

## *Module 5: Infectiousness and Infection Control*

### **Facilitation Tips**

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#### **Purpose:**

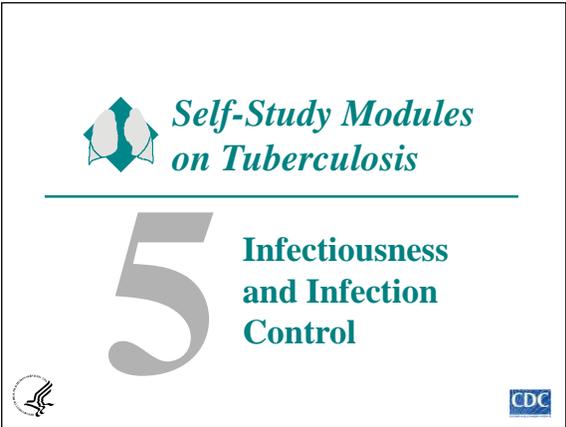
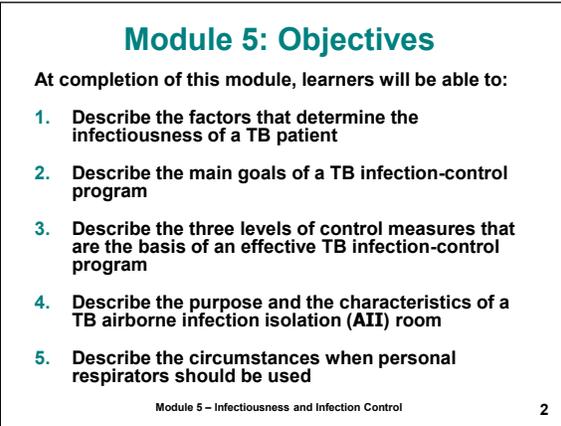
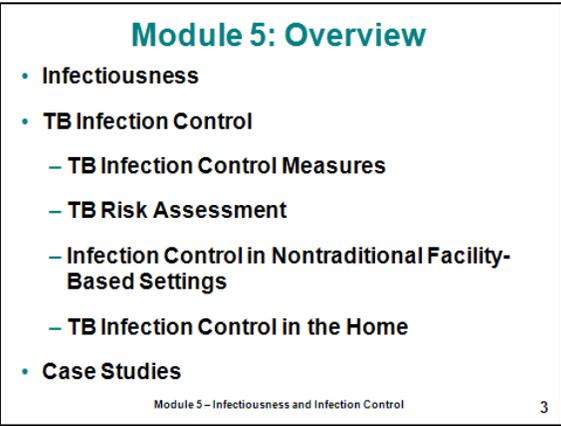
In this module, participants will learn about the factors that determine the infectiousness of a person with tuberculosis (TB) disease. This will help participants decide whether a particular patient should be considered infectious. Participants will also learn about the precautions they should take if they come in contact with patients who are considered infectious to prevent the spread of TB in health care settings and communities. These precautions, or measures, are part of a TB infection-control program that each health care setting should develop to minimize the risk for transmission of *Mycobacterium tuberculosis*.

#### **Learning Objectives:**

1. Describe the factors that determine the infectiousness of a TB patient
2. Describe the main goals of a TB infection-control program
3. Describe the three levels of control measures that are the basis of an effective infection-control program
4. Describe the purpose and the characteristics of a TB airborne infection isolation room
5. Describe the circumstances when personal respirators should be used

#### **Module Overview**

<b>Time</b>	<b>Activity</b>	<b>Content</b>	<b>Resources Needed</b>
2 min.	Presentation	Introduction	Slides 1-3
10 min.	Presentation	Infectiousness	Slides 4-12
15 min.	Presentation	TB Infection Control	Slides 13-27
25 min.	Presentation	TB Infection Control Measures	Slides 28-60
3 min.	Presentation	TB Risk Assessment	Slides 61-65
5 min.	Presentation	Infection Control in Nontraditional Facility-Based Settings	Slides 66-72
5 min.	Presentation	TB Infection Control in the Home	Slides 73-81
10 min.	Case Studies	Case Studies	Slides 82-93
<b>75 min.</b>	<b>Total Time</b>		

		Facilitation Tips
Slide 1		<ul style="list-style-type: none"> <li>- Introduce Module 5</li> </ul>
Slide 2		<ul style="list-style-type: none"> <li>- State objectives of presentation</li> </ul> <p><i>Background and Objectives - Module 5, p. 1</i></p>
Slide 3		<ul style="list-style-type: none"> <li>- Review slide content</li> </ul>

Slide 4

**Infectiousness**

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4

- Introduce section
- Ask participants which factors are associated with infectiousness

*Infectiousness - Module 5, pp. 4-6*

Slide 5

**Infectiousness (1)**

- Infectiousness is directly related to number of tubercle bacilli TB patients expel into air
- TB patients generally expel more tubercle bacilli if their cough produces a lot of sputum
- Only people with TB of the lungs, airway, or larynx are infectious

Module 5 – Infectiousness and Infection Control

5

- Review slide content

*Infectiousness - Module 5, p.4*

Slide 6

**Infectiousness (2)**

**Factors generally associated with infectiousness:**

• Presence of cough	• Not covering mouth when coughing
• Lung cavity	• Not receiving adequate treatment
• Acid-fast bacilli on sputum smear	• Undergoing cough inducing procedures
• TB of lungs, airway, or larynx	• Positive sputum cultures

Module 5 – Infectiousness and Infection Control

6

- Review slide content

*Infectiousness - Module 5, pp. 4-5*

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 7</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Infectiousness (3)</h3> <ul style="list-style-type: none"> <li>• Infectiousness appears to decline rapidly after adequate treatment is started; however: <ul style="list-style-type: none"> <li>– How quickly infectiousness declines varies from patient to patient (weeks to months)</li> <li>– Patients with drug-resistant TB may not respond to initial drug regimen; meaning they may remain infectious for longer</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">7</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic;">Infectiousness - Module 5, p. 6</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 8</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Infectiousness (4)</h3> <ul style="list-style-type: none"> <li>• Patients can be considered non-infectious when they meet <u>all</u> of the following criteria: <ul style="list-style-type: none"> <li>– Received adequate treatment for 2 weeks or longer</li> <li>– Symptoms have improved</li> <li>– 3 consecutive negative sputum smears from sputum collected in 8-24 hour intervals (at least one early morning specimen)</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">8</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic;">Infectiousness - Module 5, p. 6</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 9</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Infectiousness (5)</h3> <ul style="list-style-type: none"> <li>• Children are less likely than adults to be infectious <ul style="list-style-type: none"> <li>– Children generally do not produce a lot of sputum when they cough</li> </ul> </li> <li>• Young children can still transmit TB if they exhibit signs of infectiousness</li> </ul>  <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">9</span></p> </div>	<ul style="list-style-type: none"> <li>- Before showing slide, ask participants if children are more or less likely than adults to be infectious</li> <li>- Review slide content</li> <li>- Explain that children can transmit TB to others if they have signs of infectiousness, such as a positive AFB smear or cavity, in their lung</li> </ul> <p style="text-align: right; font-style: italic;">Infectiousness - Module 5, p. 6</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 10</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Infectiousness Study Question 5.1</b></p> <p><b>List 7 factors that affect the infectiousness of a TB patient.</b> (pg. 7)</p> <ul style="list-style-type: none"> <li>• Presence of a cough</li> <li>• Chest x-ray showing cavity in lung</li> <li>• Positive acid-fast bacilli sputum smear result</li> <li>• TB of lungs, airway, or larynx</li> <li>• Patient not covering mouth or nose when coughing</li> <li>• Not receiving adequate treatment</li> <li>• Undergoing cough-inducing procedures</li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">10</span></p> </div>	<ul style="list-style-type: none"> <li>- Introduce study questions</li> <li>- Ask participants to turn to p. 7 (if participants have print-based modules)</li> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Answers - Module 5, p. 47</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 11</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Infectiousness Study Question 5.2</b></p> <p><b>Why does the site of disease affect the infectiousness of a TB patient?</b> (pg. 7)</p> <ul style="list-style-type: none"> <li>• Usually only people with pulmonary or laryngeal TB are infectious. These people may be coughing and expelling tubercle bacilli into air.</li> <li>• People with extrapulmonary TB are generally not infectious</li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">11</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Answers - Module 5, p. 47</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 12</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Infectiousness Study Question 5.3</b></p> <p><b>When can a TB patient be considered noninfectious? List all 3 criteria.</b> (pg. 7)</p> <ul style="list-style-type: none"> <li>• When they meet <u>all</u> of the following criteria: <ul style="list-style-type: none"> <li>– Received adequate TB treatment for a minimum of 2 weeks</li> <li>– Symptoms have improved</li> <li>– 3 consecutive negative sputum smears from sputum collected in 8-24 hour intervals (one being early morning specimen)</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">12</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Answers - Module 5, p. 47</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 13</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">TB Infection Control</h2> <hr style="width: 30%; margin: 5px auto;"/> <p style="font-size: small; margin-top: 20px;">13</p> </div>	<ul style="list-style-type: none"> <li>- Introduce section</li> </ul> <p style="text-align: right; font-style: italic; margin-top: 20px;"><i>TB Infection Control - Module 5, pp. 9-39</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 14</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Infection Control (1)</h3> <ul style="list-style-type: none"> <li>• Infection control is an important strategy to prevent the spread of TB <ul style="list-style-type: none"> <li>- Several outbreaks of TB in health care settings, including multidrug-resistant TB (MDR TB) and extensively drug-resistant TB (XDR TB), have occurred</li> </ul> </li> <li>• All health care and congregate settings should implement TB infection-control measures</li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">14</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic; margin-top: 20px;"><i>TB Infection Control - Module 5, p. 9</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 15</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Infection Control (2)</h3> <ul style="list-style-type: none"> <li>• TB is most likely to be transmitted when health care workers (HCWs) and patients come in contact with persons who: <ul style="list-style-type: none"> <li>- Have unsuspected TB disease</li> <li>- Are not receiving adequate treatment</li> <li>- Have not been isolated from others</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">15</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that TB can be transmitted in just about any setting but that it is most likely to be transmitted in health care settings with these three characteristics</li> </ul> <p style="text-align: right; font-style: italic; margin-top: 20px;"><i>TB Infection Control- Module 5, p. 9</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 16</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control (3)</b> <b>Role of the Health Department</b></p> <ul style="list-style-type: none"> <li>• Health department TB control programs should: <ul style="list-style-type: none"> <li>– Ensure each of their clinics develop a TB infection-control program</li> <li>– Provide consultation about TB infection control to other health care and congregate settings</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">16</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Role of the Health Department - Module 5, p. 10</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 17</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control (4)</b> <b>Role of the Health Department</b></p> <ul style="list-style-type: none"> <li>• Health departments should specifically assist health care settings with: <ul style="list-style-type: none"> <li>– Reporting confirmed or suspected TB cases</li> <li>– Conducting contact investigations</li> <li>– Ensuring a plan for TB patients to receive follow-up care after discharge</li> <li>– Testing, surveillance, and outbreak investigations</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">17</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that health departments should work closely with health care facilities to help them report confirmed or suspected TB cases as quickly as possible</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Role of the Health Department - Module 5, p. 10</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 18</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection-Control Program (1)</b></p> <ul style="list-style-type: none"> <li>• Main goals of a TB infection-control program are to ensure early and prompt: <ul style="list-style-type: none"> <li>– Detection of TB disease</li> <li>– Isolation of people who have or are suspected of having TB disease (airborne precautions)</li> <li>– Treatment of people who have or are suspected of having TB disease</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">18</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>TB Infection-Control Program - Module 5, p. 11</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 19</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection-Control Program (2)</b> Detection of TB disease</p> <ul style="list-style-type: none"> <li>• HCWs should suspect TB disease in anyone with any of these symptoms: <ul style="list-style-type: none"> <li>– Persistent cough</li> <li>– Bloody sputum</li> <li>– Weight loss or loss of appetite</li> <li>– Fever</li> <li>– Night sweats</li> </ul> </li> </ul>  <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">19</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that in areas where TB is common staff at health care facilities should stay alert for TB; especially staff at public health and community clinics</li> </ul> <p style="text-align: right; font-style: italic;">TB Infection-Control Program - Module 5, p. 11</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 20</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection-Control Program (3)</b> Detection of TB disease</p> <ul style="list-style-type: none"> <li>• When a health care worker suspects that a patient has TB disease, the patient should be: <ul style="list-style-type: none"> <li>– Placed in an area away from other patients and evaluated</li> <li>– Given a surgical mask to wear</li> <li>– Given tissues and asked to cover nose and mouth when coughing or sneezing</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">20</span></p> </div>	<ul style="list-style-type: none"> <li>- Before showing slide, ask what a health care worker should do if they suspect a patient has TB disease</li> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic;">TB Infection-Control Program - Module 5, p. 11</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 21</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection-Control Program (4)</b> Airborne Precautions</p> <ul style="list-style-type: none"> <li>• Airborne precautions should be taken for any person who has signs or symptoms of TB disease</li> <li>• If facility has an AII room, TB suspects and TB patients should be placed there</li> <li>• Health care settings, such as TB clinics, should implement a respiratory-protection program</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">21</span></p> </div>	<ul style="list-style-type: none"> <li>- Before showing slide, ask what airborne precautions should be taken for a person who has signs or symptoms of TB disease</li> <li>- Review slide content</li> <li>- Explain that if a facility does not have an AII room, patients who have or are suspected of having TB should be placed in an area away from other patients</li> <li>- Explain that for settings other than clinics, patients with suspected TB should be promptly referred for a medical evaluation</li> </ul> <p style="text-align: right; font-style: italic;">TB Infection-Control Program - Module 5, pp. 12-13</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 22</p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center;">TB Infection-Control Program (5) Treatment</h3> <ul style="list-style-type: none"> <li>• Patients diagnosed with TB should start treatment immediately</li> <li>• DOT should be used to ensure adherence</li> </ul>  <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">22</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Emphasize that DOT is the best way to ensure adherence to treatment</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>TB Infection-Control Program - Module 5, p. 13</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 23</p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center;">TB Infection Control Study Question 5.4</h3> <p><b>Under what circumstances is TB most likely to be transmitted in health care facilities?</b> <i>(pg. 15)</i></p> <p><b>TB is most likely to be transmitted when health care workers and patients come into contact with persons who:</b></p> <ul style="list-style-type: none"> <li>• Have unsuspected TB disease</li> <li>• Are not receiving adequate treatment</li> <li>• Have not been isolated from others</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">23</span></p> </div>	<ul style="list-style-type: none"> <li>- Introduce study questions</li> <li>- Ask participants to turn to p. 15 (if participants have print-based modules)</li> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Answers - Module 5, p. 47</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 24</p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center;">TB Infection Control Study Question 5.5</h3> <p><b>How can the health department assist health care settings in preventing the spread of TB?</b> <i>(pg. 15)</i></p> <p><b>The health department can:</b></p> <ul style="list-style-type: none"> <li>• Help report confirmed or suspected TB cases</li> <li>• Do contact investigations</li> <li>• Make sure there is a plan for TB patients to receive follow-up care after they are discharged</li> <li>• Help with testing, surveillance, and outbreak investigations</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">24</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Answers - Module 5, p. 48</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 25</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control Study Question 5.6</b></p> <p><b>What are the main goals of a TB infection-control program?</b> (pg. 15)</p> <p>The main goals are to ensure early and prompt</p> <ul style="list-style-type: none"> <li>- Detection of TB disease</li> <li>- Isolation of people who have or are suspected of having TB disease (airborne precautions)</li> <li>- Treatment of people who have or are suspected of having TB disease</li> </ul> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">25</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 48</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 26</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control Study Question 5.7</b></p> <p><b>What would make a health care worker suspect that a patient has TB disease?</b> (pg. 16)</p> <ul style="list-style-type: none"> <li>• Persistent cough</li> <li>• Bloody sputum</li> <li>• Weight loss or loss of appetite</li> <li>• Fever</li> <li>• Night sweats</li> </ul> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">26</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 48</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 27</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control Study Question 5.8</b></p> <p><b>What should be done when a health care worker suspects that a patient has TB disease?</b> (pg. 16)</p> <ul style="list-style-type: none"> <li>• Patient should be placed in an area away from other patients and evaluated</li> <li>• Patient should be given surgical mask to wear</li> <li>• Patient should also be given tissues and asked to cover nose and mouth when coughing or sneezing</li> <li>• Patient diagnosed with TB should start appropriate treatment at once</li> </ul> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">27</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 48</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 28</p>	<div data-bbox="217 266 781 688" style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">TB Infection Control</h2> <hr style="width: 30%; margin: 5px auto;"/> <h3 style="margin: 0;">TB Infection Control Measures</h3> <p style="font-size: small; margin-top: 20px;">28</p> </div>	<ul style="list-style-type: none"> <li>- Introduce section</li> </ul> <p style="text-align: right; font-style: italic; font-size: small; margin-top: 20px;"><i>TB Infection Control Measures - Module 5, pp. 13-29</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 29</p>	<div data-bbox="217 800 781 1222" style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Infection Control Measures (1)</h3> <p style="margin: 0;">Hierarchy of Infection Control</p> <div style="display: flex; flex-direction: column; align-items: center; margin-top: 10px;"> <div style="display: flex; align-items: center; margin-bottom: 10px;">  <div style="background-color: #c8e6c9; padding: 5px; border-radius: 5px; text-align: center; width: 150px;">Administrative Controls</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;">  <div style="background-color: #ffe0b2; padding: 5px; border-radius: 5px; text-align: center; width: 150px;">Environmental Controls</div> </div> <div style="display: flex; align-items: center;">  <div style="background-color: #bbdefb; padding: 5px; border-radius: 5px; text-align: center; width: 150px;">Respiratory Protection</div> </div> </div> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">29</p> </div>	<ul style="list-style-type: none"> <li>- Explain that there are three levels of infection control</li> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic; font-size: small; margin-top: 20px;"><i>TB Infection Control Measures - Module 5, p. 13</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 30</p>	<div data-bbox="217 1293 781 1715" style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Infection Control Measures (2)</h3> <p style="margin: 0;">Three levels of control measures:</p> <ul style="list-style-type: none"> <li>• <b><u>Administrative controls:</u></b> managerial measures to reduce risk of exposure to <i>M. tuberculosis</i></li> <li>• <b><u>Environmental controls:</u></b> engineering systems to prevent the spread of and reduce the concentration of infectious <i>M. tuberculosis</i> droplet nuclei in air</li> <li>• <b><u>Respiratory-protection controls:</u></b> personal protection to further minimize risk for exposure to <i>M. tuberculosis</i></li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">30</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic; font-size: small; margin-top: 20px;"><i>TB Infection-Control Program - Module 5, pp. 13-14</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 31</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">TB Infection Control</h2> <hr style="width: 30%; margin: 5px auto;"/> <h3 style="margin: 0;">TB Infection Control Measures</h3> <h3 style="margin: 0;">Administrative Controls</h3> <p style="font-size: small; margin-top: 20px;">31</p> </div>	<ul style="list-style-type: none"> <li>- Introduce section</li> <li>- Ask participants what types of administrative controls should be used</li> </ul> <p style="text-align: right; font-style: italic;">Administrative Controls - Module 5, pp. 18-21</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 32</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">Administrative Controls (1)</h3> <ul style="list-style-type: none"> <li>• <b>Administrative controls:</b> <ul style="list-style-type: none"> <li>- First and most important level of TB infection-control program</li> <li>- Goal is to reduce risk of exposure to persons who might have TB disease</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">32</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic;">Administrative Controls - Module 5, p. 18</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 33</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">Administrative Controls (2)</h3> <ul style="list-style-type: none"> <li>• <b>Administrative control activities:</b> <ul style="list-style-type: none"> <li>- Assigning someone responsibility for TB infection control</li> <li>- Conducting TB risk assessment</li> <li>- Developing and implementing written TB infection control plan</li> <li>- Ensuring availability of prompt laboratory processing, testing, and reporting of results</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">33</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that a TB risk assessment consists of evaluating the risk of transmission</li> <li>- Explain that an infection control plan should specify policies and practices to ensure prompt detection, isolation, and treatment or transfer of persons who have suspected or confirmed disease</li> <li>- Explain that laboratory services help to determine if patients are still infectious and if they need to remain in an AII room</li> </ul> <p style="text-align: right; font-style: italic;">Administrative Controls - Module 5, pp. 18-19</p>

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### Administrative Controls (3)

- Administrative control activities (cont.):
  - Implementing effective work practices for managing patients who may have TB
  - Ensuring proper cleaning and sterilization or disinfection of equipment
  - Educating, training, and counseling HCWs about TB
  - Testing and evaluating workers who are at risk for TB or may be exposed to TB

Module 5 – Infectiousness and Infection Control

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- Review slide content
- Explain that all health care workers should be educated about basic TB concepts, infection control, and the importance of testing programs
- Explain that TB testing programs can protect both workers and patients. Each health care setting should determine if and how often serial testing is offered depending upon the risk of TB transmission in their setting

*Administrative Controls - Module 5, pp. 19-20*

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### Administrative Controls (4)

- Administrative control activities (continued):
  - Using posters to remind patients of proper cough etiquette
  - Coordinating efforts between health departments and high risk settings



Module 5 – Infectiousness and Infection Control

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- Review slide content
- Emphasize that state or local health department TB control programs and high-risk health care and congregate settings should establish regular communication

*Administrative Controls - Module 5, p. 21*

Slide 36

## TB Infection Control

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### TB Infection Control Measures

### Environmental Controls

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- Introduce section

*Environmental Controls - Module 5, pp. 22-25*

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 37</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Environmental Controls</h3> <ul style="list-style-type: none"> <li>• <b>Second level of infection-control program</b></li> <li>• <b>Consist of technologies that are designed to remove or inactivate airborne <i>M. tuberculosis</i></b> <ul style="list-style-type: none"> <li>– Ventilation technologies</li> <li>– High efficiency particulate air filtration (HEPA)</li> <li>– Ultraviolet germicidal irradiation (UVGI)</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">37</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that the specifics of environmental controls will differ for each health care setting</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Environmental Controls - Module 5, p. 22</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 38</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Ventilation Technologies (1)</h3> <ul style="list-style-type: none"> <li>• <b>Ventilation is the movement of air in a building and the replacement of air inside with air from outside</b></li> <li>• <b>Ventilation technologies include:</b> <ul style="list-style-type: none"> <li>– Natural ventilation</li> <li>– Mechanical ventilation</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">38</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- State that when fresh air enters a room, it dilutes the concentration of particles in room air, such as droplet nuclei containing <i>M. tuberculosis</i></li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Environmental Controls - Module 5, p. 22</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 39</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; color: #008080;">Ventilation Technologies (2)</h3> <h4 style="text-align: center; color: #008080;">Natural Ventilation</h4> <ul style="list-style-type: none"> <li>• <b>Doors and windows should be open</b></li> <li>• <b>Fans can be used to distribute air</b></li> <li>• <b>HCW should sit near fresh air source</b></li> <li>• <b>Can be useful for nontraditional settings that do not have a central ventilation system</b></li> </ul> <div style="text-align: right; margin-top: 10px;">  </div> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">39</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that natural ventilation relies on open doors and windows to bring in air from the outside</li> <li>- State that waiting rooms, shelter dormitories, or other rooms in which people congregate should have an operable door, window, or skylight kept open as often as possible</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Natural Ventilation - Module 5, pp. 22-23</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 40</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Ventilation Technologies (3)</b> <b>Mechanical Ventilation</b></p> <ul style="list-style-type: none"> <li>• Refers to the use of technological equipment to circulate and move air</li> <li>• Consists of two types of technologies <ul style="list-style-type: none"> <li>– Local exhaust ventilation</li> <li>– General ventilation</li> </ul> </li> <li>• Should be used by hospitals, TB clinics, and other settings where TB patients are expected</li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">40</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Mechanical Ventilation - Module 5, pp.23-24</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 41</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Ventilation Technologies (4)</b> <b>Mechanical Ventilation</b></p> <ul style="list-style-type: none"> <li>• Local exhaust ventilation <ul style="list-style-type: none"> <li>– Stops airborne contaminants from spreading into general environment</li> <li>– Includes external hoods, booths, and tents</li> <li>– Should be used for cough-inducing procedures</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">41</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Mechanical Ventilation - Module 5, pp.23-24</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 42</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Ventilation Technologies (5)</b> <b>Mechanical Ventilation</b></p> <ul style="list-style-type: none"> <li>• General ventilation systems: <ul style="list-style-type: none"> <li>– Dilute contaminated air</li> <li>– Remove contaminated air</li> <li>– Control airflow patterns in patient and procedure rooms (e.g., negative pressure in AII room)</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">42</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Mechanical Ventilation - Module 5, pp.23-24</i></p>

## Ventilation Technologies (6)

### Mechanical Ventilation

- AII rooms are designed to prevent spread of droplet nuclei expelled by patient
  - Negative pressure
  - Clean air flows from corridors into AII room
- Air cannot escape AII room
  - Exhausted outdoors or passed through filter

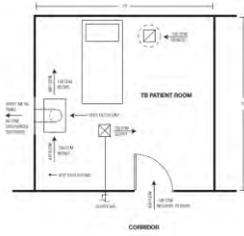


Image credit: Francis J. Curry National TB Center

Module 5 – Infectiousness and Infection Control

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- Explain that in TB clinics, hospitals, and other inpatient settings, patients known or suspected of having TB disease should be placed in an AII room
- Review slide content
- Note that air from AII rooms can be exhausted outdoors because any infectious droplet nuclei will be diluted in the outdoor air and killed by sunlight

*Mechanical Ventilation - Module 5, p. 24*  
 [Image credit: Francis J. Curry National TB Center]

## HEPA Filters

- HEPA filters are special filters used to remove droplet nuclei from air
- Must be used when releasing air from:
  - Local exhaust ventilation booths to surrounding area
  - AII room to general ventilation system

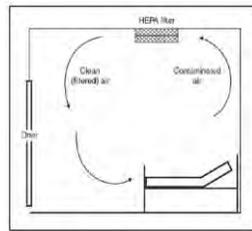


Image credit: Francis J. Curry National TB Center

Module 5 – Infectiousness and Infection Control

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- Review slide content
- Use the image to illustrate how air circulates through the room

*HEPA Filters - Module 5, p. 24*  
 [Image credit: Francis J. Curry National TB Center]

## UVGI

- UVGI is air cleaning technology that consists of lamps that give off UV light, which can kill tubercle bacilli
- Should be used with other infection control measures
- UV light can be harmful to skin and eyes

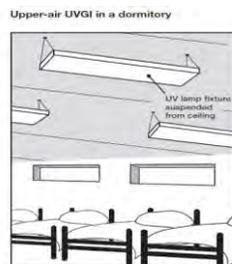


Image credit: Francis J. Curry National TB Center

Module 5 – Infectiousness and Infection Control

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- Review slide content
- State that because UV light can be harmful to skin and eyes the lamps must be installed in upper part of rooms or corridors or placed in exhaust ducts

*UVGI - Module 5, p. 24*  
 [Image credit: Francis J. Curry National TB Center]

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 46</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">TB Infection Control</h2> <hr style="width: 30%; margin: 5px auto;"/> <h3 style="margin: 0;">TB Infection Control Measures Respiratory-Protection Controls</h3> <p style="font-size: small; margin-top: 10px;">46</p> </div>	<ul style="list-style-type: none"> <li>- Introduce section</li> <li>- Ask what types of respiratory protection controls should be used by the patient and the health care worker</li> </ul> <p style="text-align: right; font-size: small; margin-top: 20px;"><i>Respiratory-Protection Controls - Module 5, pp. 26-28</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 47</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">Respiratory-Protection Controls (1)</h3> <ul style="list-style-type: none"> <li>• Third level of infection-control that includes: <ul style="list-style-type: none"> <li>- Implementing a respiratory-protection program</li> <li>- Training health care workers on respiratory-protection</li> <li>- Educating patients on respiratory hygiene</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: small;">47</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Note that all health care settings that use respiratory-protection controls are required by the Occupational Safety and Health Administration (OSHA) to develop, implement, and maintain a respiratory-protection program</li> <li>- Explain that respiratory-protection controls reduce the risk of TB transmission in settings where administrative and environmental controls may not fully protect persons against droplet nuclei</li> </ul> <p style="text-align: right; font-size: small; margin-top: 20px;"><i>Respiratory-Protection Controls - Module 5, p. 26</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 48</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">Respiratory-Protection Controls (2) Personal Respirators</h3> <ul style="list-style-type: none"> <li>• Respirators filter out droplet nuclei</li> <li>• Should be used in: <ul style="list-style-type: none"> <li>- TB AII rooms</li> <li>- Cough-inducing procedure rooms</li> <li>- Ambulances transporting infectious TB patients</li> <li>- Homes of infectious TB patients</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: small;">48</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-size: small; margin-top: 20px;"><i>Personal Respirators - Module 5, p. 26</i></p>

Slide 49

### Respiratory-Protection Controls (3) Personal Respirators

- Important that respirator fits properly:
  - Fit test used to determine which respirator to wear
  - User seal check should be done each time a respirator is put on



Health care worker undergoing a fit test  
Image credit: Paul Jensen

Module 5 – Infectiousness and Infection Control

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- Review slide content
- Emphasize that the most important factor to consider when selecting respirator is whether the respirator fits properly
- Explain that the image is of a health care worker undergoing a fit test for a personal respirator

*Personal Respirators - Module 5, p. 27*  
*[Image credit: Paul Jensen]*

Slide 50

### Respiratory-Protection Controls (4) Personal Respirators

- Respirators that can be used to protect against *M. tuberculosis*:
  - Nonpowered respirators with N95, N99, N100, R95, R99, R100, P95, P99, and P100 filters
  - Powered air-purifying respirators (PAPRs) with high-efficiency filters



Image credit: Greg Knobloch

Module 5 – Infectiousness and Infection Control

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- Review slide content
- Explain that the top image shows nonpowered respirators
- Explain that the bottom image is of a woman wearing a powered air-purifying respirator (PAPR)

*Personal Respirators - Module 5, p. 27*  
*[Image credit: Greg Knobloch]*

Slide 51

### Respiratory-Protection Controls (5) Respirators and Surgical Masks

- Important to understand difference between respirators and surgical masks
  - Respirators protect individuals from inhaling droplet nuclei
  - Surgical masks stop droplet nuclei from being exhaled into air by infectious TB patients or suspects

Module 5 – Infectiousness and Infection Control

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- Review slide content
- Explain that respirators protect individuals from becoming infected with *M. tuberculosis* and that surgical masks protect individuals from expelling infectious droplet nuclei

*Respirators and Surgical Masks - Module 5, p. 27*

Slide 52

### Respiratory-Protection Controls (6) Respirators



Health care worker wearing a personal respirator

Module 5 – Infectiousness and Infection Control

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- Explain that this image is of a health care worker wearing a personal respirator

*Personal Respirators - Module 5, p. 28*

Slide 53

### Respiratory-Protection Controls (7) Surgical Masks



Patient wearing a surgical mask

Module 5 – Infectiousness and Infection Control

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- Explain that this image is of a patient wearing a surgical mask
- Emphasize that patients should not wear respirators because respirators are designed to prevent persons from inhaling droplet nuclei

*Surgical Mask - Module 5, p. 28*

Slide 54

### TB Infection-Control Study Question 5.9

What are the three levels of control that form the basis of a TB infection-control program?  
(pg. 16)

- Administrative controls
- Environmental controls
- Respiratory-protection controls

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- Introduce study questions
- Ask participants to turn to p. 16 (if participants have print-based modules)
- Read question
- Ask participants for answers

*Answers - Module 5, p. 49*

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 55</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Administrative Controls Study Question 5.10</b></p> <p><b>List 5 administrative control measures that should be taken in health care settings to reduce the risk of exposure to persons who may have TB disease.</b> (pg. 30)</p> <ul style="list-style-type: none"> <li>• Assign responsibility for TB infection control</li> <li>• Conduct TB risk assessment</li> <li>• Develop and implement a written TB infection-control plan</li> <li>• Ensure prompt availability of recommended laboratory processing, testing, and reporting of results</li> <li>• Implement effective work practices for the management of patients</li> <li>• Ensure proper cleaning, sterilization, or disinfection of potentially contaminated equipment</li> <li>• Train and educate health care workers</li> <li>• Test and evaluate health care workers for TB</li> <li>• Use posters and signs educating and advising respiratory hygiene and cough etiquette</li> <li>• Coordinate efforts with the local or state health department</li> </ul> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>55</b></p> </div>	<ul style="list-style-type: none"> <li>- Ask participants to turn to p. 30 (if participants have print-based modules)</li> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 49</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 56</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Environmental Controls Study Question 5.11</b></p> <p><b>Where should sputum induction, bronchoscopy, or other cough-inducing procedures be done?</b> (pg. 30)</p> <p style="margin-top: 20px;"><b>These medical procedures should be done in special AII rooms or booths to prevent any droplet nuclei expelled during the procedure from reaching other parts of the facility.</b></p> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>56</b></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 49</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 57</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Environmental Controls Study Question 5.12</b></p> <p><b>What is a TB AII room? What are the important characteristics of an AII room?</b> (pg. 30)</p> <p style="margin-top: 20px;"><b>Rooms that have special characteristics to prevent spread of droplet nuclei expelled by TB patient. They are at negative pressure relative to other parts of the facility, and air from the room is exhausted directly to the outdoors or passed through a filter.</b></p> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>57</b></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 50</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 58</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Ventilation Systems Study Question 5.13</b></p> <p><b>How do ventilation systems help prevent the spread of TB?</b> (pg. 31)</p> <p>Ventilation systems maintain negative pressure and exhaust air properly. These systems can also be designed to minimize the spread of TB in other areas of the facility.</p> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">58</span></p> </div>	<ul style="list-style-type: none"> <li>- Ask participants to turn to p. 31 (if participants have print-based modules)</li> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 50</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 59</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Ventilation Systems Study Question 5.14</b></p> <p><b>Give 4 examples of settings where personal respirators should be used.</b> (pg. 31)</p> <ul style="list-style-type: none"> <li>• TB AII rooms</li> <li>• Rooms where cough-inducing procedures are done</li> <li>• Ambulances or other vehicles transporting infectious TB patients</li> <li>• Homes of infectious TB patients</li> </ul> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">59</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 50</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 60</p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Respiratory Protection-Controls Study Question 5.15</b></p> <p><b>What is the difference in use between a respirator and a surgical mask?</b> (pg. 31)</p> <ul style="list-style-type: none"> <li>• Respirators protect individuals from <u>inhaling</u> droplet nuclei</li> <li>• Surgical masks stop droplet nuclei from being <u>exhaled</u> into the air by the person wearing them</li> </ul> <p style="font-size: small;">Module 5 – Infectiousness and Infection Control <span style="float: right;">60</span></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 50</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 61</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">TB Infection Control</h2> <hr style="width: 30%; margin: 5px auto;"/> <h3 style="margin: 0;">TB Risk Assessment</h3> </div> <p style="text-align: right; font-size: small;">61</p>	<ul style="list-style-type: none"> <li>- Introduce section</li> </ul> <p style="text-align: right; font-size: small;"><i>TB Risk Assessment - Module 5, pp. 32-34</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 62</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Risk Assessment (1)</h3> <ul style="list-style-type: none"> <li>• Administrative control measure</li> <li>• Helps to inform infection control plan</li> <li>• Determines types of controls needed for setting</li> <li>• Serves as an initial and ongoing monitoring and evaluation tool for infection-control program</li> <li>• Helps determine frequency of employee testing</li> </ul> <p style="font-size: x-small; margin-top: 5px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: small;">62</p> </div>	<ul style="list-style-type: none"> <li>- Explain that every health care and congregate setting should conduct initial and ongoing evaluations of the risk for transmission of <i>M. tuberculosis</i></li> <li>- Review slide content</li> </ul> <p style="text-align: right; font-size: small;"><i>TB Risk Assessment - Module 5, p. 32</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 63</b></p>	<div style="border: 1px solid black; padding: 10px;"> <h3 style="margin: 0;">TB Risk Assessment (2)</h3> <ul style="list-style-type: none"> <li>• Risk assessment examines many factors, including: <ul style="list-style-type: none"> <li>– Number of patients with TB disease in setting</li> <li>– Promptness of detection, isolation, and evaluation of patients with suspected or confirmed TB</li> <li>– Evidence of transmission of <i>M. tuberculosis</i> in setting</li> <li>– Community rate of TB disease</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 5px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: small;">63</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-size: small;"><i>TB Risk Assessment - Module 5, p. 32</i></p>

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**TB Risk Classification**

- **Low risk**
  - Persons with TB disease are not expected to be encountered
- **Medium risk**
  - Possible exposure to persons with TB disease
  - Possible exposure to clinical TB specimens
- **Potential ongoing transmission**
  - Setting where there is evidence of person-to-person transmission of *M. tuberculosis* in past year

Module 5 – Infectiousness and Infection Control 64

- Explain that the risk level will vary from setting to setting. There are three TB risk classifications
- Review slide content

*TB Risk Classification - Module 5, pp. 32-33*

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**TB Testing Frequency**

TB Risk Classification	Frequency for TB Testing
Low Risk	<ul style="list-style-type: none"> <li>• Conduct baseline test when health care worker is hired</li> <li>• No further testing needed unless exposure occurs</li> </ul>
Medium Risk	<ul style="list-style-type: none"> <li>• Conduct baseline test when health care worker is hired</li> <li>• Repeat test annually</li> </ul>
Potential Ongoing Transmission	<ul style="list-style-type: none"> <li>• Conduct baseline test when health care worker is hired</li> <li>• Repeat test every 8-10 weeks until there is no evidence of ongoing transmission</li> </ul>

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- Explain that TB risk assessment helps to determine the need for a TB testing program and the frequency of the testing
- Review slide content

*TB Testing Frequency - Module 5, pp. 33-34*

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**TB Infection Control**

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**Infection Control in  
Nontraditional  
Facility-Based Settings**

66

- Introduce section

*Infection Control in Nontraditional Facility-Based Settings  
- Module 5, pp. 33-34*

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 67</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (1)</b></p> <ul style="list-style-type: none"> <li>• <b>Nontraditional facility-based settings where TB patients receive care should establish and follow an infection-control program</b></li> <li>• <b>Includes settings such as:</b> <ul style="list-style-type: none"> <li>– Nursing homes</li> <li>– Correctional facilities</li> <li>– Homeless shelters</li> <li>– Drug treatment centers</li> <li>– Emergency medical services</li> <li>– Home-based health care</li> <li>– Outreach settings</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">67</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Explain that the main goal should be to detect TB disease early and arrange for isolation and treatment of patients suspected of having TB</li> <li>- Local health departments and congregate settings should collaborate to provide training and education about TB as well as conducting contact investigations when necessary</li> </ul> <p style="text-align: right; font-style: italic;">Special Considerations - Module 5, p. 35</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 68</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (2) Correctional Facilities</b></p> <ul style="list-style-type: none"> <li>• <b>Medical settings within correctional facilities should:</b> <ul style="list-style-type: none"> <li>– Classify as medium risk or higher</li> <li>– Test all staff annually</li> <li>– Implement a respiratory-protection program with at least one AII room</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">68</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; font-style: italic;">Correctional Facilities - Module 5, pp. 35-36</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 69</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (3) Correctional Facilities</b></p> <ul style="list-style-type: none"> <li>• <b>Medical settings within correctional facilities should (cont.):</b> <ul style="list-style-type: none"> <li>– Have inmates with suspected or confirmed TB disease wear surgical mask when transported</li> <li>– Establish and maintain a tracking system for inmate testing and treatment</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">69</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- State that confidentiality of inmate information should be ensured during testing for signs and symptoms of TB</li> </ul> <p style="text-align: right; font-style: italic;">Correctional Facilities - Module 5, pp. 35-36</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 70</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (4)</b> <b>Homeless Shelters</b></p> <ul style="list-style-type: none"> <li>• Should observe the same TB infection-control measures as outpatient clinics</li> <li>• Several factors in shelter environment can influence likelihood of TB transmission: <ul style="list-style-type: none"> <li>– Crowdedness of shelter</li> <li>– Ventilation system of shelter</li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">70</span></p> </div>	<ul style="list-style-type: none"> <li>- Explain that TB is more common in the homeless population than the general population</li> <li>- Review slide content</li> </ul> <p style="text-align: right;"><i>Homeless Shelters - Module 5, p. 36</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 71</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (5)</b> <b>Emergency Medical Services (EMS)</b></p> <ul style="list-style-type: none"> <li>• EMS workers should be included in TB testing program based on risk for the setting</li> <li>• Persons with infectious TB who are transported in ambulance should wear surgical mask</li> <li>• Drivers, health care workers, and other staff should consider wearing a respirator</li> <li>• Ambulance should allow for maximum amount of outdoor air to be circulated in vehicle</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">71</span></p> </div>	<ul style="list-style-type: none"> <li>- Explain that even though the overall risk of transmission of <i>M. tuberculosis</i> in EMS settings is low, there has been documented transmission</li> <li>- Review slide content</li> </ul> <p style="text-align: right;"><i>Emergency Medical Services - Module 5, p. 36</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 72</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Special Considerations (6)</b> <b>Long-Term Care Facilities (LTCFs)</b></p> <ul style="list-style-type: none"> <li>• LTCFs (e.g., hospices and nursing homes) should: <ul style="list-style-type: none"> <li>– Symptom screen and possibly test new employees and residents</li> <li>– Have administrative and environmental controls <b>IF</b> they accept patients with infectious TB</li> </ul> </li> <li>• Persons with TB disease who are non-infectious can stay in LTCFs and do not need AII room</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">72</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Emphasize that patients with suspected or confirmed infectious TB disease should not stay in a long-term care facility unless adequate administrative and environmental controls are in place</li> </ul> <p style="text-align: right;"><i>Long-Term Care Facilities - Module 5, pp. 36-37</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 73</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>TB Infection Control</b></p> <hr style="width: 30%; margin: auto;"/> <p><b>TB Infection Control in the Home</b></p> <p style="font-size: small; margin-top: 20px;">73</p> </div>	<ul style="list-style-type: none"> <li>- Introduce section</li> <li>- Ask what type of TB infection control should be used in the home for the             <ul style="list-style-type: none"> <li>○ family</li> <li>○ health care worker</li> </ul> </li> </ul> <p style="margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, pp. 38-39</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 74</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection Control in the Home (1)</b> Patient Returning Home</p> <ul style="list-style-type: none"> <li>• TB patients and TB suspects may be sent home after starting treatment, even though they may be infectious</li> </ul> <p style="font-size: x-small; margin-top: 20px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">74</p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, p. 38</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 75</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection Control in the Home (2)</b> Patient Returning Home</p> <ul style="list-style-type: none"> <li>• Criteria for patient to return home:             <ul style="list-style-type: none"> <li>– Follow-up plan with local TB program</li> <li>– Patient on TB treatment and DOT arranged</li> <li>– No infants or children under 4 years or persons with immunocompromising conditions in home</li> </ul> </li> </ul> <p style="font-size: x-small; margin-top: 20px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">75</p> </div>	<ul style="list-style-type: none"> <li>- Explain that TB patients can return home even if they do not have three negative sputum smears, if certain criteria are met</li> <li>- Explain that patients with TB disease are allowed to go back home if <u>all</u> of the criteria are met</li> <li>- Review slide content</li> </ul> <p style="margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, p. 38</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 76</p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection Control in the Home (3)</b> Patient Returning Home</p> <ul style="list-style-type: none"> <li>• Criteria for patient to return home (cont.):             <ul style="list-style-type: none"> <li>– All household members have already been exposed to TB patient</li> <li>– Patient is willing to not travel outside of home until sputum smear results are negative</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">76</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, p. 38</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 77</p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection Control in the Home (4)</b> Patient Returning Home</p> <ul style="list-style-type: none"> <li>• TB patients and members of household should take steps to prevent spread of TB</li> <li>• Patients with TB should be instructed to:             <ul style="list-style-type: none"> <li>– Cover mouth and nose with tissue when coughing or sneezing</li> <li>– Sleep alone</li> <li>– Not have visitors until noninfectious</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">77</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> <li>- Note that it is more likely that TB patients transmitted TB to members of their household <b>before</b> their TB was diagnosed and TB started; however, steps should still be taken to prevent the spread of TB in the home when the patient returns</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, p. 38</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Slide 78</p>	<div style="border: 1px solid black; padding: 10px;"> <p><b>TB Infection Control in the Home (5)</b> Health Care Workers (HCWs)</p> <ul style="list-style-type: none"> <li>• HCWs should:             <ul style="list-style-type: none"> <li>– Be trained in detecting TB signs and symptoms</li> <li>– Take precautions to protect themselves:                 <ul style="list-style-type: none"> <li>• Instruct patient to cover mouth when coughing</li> <li>• Wear personal respirator</li> <li>• Collect sputum in well-ventilated areas</li> </ul> </li> <li>• Participate in TB testing and prevention programs</li> </ul> </li> </ul> <p style="font-size: small; margin-top: 10px;">Module 5 – Infectiousness and Infection Control <span style="float: right;">78</span></p> </div>	<ul style="list-style-type: none"> <li>- Review slide content</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>TB Infection Control in the Home - Module 5, p. 38</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 79</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Risk Assessment Study Question 5.16</b></p> <p><b>What are 3 different TB risk classifications that can be assigned to health care settings?</b> (pg. 40)</p> <ul style="list-style-type: none"> <li>• Low risk</li> <li>• Medium risk</li> <li>• Potential ongoing transmission</li> </ul> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>79</b></p> </div>	<ul style="list-style-type: none"> <li>- Introduce study questions</li> <li>- Ask participants to turn to p. 40 (if participants have print-based modules)</li> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 50</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 80</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Risk Assessment Study Question 5.17</b></p> <p><b>Depending on risk classification, how often should health care settings test workers for TB?</b> (pg. 40)</p> <ul style="list-style-type: none"> <li>• Low Risk Settings <ul style="list-style-type: none"> <li>- Conduct TB baseline test when HCW is hired</li> <li>- No further testing needed unless exposure occurs</li> </ul> </li> <li>• Medium Risk Settings <ul style="list-style-type: none"> <li>- Conduct TB baseline test when HCW is hired</li> <li>- Repeat test annually</li> </ul> </li> <li>• Potential Ongoing Transmission <ul style="list-style-type: none"> <li>- Conduct baseline test when HCW is hired</li> <li>- Repeat test 8-10 weeks until there is no longer evidence of <i>M. tuberculosis</i> transmission in the setting</li> </ul> </li> </ul> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>80</b></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 51</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 81</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>TB Infection Control in the Home Study Question 5.18</b></p> <p><b>What precautions should a health care worker take when visiting the home of a TB patient who may be infectious?</b> (pg. 40)</p> <ul style="list-style-type: none"> <li>• Instruct patients to cover mouth and nose with a tissue when coughing or sneezing</li> <li>• Wear a personal respirator</li> <li>• Collect sputum specimen in a well-ventilated area</li> <li>• Participate in a TB testing and prevention program</li> </ul> <p style="text-align: right;"><small>Module 5 – Infectiousness and Infection Control</small> <b>81</b></p> </div>	<ul style="list-style-type: none"> <li>- Read question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers - Module 5, p. 51</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 82</b></p>	<div style="border: 1px solid black; padding: 20px; text-align: center;"> <h2 style="color: #008080;">Case Studies</h2> <hr style="width: 30%; margin: 10px auto;"/> <p style="font-size: small; margin-top: 20px;">82</p> </div>	<ul style="list-style-type: none"> <li>- Introduce case studies</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 83</b></p>	<div style="border: 1px solid black; padding: 10px;"> <div style="border: 1px solid #008080; padding: 10px; margin-bottom: 5px;"> <p style="text-align: center; color: #008080;"><b>Module 5: Case Study 5.1</b></p> <p>For each of the following situations, decide whether the patient should be considered infectious or non-infectious, and explain why. <i>(pg. 8)</i></p> </div> <p style="font-size: x-small; margin-top: 5px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">83</p> </div>	<ul style="list-style-type: none"> <li>- Ask participants to turn to p. 8 (if participants have print-based modules)</li> <li>- Read case study</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Case Study 5.1 – Module 5, p. 8</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 84</b></p>	<div style="border: 1px solid black; padding: 10px;"> <div style="border: 1px solid #008080; padding: 10px; margin-bottom: 5px;"> <p style="text-align: center; color: #008080;"><b>Module 5: Case Study 5.1</b></p> <p style="text-align: center; color: #008080;"><b>Question 5A</b></p> <p>Two weeks ago, Mr. Lopez had a sputum smear that was positive; since then no sputum specimens have been tested. Mr. Lopez started self-administered TB treatment 7 days ago. He still has a cough.</p> </div> <p style="font-size: x-small; margin-top: 5px;">Module 5 – Infectiousness and Infection Control</p> <p style="text-align: right; font-size: x-small;">84</p> </div>	<ul style="list-style-type: none"> <li>- Read case study question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right; margin-top: 20px;"><i>Case Study 5.1 – Module 5, p. 8</i></p>

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**Module 5: Case Study 5.1**  
**Question 5A: Answer**

- Mr. Lopez should be considered infectious
- Should be given his treatment by DOT to ensure he receives adequate treatment
- Does not meet the criteria for non-infectious because:
  - He has been receiving treatment for only 7 days not 2 weeks
  - His symptoms haven't improved
  - He does not have 3 consecutive negative sputum smears

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*Answers – Module 5, p. 52*

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**Module 5: Case Study 5.1**  
**Question 5B**

Ms. Nguyen, a patient with pulmonary TB, has been receiving DOT treatment for 6 weeks and no longer has symptoms of TB. She has had three sputum smears. The first one was positive, but the last two were negative.

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- Read case study question
- Ask participants for answers

*Case Study 5.1 – Module 5, p. 8*

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**Module 5: Case Study 5.1**  
**Question 5B: Answer**

- Ms. Nguyen should be considered infectious until she has 3 consecutive negative sputum smears
- Meets the first 2 criteria for non-infectiousness:
  - Has been receiving treatment for at least 2 weeks
  - Her symptoms have improved

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*Answers – Module 5, p. 52*

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 88</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.1</b> <b>Question 5C</b></p> <p>Mr. Martin started DOT treatment for pulmonary TB in April. His symptoms went away and his sputum smears were negative in May. However, the outreach worker was unable to locate him on June 5<sup>th</sup> and has not been able to contact him since that time. Mr. Martin returned to the TB clinic today, August 2, and is coughing.</p> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">88</span></p> </div>	<ul style="list-style-type: none"> <li>- Read case study question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Case Study 5.1 – Module 5, p. 8</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 89</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.1</b> <b>Question 5C: Answer</b></p> <ul style="list-style-type: none"> <li>• Mr. Martin, at this point, should be considered infectious</li> <li>• He might have been non-infectious in May, but it appears that he may be infectious again <ul style="list-style-type: none"> <li>– Has been coughing and has not received adequate treatment since June 4<sup>th</sup></li> </ul> </li> <li>• Should be evaluated for infectiousness and non-adherence to treatment</li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">89</span></p> </div>	<p style="text-align: right;"><i>Answers – Module 5, p. 52</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 90</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.2 (1)</b></p> <p>You are checking patients into the TB clinic. An elderly man comes to the desk and says he was told to come and get checked because one of his friends has TB. You notice that he looks sick and is coughing frequently. The waiting room is full of patients, and you know it will probably be more than an hour before the physician can see him. (pg. 17)</p> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">90</span></p> </div>	<ul style="list-style-type: none"> <li>- Ask participants to turn to p. 17 (if participants have print-based modules)</li> <li>- Read case study</li> </ul> <p style="text-align: right;"><i>Case Study 5.2 – Module 5, p.17</i></p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 91</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.2 (2)</b></p> <ul style="list-style-type: none"> <li>• <b>What should you do?</b> <ul style="list-style-type: none"> <li>– <b>Suspect that this man has infectious TB and work with clinical staff to ensure he is evaluated for TB quickly</b></li> <li>– <b>Give him a surgical mask, instruct him to keep it on, and ask him to cover his mouth and nose when coughing or sneezing.</b></li> <li>– <b>Move the man to an area away from other patients right away</b></li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">91</span></p> </div>	<ul style="list-style-type: none"> <li>- Read case study question</li> <li>- Ask participants for answers</li> </ul> <p style="text-align: right;"><i>Answers – Module 5, p. 52</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 92</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.3 (1)</b></p> <p><b>You are sent to deliver directly observed therapy (DOT) to a woman who started treatment last week for suspected pulmonary TB. Her sputum smear results are not back yet. You are asked to collect another sputum specimen while you are at the woman’s home. (pg. 41)</b></p> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">92</span></p> </div>	<ul style="list-style-type: none"> <li>- Ask participants to turn to p. 41 (if participants have print-based modules)</li> <li>- Read case study</li> </ul> <p style="text-align: right;"><i>Case Study 5.3 – Module 5, p.43</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Slide 93</b></p>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Module 5: Case Study 5.3 (2)</b></p> <ul style="list-style-type: none"> <li>• <b>What precautions should you take?</b> <ul style="list-style-type: none"> <li>• <b>Instruct patient to cover her mouth and nose when she coughs or sneezes.</b></li> <li>• <b>Wear a personal respirator when visiting her home.</b></li> <li>• <b>Collect sputum in well-ventilated area, away from other household members.</b></li> <li>• <b>Participate in a TB testing and prevention program</b></li> </ul> </li> </ul> <p style="font-size: small; text-align: center;">Module 5 – Infectiousness and Infection Control <span style="float: right;">93</span></p> </div>	<ul style="list-style-type: none"> <li>- Read case study question</li> <li>- Ask participants for answers</li> <li>- Ask if there are any questions about Module 5</li> </ul> <p style="text-align: right;"><i>Answers – Module 5, p. 53</i></p>