure this sickness? Why? How do you know?

Additional Information for the Trainer

Health Unit Surveys (Mozambique only)

- According to UNICEF statistics for 2008, 65% of children under five with suspected pneumonia were taken to an appropriate health center, while only 22% of children under five with suspected pneumonia received antibiotics (2005 – 2008)²⁰

The Thief

- For more information regarding the comparison of sickness to a thief, see Module 3, Lesson 5.

Give all the Medicine (Picture 2.3) – 5 minutes

7. Show:

- Ask the caregivers to describe what they see in the picture on page 17.

	<p>What do you see in these pictures?</p>
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8. Explain:

- Share the key messages using flipcharts pages 16 and 17.
- Use the captions on the flipchart to remind you which images represent each point.
- Ask the last question to discuss the value of life. Children are vulnerable to sickness and infection. Infection can easily kill a child. It

²⁰ http://www.unicef.org/infobycountry/mozambique_statistics.html

is worth a caregiver's time and money to treat the child and protect them from death. Life is a gift that should be cherished.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here

- Give all the medicine recommended by the health worker. Full treatment chases the sickness far away.
 - Sickness is like a thief that steals health from a child.
 - Giving all the medicine is like a man chasing a thief far away from the community.
- Do not share your child's treatment with others. Sickness, like a thief, will come back quickly.
 - This mother is sharing her child's treatment with a friend.
 - The sickness will return quickly to both children.
 - Do not share or give only half of a child's treatment.
- If the child's health does not improve, return to the clinic.
 - In the pictures, the mother gave all the medicine.
 - The child still had a cough and symptoms of respiratory infection.
 - The mother returned to the clinic.
- Is it important for caregivers to treat childhood illness? Why?
 - A caregiver is able to prevent death by giving treatment.
 - Simple practices can save the child's life and allow them to live into old age.
 - Each child is different from all others.
 - Your child is unique and valuable.

Additional Information for the Trainer

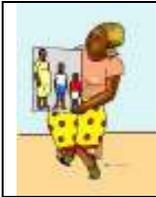
Medication

- The reference above to "taking all the medication" refers to medication such as antibiotics or malaria pills. A child must take these treatments at certain times for a series of days to cure the illness.
- "Taking all the medication" does not apply to paracetamol or other drugs to lessen symptoms. Take these drugs only when you have symptoms.

Severe Respiratory Infection: Tuberculosis (Picture 2.4) – 5 minutes

9. Show:

Ask the caregivers to describe what they see in the picture on page 19.



What do you see in these pictures?

10. Explain:

- Use flipchart pages 18 and 19 for guidance.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Tuberculosis is a severe respiratory infection for adults. It is very contagious.
 - **Mother A's husband** is coughing on his son.
 - Children usually get TB from a sick adult in their house.
- If someone in your house has tuberculosis, take everyone to the clinic to be tested.
 - **Mother A** has taken everyone to the clinic for a TB test.
 - A person can have tuberculosis, without showing signs of sickness.
- In adults, the danger signs are a cough for more than three weeks, coughing up blood, fever, and sudden weight loss.
 - **Mother A's husband** has fever and sweats at night.
 - He has lost a lot of weight in three weeks.
- In children, the danger signs are loss of interest in feeding, fever, and sudden weight loss.
 - This infant has tuberculosis. He doesn't breastfeed as he used to. He has lost a lot of weight in a few weeks.

Additional Information for the Trainer Tuberculosis Mortality

- Of the 22 countries with the highest tuberculosis cases in 2008, DRC was ninth with 245,000 cases. Mozambique was sixteenth with 94,000 cases.²¹
- Seventy five percent of tuberculosis deaths occur among people 15 to 54 years of age.²²
- Tuberculosis is the leading cause of death among HIV infected people in Africa.²³

Latent Tuberculosis

²¹ AVERT. 2008. [Tuberculosis](#). Horsham, West Sussex, United Kingdom: AVERT.

²² Clydette Powell, USAID. Global Health ELearning Center. USAID Tuberculosis Basics (Updated 2008). <http://www.globalhealthlearning.org/tracker.cfm>

²³ AVERT. 2008. [Tuberculosis](#). Horsham, West Sussex, United Kingdom: AVERT.

- Latent Tuberculosis infection means that the TB germs are in the body but are not active.
- When a person inhales TB germs, the immune system (germ fighting system) builds a wall around them. The germs can stay inside these walls for years, alive but not active.
- Inactive TB germs do not hurt the body. They are not contagious. This person is infected, but NOT sick.

Active Tuberculosis

- Inactive (latent) TB germs become active when the immune system (germ fighting system) is weak from malnutrition, HIV or other illness.
- TB germs become active, multiply, and begin to damage the lungs or other organs.

Tuberculosis Test

- Those who have been in close contact with someone who has active Tuberculosis (shows the danger signs of infection) are given a TB test.
- TB tests are given a few weeks after the person or child has been exposed. It usually takes about 6 weeks after infection to see an accurate test result.
- A nurse gives an injection just under the skin of the forearm. After 1 or 2 days, a health worker checks your arm for swelling. A swollen, firm lump means that you have tuberculosis.



11. Activity: Saving Money for Treatment – 15 minutes

Before the meeting:

Ask the Activity Leader to find out the costs of the treatments needed for severe respiratory infection. Tuberculosis treatment is usually free. Pneumonia is treated with antibiotics. Talk with workers at a pharmacy or workers at the health clinic to find out the cost.

During the meeting:

1. Explain the costs of the different drugs needed to treat severe respiratory infection.
2. Ask mothers who have recently purchased treatment, how they were able to find money to purchase the treatment.
 - a. Did they receive money from a family member?
 - b. Did they use money they received by selling something at the market?
 - c. Did they borrow money?
3. Encourage mothers to think of new ways to “generate” money or save money for times when children are ill.
 - a. Are there banks that will hold or save money (savings account)? Is there a bank nearby that adds interest (extra money)?
 - b. Are there products the women’s group could make together and sell for profit at the market?

- c. Could the women teach the flipchart lesson to their family members and discuss the need to save money in case there is an illness?
- 4. Discuss the ideas offered by the mothers. Encourage them to consider ways to be “prepared” for an emergency. If a child shows a danger sign, they need to be able to purchase treatment on the same day. This means they need to be able to work quickly to gather money for treatment.

	<p>12. Probe – 10 minutes</p>
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? What do you think about these ideas? Do you think this advice would be difficult to follow? Is there anything that might stop you from following this guidance?

Ask mothers to talk to a woman sitting next to them for the next five minutes. They should share any personal concerns that they have with these practices. Together they should try to find solutions to these worries and problems. After five minutes, ask the Leader Mothers to share what they have discussed.

	<p>13. Inform – 5 minutes</p>
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Help find solutions to their concerns. Encourage them to try these new practices. If a woman offers a good solution to another woman’s concern, praise her and encourage other mothers to consider using this solution when they talk with others.

Possible concerns:

Health managers: please add possible concerns and solutions that might be common in your area.

<p>14. Practice and Coaching – 20 minutes</p>
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1. Ask Leader Mothers to share the teachings they have learned today. They will share with another woman in the care group using the ASPIRE method.
2. One Leader Mother will share the teachings from the first two flipchart pages of the lesson. After ten minutes, the Leader Mothers will switch roles. The other Leader Mother will share teachings from the third and fourth flipchart pages of this lesson.
3. Tell the Leader Mothers listening to the message that they should give one objection to the lesson; one reason that they think these messages would be difficult for them.
4. The Leader Mothers sharing the message should try to help the women overcome this obstacle.
5. The Promoter should watch, correct, and help the Leader Mothers who are having trouble.
6. When everyone is finished, answer any questions that the mothers have about the materials, or today's lesson.

	<p>15. Request – 10 minutes</p>
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? Are you willing to make a commitment to the teachings you have heard today? What is your commitment?

Ask each mother to say aloud a new commitment that she will make today. Each mother can choose the commitment that is most important to her.

For example:

- I commit to using a calendar so I won't forget to give all the medication.
- I commit to begin my child's treatment on the same day that I see the danger signs.
- I commit to talking with my family about saving money for treatment.

	<p>16. Examine – 10 minutes</p>
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Ask each mother one-on-one about her commitments.

? What was your commitment at the last lesson? Have you kept that commitment? How – what did you do?

Finally, ask each mother one-on-one about her practices in the last two weeks:

- *Has your child has a respiratory infection in the last few two weeks?*
- *If yes:*
 - *Did you see any danger signs?*
 - *Did you take your child to the clinic?*
 - *Did you give them special care at home?*
- *If no:*
 - *How did you know if the respiratory infection is serious?*
 - *What are the danger signs?*

Lesson 3: Recovery and Care for Children with Respiratory Infection



- Caregivers will give special care to those sick with mild infection as well as those receiving treatment for severe infection. Caregivers will help to thin and remove the thick liquid in the child's nose and chest to help them breathe.
 - Help the child to inhale hot water steam to loosen mucus (thick liquid) in the throat and nose.
 - Give warm liquids to children six months and older to thin mucus (thick liquid) and ease coughing.
 - Caregivers will give more fluids than normal to those recovering from a respiratory infection to thin the thick liquid and help replenish lost liquids.
- Caregivers will feed high-nutrient foods to help children recover from respiratory infections.
 - Caregivers will give foods high in Vitamin A including organ meat, red meat, fish, sweet potato, papaya, plantain, peas, carrots, and red palm oil. Foods high in Vitamin A help to shorten the length of illness and protect against severe illness.
 - Caregivers will offer children favorite foods and soft foods to encourage children to eat. Sick children often have difficulty eating and soft foods and extra liquids will help to replenish energy lost during illness.
 - Caregivers will offer extra foods and fluids each day during sickness and for two weeks after the sickness is gone. The extra food and fluids help the child recover and regain the energy and water lost during the sickness.²⁴
- Caregivers will help the child's body recover from illness in the following ways:
 - When child has a fever, caregivers will cool down the body by wrapping them in a wet cloth or putting a wet towel around the child's head. A high fever may cause convulsions and unconsciousness if left untreated.
 - Caregivers will dress sick children in an extra layer of clothing or blanket when it is cold.
 - Caregivers will encourage sick children to sleep more often to help them recover.
- Caregivers will believe that the life of their child is valuable and of great worth and should be given special care when ill.

²⁴ Baseline: [DRC - 29%; MOZ - 36%] of mothers gave children the same or more food during illness.

Materials

1. Attendance Registers
3. Acute Respiratory Infection Leader Mother Flipchart
2. Two oranges, balls of fabric, or twine for the game
3. Foods and cooking supplies for the Recovery Porridge.*
4. Ask each woman to bring a small bowl and spoon for her child.*

Lesson 3 Summary:

- Game: Ball under Chin
- Attendance and Troubleshooting
- Share the story and ask about their current practices: Special Care at Home
- Show pictures and share key messages on flipchart pages 22-27 about Helping the Child Breathe, Feeding Guidelines for Recovery, and Helping the Body Recover
- Activity: Recovery Porridge
- Probe about possible barriers
- Inform them of possible solutions to the barriers
- Practice and Coaching in pairs
- Request a commitment
- Examine practices related to treatment of severe respiratory infection.

	1. Game: Ball under Chin – 10 minutes
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1. For this game, you need two oranges, balls of fabric, or twine. The ball must be large enough to be held (without hands) between the chin and chest.
2. Divide the women into two equal groups. Ask the women in each group to stand in a line shoulder to shoulder.
3. Give the first woman in each group the ball. Show the first two women in the line how to hold the ball under their chin. First, put the ball against their neck. Then, lower their chin until they are able to hold the ball without hands by pressing their chin down and pushing the ball against their chest. Allow each of the women in the group to try it.
4. Explain: The women must pass the ball from person to person without using their hands. The next woman in line must lean over the neck of the first woman and try to grab the ball with her chin, holding it against her own chest. When she is holding it successfully, the next woman in line tries to grab the ball from under her chin and the women continue passing the ball, down the row.
5. If the ball drops, it has to go back to the beginning of the line. Each row will race to see who is able to pass the ball the fastest without dropping it.
6. When everyone understands the instructions, say, "Go."
7. The first line that finishes is the winner.

8. Repeat the game until everyone has tried it.

Now that we are energized, let's begin our lesson.



2. Attendance and Troubleshooting – 15 minutes

1. Promoter fills out attendance sheets for each Leader Mother and neighbor group (beneficiary group).
2. Promoter asks if any of the Leader Mothers had problems meeting with their neighbors.
3. The Promoter helps to solve the problems that they mention.
4. Promoter thanks all of the Leader Mothers for their hard work and encourages them to continue.
5. Promoter asks the group's Activity Leader²⁵ to discuss the needed items for next week's activity and solicit volunteers.

Special Care at Home (Picture 3.1) – 10 minutes

3. Story:

- Read the story on page 20 of the flipchart.
- **Mother B** is giving treatment to **Hardship**, but she is not giving special care to help the child recover. She is doing nothing to relieve **Hardship's** cough. She is doing nothing to relieve **Hardship's** sore throat and lungs.
- **Mother A** is asking her why she is not giving special care.
- **Mother B** believes that treatment is enough to help the child recover. She does not understand that special care at home will speed the child's recovery. ²⁶

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

Mother B is giving **Hardship** medicine like the health worker suggested. **Hardship** is improving slowly. **Mother A** comes to visit **Mother B** to find out how **Hardship** is doing. **Mother A** asks, "What are you doing to help **Hardship's** cough?" Are you giving **Hardship** special foods to help him recover? **Mother B** says that she is giving medicine. Why should I give special treatment if I am giving medicine?

²⁵ The Activity Leader should arrive ten minutes prior to each care group meeting to get the description of the activity and the list of needed items from the promoter.

²⁶ This story is similar to **Mother B's** reaction to **Hardship's** malaria. If the child is receiving treatment, does he still need to sleep under a net? (Refer to Module 4, Lesson 2).

4. Ask

- Read the questions on page 20 of the flipchart.
- Ask the first two questions to find out about what the mothers believe is needed to help a child recover.
- Ask the last question to find out the current home care practices of the women.
- We hope that participants respond in this way: **Mother B** is giving medication, but she also needs to help Hardship overcome the symptoms of infection. She can give hot liquids to soothe his throat. She can help clear away the thick liquid from his nose so he can breathe. She can give healthy foods (foods high in vitamin A) to help the body recover. She can pray for the child. All of these things will help the child to recover.
- **Encourage discussion. Don't correct "wrong answers."** Let everyone give an opinion. You will correct their inaccurate beliefs in the flipchart pages that follow.
- After the participants answer the last question, move to the next flipchart page by saying, "Let compare your thoughts with the messages on the following pages."

	<ul style="list-style-type: none">? Is Mother B giving her child special care?? If the child is taking medication, do you need to give the child special care?? What special care do you give to a child at home to help them recover?
--	---

Helping the Child Breathe (Picture 3.2) – 5 minutes

5. Show: Ask the caregivers to describe what they see in the pictures on page 21.

	<ul style="list-style-type: none">? What do you see in these pictures?
---	--

6. Explain:

- Share the key messages using flipcharts pages 22 and 23.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Clean each nostril with a warm cloth to help the child breath.
 - **Mother A** is using the corner of a cloth to clean her child's nose.
 - Then she washes her hands and the cloth with soap and water.
- Loosen
snot by helping the child breath hot water steam.
 - Wet, warm air helps to loosen the thick liquid in the nose and chest.
 - The cloth helps to hold the steam.
 - **Mother A's husband** is sitting with the child to make sure the steam is not too hot.
- Give warm liquids to children six months and older.
 - Warm liquids loosen the thick liquid in the nose and chest and ease coughing.
 - Extra liquids help to make snot thinner.
- Breastfeed
and offer more liquids than usual.
 - Drinking more liquids helps to thin the thick liquid in the nose and throat.
 - Give back liquids that are lost through coughing and dripping nose.

Additional Information for the Trainer

Malnutrition

- Malnutrition in children under four years of age contributes to more than 1 million pneumonia deaths each year.
- Malnutrition weakens the child's immune system. Malnourished children also have weakened respiratory muscles, which prevent them from adequately clearing mucus from the respiratory tract.

Feeding Guidelines for Recovery (Picture 3.3) – 5 minutes

7. Show:

- Ask the caregivers to describe what they see in the pictures on page 25.



? What do you see in these pictures?

8. Explain:

- Share the key messages using flipcharts pages 24 and 25.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Add small amounts of Vitamin A foods to meals each day.
 - Add organ meat, red meat, fish, sweet potato, and papaya, plantain, pumpkin, peas, carrots, and red palm oil.
 - These foods have vitamin A and will help the child get better.
- Offer sick children favorite foods and soft foods.
 - Soft foods are easy for children to swallow.
 - Eating favorite foods will encourage the child to eat.
- Offer extra foods to the child each day when the child is sick.
 - Chase the illness far away.
 - If caregivers give less food than normal, the sickness will return.
 - If the child has trouble eating solid foods, give them thick soups and porridges to help them recover.
- Offer extra foods and liquids for two weeks after the sickness is gone.
 - Strengthen the child's body with healthy foods.
 - For infants less than six months, offer one or two extra breast milk feeds each day during the sickness and for two weeks after the illness.
 - The red X's show that **Mother A** has given extra foods for two weeks after the sickness ended.

Helping the Body Recover (Picture 3.4) – 5 minutes

9. Show:

- Ask the caregivers to describe what they see in the picture on page 27.

	<p>? What do you see in these pictures?</p>
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10. Explain:

- Share the key messages using flipcharts pages 26 and 27.
- Use the captions on the flipchart to remind you which images represent each point.

- Ask the question at the bottom of the flipchart to discuss equal care. In some countries, male children receive better care than female children. Make sure that the participants understand that **Mother A** gives her female child the same care that she gives her male children. All children, both boys and girls, deserve to be cared for during illness.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Keep the child warm, especially when it is cold outside.
 - Children heal better if they are warm and comfortable.
 - Do not overdress the child so they sweat.
- Let the child sleep more often when they are sick. Sleeping with the head and chest raised may help the child breathe.
 - Sleep helps the body recover.
- If the child has fever, cool down the body by wrapping the child in a wet cloth.
 - If fever stays too long, the child may have convulsions.
 - Cooling down the body prevents convulsions.
 - A mother can also pour cool water on a towel placed around their head of the child or give them a cold bath.
- ? What if your child is a girl? Would you still give them special care?
 - Yes! All children are unique and valuable whether they are girls or boys.
 - Simple practices can protect them from sickness and death. Simple practices can keep them alive.



11. Activity: Recovery Porridge – 30 minutes

Health Managers work with the promoters to choose one thick and nutritious porridge or a group of mashed foods that are high in vitamin A. (A recipe for nutritious porridge may have been developed during the recipe competition - which can be repeated here.) This porridge will be recommended for children 6 months and older who are suffering from respiratory infection as well as those recovering from sickness or as a nutritious snack for healthy children. Prioritize vitamin A foods. Foods rich in vitamin A protect against severe illness and shorten the length of an illness. Prioritize the foods with the greatest amount of vitamin A: see Lesson 4 of Module 2 for details.

1. *Recipe for nutritious porridge or mashed foods (include ingredients below). Ingredients:*

2. *Prepare the nutritious porridge with mothers in the group. Explain the ingredients needed so each woman can make the porridge at home.*
3. *Explain the reason the porridge is good for sick children:*
 - a. *It is easier for children to eat soft foods when the nose is filled with thick liquid.*
 - b. *Soft foods are easier for sick children to swallow especially when they have a sore throat.*
 - c. *Hot foods help to loosen mucus in the nose, throat, and chest.*
 - d. *Vitamin A foods help to protect children against severe illness, and shorten the number of days a child is ill.*
4. *Allow each woman in the group to feed the recovery porridge to their children six months and older.*

	<p>12. Probe – 10 minutes</p>
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? What do you think about these ideas? Do you think this advice would be difficult to follow? Is there anything that might stop you from following this guidance?

Ask mothers to talk to a woman sitting next to them for the next five minutes. They should share any personal concerns that they have with these practices. Together they should try to find solutions to these worries and problems. After five minutes, ask the Leader Mothers to share what they have discussed.

	<p>13. Inform – 5 minutes</p>
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Help find solutions to their concerns. Encourage them to try these new practices. If a woman offers a good solution to another woman's concern, praise her and encourage other mothers to consider using this solution when they talk with others.

Possible concerns:

Health managers: please add possible concerns and solutions that might be common in your area.

14. Practice and Coaching – 20 minutes

1. Ask Leader Mothers to share the teachings they have learned today. They will share with another woman in the care group using the ASPIRE method.
2. One Leader Mother will share the teachings from the first two flipchart pages of the lesson. After ten minutes, the Leader Mothers will switch roles. The other Leader Mother will share teachings from the third and fourth flipchart pages of this lesson.
3. Tell the Leader Mothers listening to the message that they should give one objection to the lesson; one reason that they think these messages would be difficult for them.
4. The Leader Mothers sharing the message should try to help the women overcome this obstacle.
5. The Promoter should watch, correct, and help the Leader Mothers who are having trouble.
6. When everyone is finished, answer any questions that the mothers have about the materials, or today's lesson.



15. Request – 10 minutes

? Are you willing to make a commitment to the teachings you have heard today? What is your commitment?

Ask each mother to say aloud a new commitment that she will make today. Each mother can choose the commitment that is most important to her.

For example:

- I commit to using hot water steam to help my child breathe when they have respiratory infection.
- I commit to breastfeeding more often when my child has respiratory infection.
- I commit to feeding my child fish, sweet potato, and papaya when my child has respiratory infection.



16. Examine – 10 minutes

Ask each mother one-on-one about her commitments.

? What was your commitment at the last lesson? Have you kept that commitment? How – what did you do?

Finally, ask each mother one-on-one about her practices in the last two weeks:

Have you given your child medication in the last two weeks?

- *If yes:*
 - *Did you give all the medication from the health worker?*
 - *Did you start the medication on the same day as you received it?*
 - *Did you complete medication?*
 - *Did your child recover or does he still have symptoms?*
- *If no:*
 - *What are the important things to remember about treatment?*

Lesson 4: Respiratory Infection Transmission and Prevention: Hand washing and Separating the Sick



Objectives

- Caregivers will be able to explain the causes of respiratory infections.
 - Germs (bacteria and virus) cause respiratory infections when they enter the nose, eyes, or mouth.
 - Irritants in smoke inhaled from cigarettes and cooking fires cause respiratory infections.
- Caregivers will be able to explain how respiratory germs are transmitted from a sick child to a non-sick child:
 - Respiratory germs live in snot (mucus in the nasal canal) and saliva (liquid in the mouth). When snot or saliva from a sick person gets into the nose, eyes or mouth of a new person, they also become sick.
 - Infected snot and saliva sprayed into the air (droplets) from coughs and sneezes can cause infection when breathed in by a non-sick person.
 - Infected snot and saliva on objects such as tables, doors, food, and toys can cause infection when handled by a non-sick person.
 - Infected snot and saliva on hands that touches a non-sick person's mouth, eyes, or nose can cause infection.
- Caregivers will prevent the transmission of germs in the snot and saliva of a sick child in the following ways:
 - Wash hands and objects used by a sick child with soap and water (or ash) before giving to a non-sick child.
 - Wash hands with soap and water (or ash) after caring for a sick child.
 - Wash a sick child's hands and face often to remove saliva and snot to reduce transmission of germs.
 - Give sick children a separate sleeping mat, bowl of food (when food is communal) and separate place to play to prevent transmission to non-sick children.
- Caregivers will believe that the life of their child is valuable and they should be protected from germs and illness.
- Caregivers will believe that hand washing, separating sick children, and covering coughs can prevent transmission to others (**action efficacy**).²⁷

Materials

1. Attendance Registers
2. Acute Respiratory Infection Leader Mother Flipchart

²⁷ Action efficacy is whether the person believes that the preventative practices will actually stop the illness. **Health managers: If you have completed a Barrier Analysis survey on this behavior, adapt the objective and messages in this lesson to match your findings.**

Lesson 4 Summary:

- Game: Germs and Vaccinations
- Attendance and Troubleshooting
- Share the story and ask about the cause of respiratory infection: **Mother B's husband** and the Children Get Sick
- Show pictures and share key messages on flipchart pages 30-35 about respiratory infection transmission, stopping germs with soap, and separating sick children to stop transmission of germs.
- Activity: The Germ Song
- Probe about possible barriers
- Inform them of possible solutions to the barriers
- Practice and Coaching in pairs
- Request a commitment
- Examine practices related to helping a child recover at home.

	1. Game: Germs and Vaccinations – 10 minutes
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1. Ask the women to stand in a circle.
2. Tell each woman to look around and silently choose another woman in the group. Ask them to raise a hand when they have chosen someone.
3. When everyone has chosen, explain that this person represents a germ. They should try to stay as far away as they can from this person.
4. Tell each woman to look around and silently choose another woman in the group. Ask them to raise a hand when they have chosen someone.
5. When everyone has chosen, explain that this person represents a vaccine to prevent infection from the germ. They should try to stand as close as possible to the vaccine. The vaccine protects them from the germ.
6. Make sure that everyone understands what they should do and then begin the game.
7. After a while, you can reverse the game. Tell them that the first person represents the vaccine and the second person represents the germ.
8. After several minutes when everyone is laughing, stop the game.

Let's begin today's lesson.



2. Attendance and Troubleshooting – 15 minutes

1. Promoter fills out attendance sheets for each Leader Mother and neighbor group (beneficiary group).
2. Promoter asks if any of the Leader Mothers had problems meeting with their neighbors.
3. The Promoter helps to solve the problems that they mention.
4. Promoter thanks all of the mothers for their hard work and encourages them to continue.
5. Promoter asks the group's Activity Leader²⁸ to discuss the needed items for next week's activity and solicit volunteers.

Mother B's husband and the Children get Sick (Picture 4.1) – 10 minutes

3. Story:

- Read the story on page 28 of the flipchart.
- Hardship is recovering, but now others in the family begin coughing. Hardship has passed his sickness to others in the family. Mother B doesn't know how the children became infected.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

Hardship recovered well, but soon Mother B's husband and the children begin to cough. Their noses begin to drip. Mother B is surprised. She has spent lots of time helping Hardship recover. Now three more people have respiratory infections. How did this happen?

4. Ask

- Use the first discussion question on page 28 to find out what the women know about the transmission of germs.
- Ask the second question to see if the mothers believe that prevention is possible.
- Ask the last question to find out how the women prevent transmission of germs when their children are sick.
- We hope that participants respond in this way: We can see that Mother B's husband and the children are coughing germs onto the family foods. The small girl's nose is running and she is wiping it with her hand. Her germs get onto the foods that are shared with the family.

²⁸ The Activity Leader should arrive ten minutes prior to each care group meeting to get the description of the activity and the list of needed items from the promoter.

When the sick family members cough, their germs are spread in the air to those around them. This is how respiratory germs are spread.

- **Encourage discussion. Don't correct "wrong answers."** Let everyone give an opinion. You will correct their inaccurate beliefs in the flipchart pages that follow.
- After the participants answer the last question, move to the next flipchart page by saying, "Let's compare your thoughts with the messages on the following pages."

	<ul style="list-style-type: none">? How does someone "catch" respiratory infection?? Could Mother B have prevented the others from getting sick? How?? How do you prevent sick children from spreading infection in your house?
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Respiratory Infection Transmission (Picture 4.2) – 10 minutes

5. Show:

- Ask the caregivers to describe what they see in the pictures on page 31.

	What do you see in these pictures?
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6. Explain:

- Share the key messages using flipcharts pages 30 and 31.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.	
<ul style="list-style-type: none">• Germs from a sick person's snot and saliva spread infection.<ul style="list-style-type: none">○ The green dots in this picture are germs.○ Germs are too small to see.○ A sick child's saliva and snot are filled with germs.• Germs in the air from coughs spread infection.<ul style="list-style-type: none">○ Hardship is coughing on his sister.○ His sister breathes in the germs and soon she becomes sick too.•	Germs

- on hands and objects of sick children spread infection.
 - Hardship’s snot gets onto his toys.
 - His sister’s hands now have his germs on them.
 - When his sister touches her mouth, eyes or wipes her nose the germs get into her body.
 - Soon his sister will be sick too.
- Smoke
 - also causes respiratory infection in children.
 - Smoke irritates the nose and throat.
 - Children who breathe smoke from cooking fires have more respiratory infections.
 - Children who breathe tobacco smoke have more respiratory infections.

Additional Information for Trainers

Hard Surfaces

- Some virus (germs) can survive and on hard surfaces for more than 6 hours and for 30 minutes on hands and cloth. After this time, the germs are “dead” and do not cause sickness in others.

Tobacco Smoke²⁹

- Infants whose mothers smoke are 50% more likely to have severe respiratory infection during the first year than infants with non-smoking mothers.

Immunity

- Sometimes a virus or bacteria enters the body and we don’t get sick at all. Sometimes the same virus enters the bodies of many people and only some of them get sick.
- Whether someone gets sick depends on three things: the strength of the immunity system (the body’s germ fighting system); the strength of the virus or bacteria; and the number of virus and bacteria.

Stop Germs with Soap (Picture 4.3) – 5 minutes

7. Show:

- Ask the caregivers to describe what they see in the pictures on page 33.

	<p>What do you see in these pictures?</p>
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²⁹ Blizzard, L.; Ponsonby, A.; Dwyer, T.; Venn, A.; Cochrane, J.A., "Parental smoking and infant respiratory infection: how important is not smoking in the same room with the baby?" *American Journal of Public Health* 93(3): 482-488, March 2003.

8. Explain:

- Share the key messages using flipcharts pages 32 and 33.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Wash germs off hands after caring for a sick child.
 - Mother A washes her hands after Of Great Worth coughs on her.
 - She washes her hands after wiping the child's nose.
 - Soap (and ash) kills the germs.
- Wash germs off toys and objects touched by a sick child.
 - Mother A is washing the toy.
 - She is washing off Of Great Worth's germs and snot before giving the toy to another child.
- Wash snot off the hands and faces of sick children.
 - Mother A is washing the snot and germs off Of Great Worth's face and hands.
 - Clean hands and faces of sick children often.
- Keep germs out of the air. Teach sick children to cough in their elbow or on a cloth.
 - Mother A taught her son to cough in his elbow.
 - This keeps germs out of the air.
 - Mother A is using a cloth to catch the germs from Of Great Worth.

Additional Information for the Trainer Prevention in Newborns

- During or shortly after birth, babies are at risk of developing pneumonia from coming into contact with germs in the birth canal or from substances contacted during delivery.³⁰
- For this reason, it is important to wipe infants well after birth and remove mucus from the nose and mouth after birth.
- Do not use soap to clean a newborn infant. Wait at least 24 hours and then clean the infant with a wet cloth only.

Separate Sick Children to Stop Germs (Picture 4.4) – 5 minutes

³⁰ Pneumonia: The forgotten killer of children. UNICEF/WHO. 2006. Available at <http://www.unicef.org/publications>.

9. Show:

- Ask the caregivers to describe what they see in the pictures on page 35.

	? What do you see in these pictures?
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10. Explain:

- Share the key messages using flipcharts pages 34 and 35.
- Use the captions on the flipchart to remind you which images represent each point.
- Ask the question at the bottom of the flipchart to find out if the women believe these new practices work to kill germs and stop transmission (action efficacy). Action efficacy is a behavioral determinant in Barrier Analysis.³¹ If the women do not believe that soap kills germs (or if they don't believe germs are the real cause of infection), they will not adopt these new practices. If women do not believe that germs can live in the air, they will not encourage their children to cough into a cloth or separate sick children from others.
- Reinforce the positive reasons for belief mentioned by women. Some possible reasons may include: Ever since I taught my children to wash their hands with soap, they have not had diarrhea. I can see soap washing away dirt on my hands. I understand now how germs are spread. If I cough in my elbow, I can keep germs out of the air.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Give sick children a separate sleeping mat.
 - Of Great Worth sleeps in a separate bed.
 - Germs in the air from a sick person can infect others in the bed.
- Give sick children their own bowl of food to prevent others from getting sick.
 - Germs on fingers and hands stick to food and can cause infection in others.
 - If a sick person coughs on your food, their germs on the food may make you sick too.
- Discourage healthy children from playing with sick children.
 - Germs on toys and hands can spread germs.
 - Mother A doesn't let others play with Of Great Worth when she is sick.
 - She doesn't want to spread her germs to other children.

? Do you believe these practices will work to stop infection? Why?

³¹ To find out more about barrier analysis, see the following website: <http://barrieranalysis.fhi.net/>

	<p>11. Activity: The Germ song – 15 minutes</p>

Health Managers: Develop a song or poem with the promoters and other program staff. Include the words in the lesson plan. The song should mention the way that germs are spread and the use of soap or ash to wash them away.

Sample Song:

Chorus:

*Germs, germs - They are too small to see.
Germs, germs - They jump from you to me.*

*When you are sick, don't cough on me.
Cough on your shirt, or elbow or sleeve.
When you are sick, don't snot on me.
Wipe your nose with a cloth or wash it away.*

(Chorus)

*When you are sick, I'll make you a separate bed.
I'll give you a separate bowl, to keep germs away.
When you are sick, I'll wash your hands often.
Wash your face with soap, keep it germ free. (chorus)*

1. Practice the Germ Song with the mothers.
2. Explain: Each adult in your home should learn the song. Then everyone will know how to stop sickness from spreading.
3. Give each mother a chance to sing the song for the others.

	<p>12. Probe – 10 minutes</p>
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? What do you think about these ideas? Do you think this advice would be difficult to follow? Is there anything that might stop you from following this guidance?

Ask mothers to talk to a woman sitting next to them for the next five minutes. They should share any personal concerns that they have with these practices. Together they should try to find solutions to these worries and problems. After five minutes, ask the Leader Mothers to share what they have discussed.



13. Inform – 5 minutes

Help find solutions to their concerns. Encourage them to try these new practices. If a woman offers a good solution to another woman's concern, praise her and encourage other mothers to consider using this solution when they talk with others.

14. Practice and Coaching – 20 minutes

- 1. Ask Leader Mothers to share the teachings they have learned today. They will share with another woman in the care group using the ASPIRE method.*
- 2. One Leader Mother will share the teachings from the first two flipchart pages of the lesson. After ten minutes, the Leader Mothers will switch roles. The other Leader Mother will share teachings from the third and fourth flipchart pages of this lesson.*
- 3. Tell the Leader Mothers listening to the message that they should give one objection to the lesson; one reason that they think these messages would be difficult for them.*
- 4. The Leader Mothers sharing the message should try to help the women overcome this obstacle.*
- 5. The Promoter should watch, correct, and help the Leader Mothers who are having trouble.*
- 6. When everyone is finished, answer any questions that the mothers have about the materials, or today's lesson.*



15. Request – 10 minutes

? Are you willing to make a commitment to the teachings you have heard today? What is your commitment?

Ask each mother to say aloud a new commitment that she will make today. Each mother can choose the commitment that is most important to her.

For example:

- I commit to washing my sick child's face and hands often with soap.
- I commit to making a separate sleeping place for sick children.
- I commit to teaching my children to cover their cough to prevent spreading sickness to others.

	16. Examine – 10 minutes
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Ask each mother one-on-one about her commitments.

? What was your commitment at the last lesson? Have you kept that commitment? How – what did you do?

Finally, ask each mother one-on-one about her practices in the last two weeks:

- Has your child had a respiratory infection in the last two weeks?
- If yes, how have you cared for the child at home to help them improve?
 - Have you offered them extra liquids each day?
 - Have you breastfed more often than normal?
 - Have you offered warm liquids to them (infants and children older than 6 months)?
 - Did you make recovery porridge for your child?
- If no, the next time your child is sick with respiratory infection, how will you help your child recover?

Lesson 5: Preventing New Respiratory Infections: Exclusive Breastfeeding, Vaccinations, Healthy Feeding and Reducing Indoor Smoke



- Caregivers will prevent respiratory infections by exclusively-breastfeeding infants under six months of age, giving no other foods or liquids.
- Caregivers will prevent respiratory infections by continuing to breastfeed children until at least two years.
- Caregivers will vaccinate children against severe respiratory infections including whooping cough (pertussis), measles (rubella), and meningal tuberculosis (BCG).
- Caregivers will prevent respiratory infections by adding vitamin A foods, vitamin C foods, foods high in iron, and foods high in protein to staple foods each day.
 - Caregivers will add mango, papaya, orange sweet potato, carrots, and dark green leafy vegetables (vitamin A).
 - Caregivers will add legumes, organ meats, and dark green leafy vegetables (iron).
 - Caregivers will add oranges, lemons, jackfruit, tomatoes, okra, avocado, papaya, and mango (vitamin C).
 - Caregivers will add beans, lentils, nuts, split peas, eggs, meat, chicken, and fish (protein).
 - Caregivers will add a sprinkle of iodized salt and a spoonful of oils to family foods.
- Caregivers will prevent respiratory infections by adding air vents and windows to cooking rooms.
- Caregivers will open all windows and doors when cooking to remove smoke.
- Caregivers will keep children away from smoke to prevent respiratory infection.
 - Caregivers will not smoke in rooms where children play or sleep.
 - Caregivers will not allow children to sit with those who are smoking.
 - When caregivers are cooking, they will ask others to watch the children, or give them tasks so they remain outside.
- Caregivers will examine cooking rooms of women in the group and give advice to help improve air flow.
- Caregivers will believe their child is valuable and they should be protected from severe illness.

Materials

1. Attendance Registers
2. Acute Respiratory Infection Leader Mother Flipchart
3. Two volunteers who are willing to let the group visit their cooking rooms.*

Lesson 5 Summary:

- Game: Transmission Game
- Attendance and Troubleshooting
- Share the story and ask how they protect their children from illness: A Tree Planted by a Stream
- Show pictures and share key messages on flipchart pages 38-43 about breastfeeding, vaccinations, healthy feeding, and reducing indoor smoke.
- Activity: Visiting Cooking Houses
- Probe about possible barriers
- Inform them of possible solutions to the barriers
- Practice and Coaching in pairs
- Request a commitment
- Examine practices related to preventing the spread of respiratory germs.

	1. Game: Transmission Game – 10 minutes
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1. At the beginning of the game, the facilitator should cough loudly into his or her hand several times.
2. The game begins with a few minutes of greeting. Ask everyone in the group to greet four other women in the group and remember the names of the women that they greet (shaking hands or the appropriate local greeting). When they are finished, they can sit down.
3. When everyone is finished, explain that you have a severe respiratory infection. (This is only a game – explain that you really do not have an infection). Tell the woman that you have been coughing all morning into your hand. Your hands are covered with germs from the respiratory infection. (Again, remind them this is only a game).
4. Next, the facilitator names the four women he/she greeted. Explain to them that they too have respiratory germs on their hands. Have they touched their face, their eyes, nose, or mouth, or their child's face, eyes, nose, or mouth since the game started? If yes, they are at risk of getting sick! They have already put germs close to body openings.
5. Next, the facilitator names the first person who shook his/her hand. Whom did she greet next? Those three people also have respiratory infection germs on their hands. Have they touched their face, their

eyes, nose, or mouth since the game began? If yes, they too are at risk of getting sick!

6. Next, the facilitator calls the name of the second person who shook his/her hand. What are the names of the people she greeted after the facilitator? They too have germs on their hands!
7. Discussion questions:
 - a. What could you do if you knew that I was sick? (You may shake my wrist or after shaking hands, be sure to wash with soap and water!)
 - b. What should I do if I know that I am sick? (Shake the wrist of others or tell people that you are sick and you don't want to greet them and spread the sickness).
 - c. What can we learn from this game? (Germs are everywhere! We must remember to wash our hands with soap regularly and keep "germy hands" away from our face.)

Now that we are energized, let's begin today's lesson.



2. Attendance and Troubleshooting – 15 minutes

1. Promoter fills out attendance sheets for each Leader Mother and neighbor group (beneficiary group).
2. Promoter asks if any of the Leader Mothers had problems meeting with their neighbors.
3. The Promoter helps to solve the problems that they mention.
4. Promoter thanks all of the mothers for their hard work and encourages them to continue.
5. Promoter asks the group's Activity Leader³² to discuss the needed items for next week's activity and solicit volunteers.
6. Ask the group to select a new Activity Leader who will be responsible to coordinate the supplies and preparations for the activities in the next module of six lessons. She will make sure that each volunteer brings one or more of the needed items for the lesson's activities. She will come to each of the six meetings ten minutes early so the promoter can give her the list of needed items and explain the activity for the next lesson. The Activity Leader will then ask for volunteers who are willing to bring the needed items during the "Attendance and Troubleshooting" section. She will also assist the promoter during the day's activity. Choose a new Activity Leader when she completes six lessons.

A Tree Planted by a Stream (Picture 5.1) - 10 minutes

³² The Activity Leader should arrive ten minutes prior to each care group meeting to get the description of the activity and the list of needed items from the promoter.

3. Story

- Read the story on page 36 of the flipchart.
- In this story, **Mother B** shares a story about a tree planted by a stream. The tree resists strong winds and sickness. The tree is planted firmly by a stream. The tree has strong roots fed by the clean stream water.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

Mother A tells a story. There is a tree planted by a stream. Its roots drink from the stream. The stream and soil provide healthy foods for the tree. The tree always has fruit and green leaves.

The tree by the stream does not break or become sick when strong winds blow. The tree remains strong. "**Hardship** can be strong like this tree," says **Mother A**. "Every child can be strong if planted like this tree." "How?" asks **Mother B**.

4. Ask

- Ask the first two questions to review the meaning of the story.
- Ask the last question to find out the beliefs of the women of what practices they can do to keep their children healthy.
- We hope that participants respond in this way: The winds do not break the tree or blow away its leaves. It has strong roots that hold it down. It feeds from a stream so that it does not wither in the heat. It remains healthy because it has grown strong after many years of being healthy and well fed. Children will be like a tree if they are well fed and kept healthy during the times when they are most vulnerable (the first two years of life).
- **Encourage discussion. Don't correct "wrong answers."** Let everyone give an opinion. You will correct their inaccurate beliefs in the flipchart pages that follow.



- ? Why does the tree keep its leaves and not break when the winds blow?
- ? What did Mother A mean when she said Hardship could be like a tree?
- ? What are actions we can take to help our children be like a strong tree and resist infections?

Breastfeed and Vaccinate to Keep the Body Strong (Picture 5.2) - 5 minutes

5. Show:

- Ask the caregivers to describe what they see in the pictures on page 39.

	<p>? What do you see in these pictures?</p>
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6. Explain:

- Share the key messages using flipcharts pages 38 and 39.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Give only breastmilk for the first six months of the infant's life.
 - Breastmilk gives the body all the food that it needs in the first six months.
 - Breastmilk protects your child from infections.
 - This child is healthy and fat because his mother gave only breastmilk for six months.
- Exclusively breastfed infants (5 months and younger) are sick less often than children (5 months and younger) who eat and drink other foods and liquids.
 - This child had porridge and water.
 - He is thin and had many illnesses during the first six months of life.
- Vaccinate your children to prevent severe respiratory infections.
 - Vaccinations prevent severe respiratory infection that may cause death (tuberculosis, whooping cough, and measles).
 - Vaccinations help to keep a child strong.
- Breastmilk is like the stream that feeds the body with nutrients. Vaccinations protect the tree from strong winds.
 - Children are valuable and their lives are of great worth
 - Giving breastmilk and vaccinations help to protect children from harm.

Additional Information for the Trainer

Exclusive Breastfeeding

- Exclusive breastfeeding during the first six months of life can reduce the rate of pneumonia among infants by 15 to 23%.³³

Vaccinations (DRC only)

³³ Niessen LW, Hove ten AC, Hilderink HH, Weber M, Mulholland K, Ezzati M. Comparative impact assessment of child pneumonia interventions. *Bull World Health Organ.* 2009;87(6):472-8.

- In the Demographic and Health Survey (DHS) in 2007, only 25 % of children 12-23 months in Katanga were fully vaccinated at the time of the survey.
- Sixty three percent of children were vaccinated against measles, 72% had received BCG and 46% the three doses of DPT - diphtheria, whooping cough and tetanus).

Vaccinations (Mozambique only)

- According to UNICEF statistics for 2008, 77% of children (12 months and younger) had been immunized against measles and 72% had received DPT (diphtheria, whooping cough and tetanus).³⁴

Pertussis Vaccine

- Vaccinations at six, 10 and 14 weeks prevent whooping cough (pertussis). DPT is the name of the vaccination which includes vaccinations for diphtheria and tetanus.
- Whooping Cough causes uncontrollable coughing for two months or more. It also causes vomiting and seizures in young children.

Measles Vaccine

- Vaccinations at 9 months prevent measles.
- Measles causes a high fever, cough, and an itchy rash that covers the entire body.

Healthy Feeding prevents Respiratory Infection (Picture 5.3) – 5 minutes

7. Show:

- Ask the caregivers to describe what they see in the pictures on page 41.

	<p>? What do you see in these pictures?</p>
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8. Explain:

- Share the key messages using flipcharts pages 40 and 41.
- Use the captions on the flipchart to remind you which images represent each point.

<p>The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.</p> <ul style="list-style-type: none"> • Add a variety of foods to [insert the name of the local staple food such as sorghum, manioc, corn or rice] each day to prevent infection.

³⁴ http://www.unicef.org/infobycountry/mozambique_statistics.html

- Of Great Worth eats foods with Vitamin A. She eats mango, papaya, orange sweet potato, carrots and dark green leafy vegetables.
- She eats foods with iron, like legumes, organ meat, and dark green leafy vegetables.
- She eats foods with vitamin C, like oranges, lemons, jackfruit, tomatoes, okra, avocado, papaya and mango.
- Of Great Worth eats foods with protein, like beans, lentils, nuts, split peas, eggs, meat, chicken and fish.
- Her mother adds a sprinkle of iodized salt and a spoonful of oils to her foods.
- Children who eat well get sick less often.
 - Of Great Worth has been sick five days in the last three months.
 - Hardship has been sick 14 days in the last three months.
 - Of Great Worth eats better and gets sick less often.
- Children who don't eat well are more likely to die from illness.
 - Hardship's body is weak because he doesn't eat a variety of foods.
 - He is more likely to die from respiratory infection than Of Great Worth.

Additional Information for the Trainer

Food Groups

- Foods rich in vitamin A protect against severe illness, promote growth and healthy sight (vision). Vitamin A also helps to shorten the length of an illness. See Module 2, Lesson 4 for more information on vitamin A.
- Foods rich in vitamin C help to increase the absorption of iron into the blood. Iron helps to build strong blood and helps children to learn (intellectual development).
- Protein helps to build body tissues and help them repair themselves when damaged.
- For more information on these nutrients, see Module 2, Lesson 5.

Morbidity

- Low birth weight, malnourished and non-breastfed children are at higher risk of getting pneumonia and dying of pneumonia³⁵.

Number of Infections

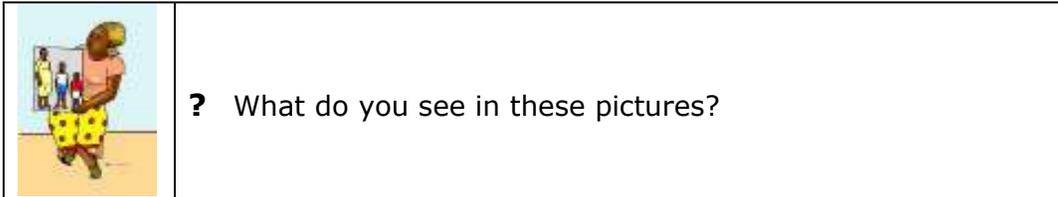
- Children are more susceptible to respiratory infections than adults. The average child will have 3-8 respiratory infections a year.
- Prevention practices greatly reduce the number of infections per year.

³⁵ World Health Organization. *Acute Respiratory Infections in Children*. Available: http://www.who.int/fch/depts/cah/resp_infections/en/. Visited 03/08/2010.

Reduce Indoor Smoke to prevent Respiratory Infections (Picture 5.4) – 5 minutes

9. Show:

- Ask the caregivers to describe what they see in the picture on page 43.



10. Explain:

- Share the key messages using flipcharts pages 42 and 43.
- Use the captions on the flipchart to remind you which images represent each point.

The text below is copied directly from the flipchart. Once the flipchart is translated, paste the translated text into the box here.

- Smoke prevents a tree from growing well. Likewise, smoke harms children who breathe it every day.
 - Smoke causes the leaves and fruit to wilt and fall off.
- When cooking, open doors and windows to let out smoke. Add vents to let smoke out.
 - Mother A has added long vents at the top of the wall to let the smoke out of the house.
 - Mother A is cooking next to the window.
- Discourage children from sitting in cooking rooms.
 - Mother A has asked her children to watch **Of Great Worth** while she is cooking.
 - She has given them work to do outside.
- Smoke in the open air. Keep small children away.
 - Do not smoke in rooms where children play or sleep.
 - The smoke stays in clothes, bedding and the walls.
 - The old smoke in the room can cause respiratory infection.

Additional Information for the Trainer:

Cooking Fuel

- Around 80% of people in rural sub-Saharan Africa use wood, dung and crop residues for cooking fuel.
- The largest reduction in indoor smoke comes from switching to modern fuels such as kerosene, biogas, and liquid petroleum gas (LPG).

Pollution and Respiratory Infections

- Inhaling indoor smoke doubles the risk of pneumonia and other respiratory infections among children under five years of age.
- Women exposed to indoor smoke are three times more likely to suffer from chronic bronchitis or emphysema, than women who cook with electricity, gas or other cleaner fuels.
- Using coal doubles the risk of lung cancer, particularly among women.³⁶

Ventilation

- By enlarging eaves (vents along the top of the wall) in a traditional house in Kenya, smoke particles in the air were reduced by 60%.⁴⁶

Tobacco Smoke³⁷

- Infants whose mothers smoke are 50% more likely to have severe respiratory infection during their first year when compared to infants with nonsmoking mothers.
- Infants whose mothers smoke in the same room have a 56% higher risk of having severe respiratory infection compared to infants whose mothers smoke in a separate room.
- There is a 73% higher risk if mothers smoke while holding their infants and a 95% higher risk if mothers smoke while feeding their infants.



11. Activity: Visiting Cooking Rooms – 30 minutes

1. Ask two mothers who live close to one another to allow the group to look at the room where they cook.
2. Ask the mothers to look at each cooking room and describe what they see.
 - a. Is the cooking fire near a window?
 - b. Does soot cover the walls?
 - c. Are there enough windows and doors? Does the mother usually cook with the windows and doors open?
 - d. Is there a place outside where children could play while the mother is cooking?
 - e. Do adults and children in the household suffer from many respiratory infections?
 - f. Discuss ways that the mother can reduce smoke in her cooking room.
3. Discuss: Are there women in the community whose cooking rooms have more windows and doors?
 - a. Do their cooking rooms let out more smoke?
 - b. What is different about their cooking rooms?
 - c. Can we make these changes to our cooking rooms?

³⁶ Fuel for Life: Household Energy and Health WHO (2006)

³⁷ Blizzard, L.; Ponsonby, A.; Dwyer, T.; Venn, A.; Cochrane, J.A., "Parental smoking and infant respiratory infection: how important is not smoking in the same room with the baby?" *American Journal of Public Health* 93(3): 482-488, March 2003.

4. Discuss ways that the women can work together to reduce indoor smoke in their homes and the community.



12. Probe – 10 minutes

? What do you think about these ideas? Do you think this advice would be difficult to follow? Is there anything that might stop you from following this guidance?

Ask mothers to talk to a woman sitting next to them for the next five minutes. They should share any personal concerns that they have with these practices to this woman. Together they should try to find solutions to these worries and problems. After five minutes, ask the Leader Mothers to share what they have discussed.



13. Inform – 5 minutes

Help find solutions to their concerns. Encourage them to try these new practices. If a woman offers a good solution to another woman's concern, praise her and encourage other mothers to consider using this solution when they talk with others.

14. Practice and Coaching – 20 minutes

1. Ask Leader Mothers to share the teachings they have learned today. They will share with another woman in the care group using the ASPIRE method.
2. One Leader Mother will share the teachings from the first two flipchart pages of the lesson. After ten minutes, the Leader Mothers will switch roles. The other Leader Mother will share teachings from the third and fourth flipchart pages of this lesson.
3. Tell the Leader Mothers listening to the message that they should give one objection to the lesson; one reason that they think these messages would be difficult for them.

4. *The Leader Mothers sharing the message should try to help the women overcome this obstacle.*
5. *The Promoter should watch, correct, and help the Leader Mothers who are having trouble.*
6. *When everyone is finished, answer any questions that the mothers have about the materials, or today's lesson.*

	<p>15. Request – 10 minutes</p>
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? Are you willing to make a commitment to the teachings you have heard today? What is your commitment?

Ask each mother to say aloud a new commitment that she will make today. Each mother can choose the commitment that is most important to her.

For example:

- I commit to talking with my husband about adding more windows and vents to our cooking room.
- I commit to exclusively breastfeeding my newborn.
- I commit to giving my child nutritious foods so they are sick less often.
- I commit to taking my child to the clinic to get his vaccinations.

	<p>16. Examine – 10 minutes</p>
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Ask each mother one-on-one about her commitments.

? What was your commitment at the last lesson? Have you kept that commitment? How – what did you do?

Finally, ask each mother one-on-one about her practices in the last two weeks:

- *Has anyone in your house had respiratory infection in the last two weeks?*

- *If yes: What did you do to prevent the spread of germs to others in your household?*
 - *Did the sick person sleep by himself or herself?*
 - *Did the sick person eat from a separate bowl?*
 - *Did the person cough into a cloth or onto their sleeve?*
 - *Did the sick person wash their hands and face often with soap?*
- *If no one was ill in your household: what will you do to prevent the spread of germs to others?*

Lessons 1 – 5 Pre and Posttest

Two questions from each lesson are listed below. Before and after teaching the materials to staff and trainers, give the posttest to evaluate their comprehension. For those who score less than 75%, give them more training to help them grasp the key content.

1. Name three of the five danger signs for respiratory infection in children.

a. _____

b. _____

c. _____

2. Name two common symptoms of respiratory infection. (If you see these two things, you know your child is sick with respiratory infection).

a. _____

b. _____

Optional: For those trained with a Breath Counter or watch – explain how to diagnose Fast Breathing.

3. Name three of the four danger signs of tuberculosis in adults.

a. _____

b. _____

c. _____

4. Why should the caregiver give all the medicine recommended by the health worker?

5. Name two practices that help to thin snot (thick liquid) in the nose and chest.

a. _____

b. _____

6. Name two practices that help the body to recover well.

a. _____

b. _____

7. What two body liquids contain the highest number of respiratory infected germs?

a. _____

b. _____

8. Name two things caregivers can do to prevent transmission of germs.

a. _____

b. _____

9. True or False. A child who is exclusively breastfed for the first six months of life has fewer respiratory infections than children fed breastmilk and other foods and liquids.

10. Name two ways caregivers can prevent respiratory infection from smoke.

a. _____

b. _____

Posttest Answer Key

For those who score less than 75%, give them more training to help them grasp the key content.

1. Name three of the five danger signs for respiratory infection in children.

Any three of the following are correct:

- *Fast breathing (child breathes much faster than normal)*
- *Chest in-drawing (lower chest wall goes in when the child inhales)*
- *Stridor (noise when the child breathes in)*
- *Coughing for more than 30 days.*
- *Fever*

2. Name two common symptoms of respiratory infection. (If you see these two things, you know your child is sick with respiratory infection).

- Dripping nose or nose full of mucus
- Cough

Optional: For those trained with a Breath Counter or watch – explain how to diagnose Fast Breathing.

Take the shirt off the child. Lay them on their backs and calm them. Count the number breathes (when the child inhales) in 60 seconds. [You may use rocks or an abacus to count the breaths in groups of 10.] After the time is over, compare this number of breaths with the chart for fast breathing (or check to see if the red bead was moved on the row that corresponds with the child's age). If the number corresponds to fast breathing (or if the red bead was moved), take the child immediately to the clinic for treatment.

3. Name three of the four danger signs of tuberculosis in adults.

Any three of the following are correct:

- *Night sweats with fever*
- *Sudden loss of weight*
- *Coughing for more than two weeks (coughing that doesn't stop)*
- *Coughing up blood*

4. Why is it important for a caregiver to give all the medicine recommended by the health worker?

Either of the following is correct:

- *If only half the treatment is given, the illness will return even stronger.*
- *The illness may return even strong and not respond to the second treatment.*

5. Name two practices that help to thin snot (thick liquid) in the nose and chest.

Any two of the following are correct:

- *Help the child inhale hot steam*
- *Give warm liquids to the child*
- *Give more fluids than normal*
- *Breastfeed more often*

6. Name two practices that help the body to recover well.

Any two of the following are correct:

- *Give foods high in vitamin A (or recovery porridge)*
- *Offer favorite foods and soft foods*
- *If fever is present cool down the body with cool water*
- *If it is cold, dress the child in warm clothes.*
- *Encourage the sick to sleep more often.*
- *Prop the sick on a pillow or blanket to help them sleep.*

7. What two body liquids contain the highest number of respiratory infected germs?

- *Saliva (liquid in the mouth)*
- *Snot (thick liquid or mucus from nose or throat)*

8. Name two things caregivers can do to prevent transmission of germs.

Any two of the following are correct:

- *Wash sick child's face and hands often*
- *Caregivers will wash their hands after caring for a sick child.*
- *Teach sick children to cover their cough or cough in their sleeve.*
- *Give sick children a separate sleeping mat*
- *Give sick children a separate bowl of foods (when eating communally)*
- *Discourage sick children from playing with others.*

9. True. A child who is exclusively breastfed for the first six months of life has fewer respiratory infections than children fed breastmilk and other foods and liquids.

10. Name two ways caregivers can prevent respiratory infection from smoke.

Any two of the following are correct:

- *Adding air vents and windows to cooking rooms.*
- *Open all windows and doors when cooking to remove smoke*
- *Do not smoke in rooms where children sleep or play.*
- *Smoke in the open air and keep children away.*
- *Give children tasks to do outside when caregivers are cooking.*
- *Keep children out of cooking rooms.*