

Module 7. Infection Control

Goal

To prepare participants to practice infection control effectively and apply the principles of standard precautions appropriately in everything they do with consumers.

Time

3.5 hours (includes 30 minutes for break and warm-up or closing)

Activity	Methods	Time
7.1 Overview of Infection	Interactive presentation	30 minutes
7.2 Infection Control Strategies, Standard Precautions, & Consumer Education	Interactive presentation, pairs work, large-group exercise, discussion	1 hour
7.3 Demonstration and Practice Lab: Hand Washing, Using Gloves, Mixing Universal Solutions	Demonstration, practice triads, return demonstration	1 hour
7.4 Demonstration: Disposing of Wastes	Interactive presentation, demonstration	30 minutes

Supplies

- Flip chart, markers, and tape
- Paper and pencils
- Index cards
- Access to at least one sink (for hand-washing) or several basins
- Paper towels, antimicrobial liquid soap
- Disposable gloves in range of available sizes
- Disposable aprons, masks, eye protectors
- Liquid bleach, white vinegar, large containers of water, basins for mixing, plastic funnels, and containers for storing universal solutions
- Plastic garbage bags
- Trash cans

Handouts

- Handout 7.1 Infections and Germs
- Handout 7.2 How Germs Spread
- Handout 7.3 Who Is Most Likely to Get Sick from Germs
- Handout 7.4 Signs of Infection
- Handout 7.5 Infection Control and Standard Precautions
- Handout 7.6 Strategies for Controlling Infections

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- Handout 7.7 Washing Your Hands
- Handout 7.8 Wearing Gloves
- Handout 7.9 Cleaning Up Germs
- Handout 7.10 Making Cleaning Products
- Handout 7.11 Show Your Skills -- Washing Your Hands
- Handout 7.12 Show Your Skills -- Putting on and Taking Off Gloves
- Handout 7.13 Touching and Washing Dirty Laundry Safely
- Handout 7.14 Getting Rid of Wastes Safely
- Handout 7.15 Getting Rid of Sharps Safely

Advance Preparation

Review all training and presentation materials for this module.

Copy handouts for all participants.

Activity 7.1: Overview

Prepare flip chart pages with the Learning Agenda (step 2), the definitions of “Infection & Germs” (step 3) and the “Cycle of Infection” (step 5).

Activity 7.2: Infection Control Strategies, etc.

Using Handout 7.6, “Strategies for Controlling Infections,” print each infection control strategy on a piece of paper, 8 ½ x 5 ½ (half-sheets) or 5x8 index card. If using colored paper, use the same color for each flip chart exercise in this activity (see next instructions). Laminating the half-sheets is highly recommended, to allow for re-use.

Do the same for the rules under “When Should You Wash Your Hands?” from Handout 7.7, “Washing Your Hands!”

Do the same for the rules under “When Should You Wear Gloves?” from Handout 7.8 “Wearing Gloves.”

Create the same kind of card for the four types of household disinfectant—detergent and hot water, bleach and hot water, vinegar and water, and commercial disinfectants described in Handout 7.9, “Cleaning Up Germs.”

Prepare four flip chart pages with these titles: Infection Control Action Steps, When to Wash Hands, When to Use Gloves, and Types of Household Cleaners.

Activity 7.3: Demonstration and Practice Lab

Set up enough workstations for around the room so that there is one station for each group of three participants. At these stations, set out supplies for the following:

- Hand washing
- Putting on & removing gloves

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- Mixing bleach solution
- Mixing vinegar solution

Place copies of the performance checklists and guidelines (Handouts 7.10, 7.11, 7.12,) at the work stations (one for each participant). These will be used by the observers during practice lab.

Make one additional set of the checklist for hand washing, to be completed by an instructor during return demonstrations.

Since you may want to observe a return demonstration in hand washing for every participant, it would be helpful to have several instructors or qualified staff available to observe and evaluate return demonstrations.

Activity 7.4: Demonstration: Disposing of Wastes

Prepare one workstation to demonstrate proper handling of laundry and appropriate waste disposal.

ACTIVITY 7.1 Overview of Infection

30 minutes

Learning Outcomes

By the end of this activity, participants will be able to:

- Define the terms infection and germs.
- Name the three main phases of the cycle of infection.
- Explain how infections spread.
- List body fluids that can spread infections.
- Name four symptoms of infection.
- Identify groups of people who are most vulnerable to infection.

Key Content

- ❖ Infections are conditions or diseases that happen when germs enter the body and grow.
- ❖ Germs are micro-organisms (i.e., tiny living things) that are virtually everywhere inside and outside our bodies. Some germs are considered helpful; others cause diseases. Types of germs are bacteria, viruses, fungi, and parasites.
- ❖ The cycle of infection involves the initial host for the germs (a person, place, or carrier), a way to move out of the host, and a way to move into a new host.
- ❖ Germs can be passed through body fluids, through the air, by animals and insects, and through food.
- ❖ Body fluids that can spread infections are: blood, urine, feces, vomit, mucus, vaginal discharge, semen, and saliva.
- ❖ Symptoms of infection include redness of tissue, swelling, discharge, warmth, or pain in the infected area, fever, chills, nausea, vomiting, or fatigue.
- ❖ The people who are most likely to become infected after exposure to germs are those who are very young or very old, are already sick, have inadequate nutrition, poor hygiene, weakened immune systems, or are feeling tired or stressed.
- ❖ As health care workers, it is important to try to control infections from spreading. Thus direct-care workers must try to prevent the spread of germs.

Activity Steps

⇒ Teaching Tips

- Throughout this training, as in this module, the selection and sequence of training methodologies follow well-established principles for adult learner-centered education. Timing may vary in some steps or some activities, but to maximize participant learning, every effort should be made to follow the teaching instructions. Participants will not likely retain critical information if taught through a lecture format. See “Learner Centered Training: Principles and Approaches,” (PHI, January 2007) for more information about principles of adult learner-centered training and specifics about using each training methodology to its greatest advantage.
- In this activity, interactive presentations are interspersed with brainstorming, to show participants that, as a group, they already know quite a bit about this topic. Brainstorming also allows the trainer to assess just how much participants do already know, and how to pace the presentations.
- In Activity 7.2, the brainstorming is done in pairs. This is important for several reasons: to keep learners engaged and attentive (even brainstorming can be repetitive and ineffective if overused); to make sure that every participant gets involved (brainstorming can easily be dominated by a few individuals, especially early in a training); to show participants that they can learn from each other; and to begin developing teamwork. Working in pairs also decreases the sense of shame or failure when a task is not done exactly right, or all the answers aren’t what the trainer was looking for. Ensuring and reinforcing successful learning at the beginning is very important in a long and intense training program.

Interactive presentation (20 minutes)

1. Introduce the module by explaining that protecting consumers from infectious disease is an important part of a direct-care worker’s job. It is equally important for direct-care workers to protect themselves from infections that could limit their ability to work. Also, if the direct-care worker becomes ill, she or he may pass disease to others. In this module, participants will learn about several important ways to control the spread of germs that cause infections.

“**Infection control**” refers to all the strategies that are used to control and limit the spread of infection. “**Standard precautions**” refers to guidelines for when to use those strategies.

2. Post and review the prepared flip chart page with the topics to be covered in this module.



LEARNING AGENDA
Module 3: Infection Control

- What infections are and how they are spread
- Strategies to control the spread of infections
- Definition of standard precautions
- Key strategies:
 - ✓ Hand washing
 - ✓ Use of gloves
 - ✓ Disinfecting
 - ✓ Disposing of wastes

3. Begin by asking: *What does the word “infection” mean to you?* After a few responses, follow up by asking: *What is a germ?* After a few more responses, post and review the prepared flip chart page. Note that they will get handouts with all this information, so for now you would like them to listen and participate in the discussion.



INFECTION:

- Conditions or diseases that happen when germs enter the body and grow.

GERMS:

- Micro-organisms (tiny living things) that are everywhere inside and outside our bodies.

4. Note that germs can be bacteria, viruses, a fungi, or parasites. Germs are nearly everywhere—in the air, on surfaces, on your hands, in your nose. Some germs are considered good and help you stay healthy, but others cause infections and illnesses. As health care workers, it is important to try to control infections from spreading. Thus direct-care workers must try to prevent the spread of germs. After this discussion, distribute Handout 7.1, “Infections and Germs.”
5. Explain that infections get spread in three stages. Post and review the prepared flip chart page on “Cycle of Infection.”



CYCLE OF INFECTION:

- A host for the germs – person, place, animal. The host may or may not show signs of infection or illness
- A way to move out of the host
- A way to move into a new host

6. It is important to note to participants that the original “host” may not show any signs of infection, and may never get sick—this is called a “carrier.” This will be important later when you discuss standard precautions. For now, it is safe to assume that direct-care workers will come in contact with consumers who are being treated for infections or infectious diseases. That’s the first host.
7. Brainstorm the ways that germs can move out of the host—that is, how are germs spread? Write participants’ answers on a flip chart page, “How Germs Travel.”



HOW GERMS TRAVEL

⇒ **Teaching Tips**

Responses that you are looking for include:

- In the air (sneezing, coughing, etc.)
- Contact with body fluids
- Contact with animals
- Insects
- Food and water
- Skin-to-skin contact

8. Expand on “body fluids,” and ask:

- *What body fluids could a direct-care worker come in contact with that may contain germs?* [Answers: blood, urine, feces, mucus, vomit, semen, vaginal secretions, saliva, and sweat]

Add these to the flip chart page, or start another sheet for “Body Fluids.”

9. Continuing with the path of infection, explain that now the germs have found a way to the potential new host. Note that they will learn in Module 5, Body Systems, that the skin is the first layer of defense against infections and a lot of germs never get any further. Ask:

- *So, how will the germs get past the skin barrier?*

Refer back to the flip chart page, “How Germs Travel,” and for each pathway, consider how that traveling germ could get into a new host. After completing this discussion, distribute Handout 7.2, “How Germs Spread,” and review any information not mentioned during the discussion.

⇒ **Teaching Tip**

How do the germs get in?

Responses that you are looking for include:

- [In the air] Breathing the germs in (to the lungs)
- [Contact with body fluids] Contact with mucus membranes (eyes, mouth, vagina, anus); or directly into a scratch or cut; or being stuck by a sharp instrument used by an infected person
- [Contact with animals] Animal bites
- [Insects] Insect bites
- [Food and water] Eating and drinking (to the stomach & intestines)
- [Skin-to-skin contact] Open sores or cuts; plus some infections affect the skin and skin contact is all it takes (e.g. scabies, lice)

10. Finally, note that not everyone who is exposed to germs will become infected or get sick.

Ask:

- *Who are the people most likely to become sick after exposure to germs?*

After brainstorming answers, distribute Handout 7.3, “Who Is Most Likely to Get Sick,” and identify any populations on the list not mentioned in the brainstorm.

⇒ **Teaching Tip**

Responses that you are looking for include:

- Children (babies especially) and elders
- People who are already sick
- People with poor nutrition
- People whose immune systems are weak (due to long-term illness, chemotherapy, or auto-immune diseases)
- People with poor personal hygiene or with poor living conditions
- People who are over-tired or stressed

11. Ask:

- *What are the symptoms or signs that someone may have an infection?*

After a few responses, distribute Handout 7.4, “Signs of Infection.” Review the list, noting which ones they already mentioned and which ones they did not. Note that some infections happen around or within a cut or wound, and others affect internal organs or body systems. Identify which symptoms go with which kind of infection.

12. Wrap up the presentation by noting that several of these groups of people who are especially susceptible to infection are the very people that they will work with as direct-care workers. Thus, it is especially important for them to practice infection control—so they protect the consumers from exposure to “new” germs, and so that they protect themselves from exposure to germs that the consumers may be transmitting. In the next activity, they will focus on infection control strategies, based on what they have just learned.

ACTIVITY 7.2 Infection Control Strategies, Standard Precautions, & Consumer Education

1 hour

Learning Outcomes

By the end of this activity, participants will be able to:

- Define infection control.
- Explain why “standard precautions” are important for infection control.
- List 10 ways that a direct-care worker can help to prevent the spread of germs.
- Explain when a direct-care worker should wash his or her hands.
- Explain when a direct-care worker should use gloves.
- Describe how to handle and wash soiled clothing or linens.
- Explain which household disinfecting solutions to use for different needs.

Key Content

- ❖ Infection control is any activity that prevents or stops the spread of germs.
- ❖ Because some infections have no symptoms, particularly those that infect internal body systems, there is no way to be sure that a consumer does not have an infection. Thus, the best way to prevent transmission of disease between direct-care workers and consumers is to assume that contact with ***all*** body fluids from ***every*** consumer carries a risk of infection.
- ❖ “Standard precautions” means using infection control practices to prevent contact with consumers’ body fluids.
- ❖ The key steps for standard precautions are the use of gloves, wearing an apron, a mask, and eye protectors, and proper handling and disposal of linens and wastes that contain body fluids and of sharp instruments that could cut or jab the worker.
- ❖ Hand washing is the single most important infection control activity. Direct-care workers should wash their hands before and after contact with consumers. They should also be aware of when they have touched a potentially contaminated surface and wash their hands to prevent spreading germs to themselves.
- ❖ Using gloves when handling any body fluids is another major component of infection control (and a key component of standard precautions). The challenge is to identify where contact with body fluids might occur (e.g., in soiled bed sheets) and to think ahead about when that might happen.
- ❖ Disinfecting surfaces in the bathroom and the kitchen, using universal solutions made with bleach and with vinegar, can also help to prevent spread of germs. Soiled linens and clothing (including uniforms) can also spread infection, so disinfecting is important in handling and cleaning laundry as well.
- ❖ Staying healthy is one of the direct-care worker’s main responsibilities. If the worker is sick, he or she should stay home. A simple cold for the worker could turn into something much worse for a consumer who is vulnerable to infection.
- ❖ Consumers can help to prevent the spread of germs, too, if they are aware of the need. Also, some consumers may be confused or concerned about the use of gloves and disinfectants. Explaining that “standard precautions” mean that this is done with ***all*** consumers, regardless of their diagnosis or condition, may help to relieve anxiety. Explaining infection control and standard precautions to consumers is thus part of the direct-care worker’s educational role.

Activity Steps

Interactive presentation (5 minutes)

1. Explain the first two bullets of “Key Content,” on the definition of infection control and standard precautions. After presenting the information and taking questions, distribute Handout 7.5, “Infection Control and Standard Precautions” for participants’ resource binders.

Pairs work (5 minutes)

2. Ask participants to form pairs. Distribute the 8 ½ x 5 ½ papers (“cards”) with the 16 strategies from Handout 7.6, “Strategies for Controlling Infections” (see Advance Preparation), one or two cards to each pair. (Keep any extra cards for yourself.)
3. Explain that there are many ways a direct-care worker can work to prevent the spread of germs. Each of their cards describes one of those ways. Ask each pair to read their card together, figure out how it helps to prevent or control the spread of germs, and then plan a brief explanation for the rest of the group. Encourage them to look back at the flip chart pages and their handout about infection and how it spreads, in order to explain how this rule would help. They will have five minutes to prepare, and can consult with the instructor if they have questions.

Discussion (10 minutes)

4. Starting with the pair who has “Wash your hands,” ask the two participants to read their card and explain why washing one’s hands helps to prevent or control the spread of infection. Ask if there are any questions. Make additional comments or corrections, as needed. After each card is read and explained, tape it to a flip chart page titled “Preventing and Controlling the Spread of Germs.” Note, again, that participants will get this information in a handout at the end of the activity.



PREVENTING AND CONTROLLING THE SPREAD OF GERMS

5. Continue with the remaining cards, in the order they are listed in the handout. Post and explain the cards that remained after distributing them to the pairs in step 2.

Pairs work & discussion (10 minutes)

6. Ask each pair to brainstorm and list all the times when a direct-care worker should wash his or her hands. Give them about 3 minutes.

⇒ **Teaching Tip**

While the pairs are working, post the flip chart page, “When to Wash Your Hands,” and find the cards based on the bullets from Handout 7.7, “Washing Your Hands” (see Advance Preparation).

7. Have each pair read one of their “times.” If it matches one from the list in the handout, find the matching card and tape it on the flip chart page titled “When to Wash Your Hands.”



WHEN TO WASH YOUR HANDS

⇒ **Teaching Tips**

- If the participants suggest something that is not on the list, but makes sense, add it to the flip chart page with a marker.
- If they suggest something that doesn’t make sense, briefly explain why and go on to the next idea.

8. After each pair has had at least one turn, post and briefly explain the cards that you are still holding (if any). Note that they will learn how to wash their hands properly during the demonstration activity (7.3).

Pairs work & discussion (10 minutes)

9. Ask each pair to brainstorm and list all the times when a direct-care worker should use gloves. Remind them that this is most important to prevent contact with body fluids.

⇒ **Teaching Tip**

While the pairs are working, post the flip chart page, “When to Use Gloves,” and find the cards based on the bullets from Handout 7.8, “Wearing Gloves” (see Advance Preparation).

10. Have each pair read one of their “times.” As before, if it matches one from the list in the handout, find the matching card and tape it on the flip chart paper titled “When to Use Gloves.”



WHEN TO USE GLOVES

11. After each pair has had at least one turn, post and briefly explain the cards that you are still holding (if any). Note that they will learn how to put on and take off gloves, to avoid contamination, during the demonstration activity (7.3).

Interactive presentation (15 minutes)

12. Briefly review the following topics, based on Key Content and Handout 7.9, “Cleaning Up Germs” and Handout 7.10, “Making Cleaning Products.”
- Disinfecting equipment, bathrooms, and kitchens; when to use commercial detergents; when to use universal solutions; composition of bleach solution and vinegar solution.
 - Keeping oneself healthy and staying home from work when sick.
 - The importance of including consumers in infection control strategies and how to inform them about their role.

Large-group exercise (5 minutes)

13. For a quick review, take all the cards off the flip chart pages—“Preventing and Controlling the Spread of Germs,” “Wash Your Hands!” and “When to Use Gloves.” Post a new flip chart page, titled “Household Disinfecting Solutions,” and add the cards on detergents and solutions into the pile (see Advance Preparation). Mix up the cards and distribute them at random to all the pairs until all the cards have been handed out. Each pair must figure out which category each of their cards goes with, and tape it on the flip chart page.



PREVENTING THE SPREAD
OF GERMS

WASH YOUR HANDS

WHEN TO USE GLOVES

HOUSEHOLD DISINFECTING
SOLUTIONS

⇒ **Teaching Tip**

If there is limited time for this review, instead of taking off all the cards, you can select several cards from each flip chart page—enough for one or two for each pair—and distribute those. It will be less challenging, but still energizing and fun for the participants to show what they remember!

14. Read the cards on each flip chart page, moving cards if necessary.
15. Congratulate everyone for all their hard work! Distribute the handouts that support this activity (Handouts 7.6 -7.10). Note that next they will learn how to *do* some of these key action steps.

ACTIVITY 7.3 Demonstration & Practice Lab: Hand Washing, Using Gloves, & Mixing Universal Solutions

1 hour

Learning Outcomes

By the end of this activity, participants will be able to:

- Demonstrate the steps in proper hand-washing.
- Demonstrate the steps in putting on and removing gloves.
- Demonstrate how to mix a universal solution with bleach and with vinegar.

Key Content

- ❖ Proper technique for hand-washing and using gloves is important for effective infection control. These will be demonstrated in this activity, and participants will have a chance to practice.
- ❖ Wearing an apron is relatively common during personal care. The use of masks and protective eye wear is less common, but participants need to know when and how to use them.
- ❖ The bleach solution is made with one part bleach and ten parts water. This is used for disinfecting surfaces that may be used for eating or washing.
- ❖ The vinegar solution is made with one part vinegar and three parts water. This is used for deodorizing items like bedpans and urinals.
- ❖ Hand washing and proper use of gloves are skills that participants will continue to practice throughout the training. They will also apply their knowledge about when and how to apply other action steps of infection control while assisting consumers with activities of daily living. The purpose of this activity is to be sure that participants are clear about the proper techniques—proficiency will come with practice.

Activity Steps

Interactive presentation and demonstration (10 minutes)

1. Explain to participants that in the last activity they learned about the importance of washing hands, wearing gloves, and using disinfectants. In this activity they will learn to how to make cleaning products, properly wash their hands, and put on and take off gloves.
2. Go to a demonstration station and ask everyone to circle around so they can see the demonstration. Following the steps in Handout 7.10, “Making Cleaning Products” demonstrate the steps for mixing the universal solution (bleach and water). Explain to

participants that they should watch the demonstration without taking notes, as their handout shows all the steps. After the demonstration, ask participants if they have questions. Ask:

- *What should be cleaned with the bleach and water solution?*

3. Next demonstrate mixing a vinegar and water solution. Ask participants if they have questions about the procedure. Ask:

- *What should be cleaned with a vinegar solution?*

Practice Triads (20 minutes)

4. Explain to participants that most of the practice labs in this training will be conducted through practice teams – usually triads (teams of three). By working in teams, participants are able to support each other while learning, reinforcing what they were taught by observing others doing it and helping them to follow the guidelines for each skill. Ask participants to form triads for this practice lab.
5. Point out the work stations that are set up around the training space. Ask each team to go to a work station.
6. Explain that the instructor(s) will be moving around the room, to assess how participants are doing, to answer questions, and to provide additional instruction as necessary.
7. In their triads, explain that participants will take turns practicing mixing the two cleaning solutions. While one person is practicing the task, the other team members should follow along with Handout 7.10, “Making Cleaning Products,” and provide encouragement when needed. After one participant completes the bleach solution, switch roles, so that the second participant, and then the third, can practice mixing the solution. Then do the same with the vinegar solution.
8. When participants have completed their skills practice, call participants back to the large group for the next demonstration.

Demonstration (10 minutes)

10. Ask participants to gather round a work station. Following the steps in Handout 7.11, “Show Your Skills -- Washing Your Hands,” demonstrate how to properly wash one’s hands. Explain each step, and take questions.
11. Following the steps in Handout 7.12, “Show Your Skills -- Putting On and Taking Off Gloves,” demonstrate how to properly put on and take off gloves. Explain each step and take questions.
12. Following the demonstrations, distribute the two handouts. Give participants a chance to review the handouts, and then ask:
 - *What steps are most important to ensure that your hands are clean and you won’t spread germs?*
 - *When should you wash your hands?*

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- *How do you get gloves off without spreading germs?*
- *When is it most important to wear gloves?*

Practice Triads (20 minutes)

13. Ask participants to return in their triads to the work stations. Each person should practice hand washing while the other members of the team use the checklist to observe and encourage the person practicing. Do the same for putting on/taking off gloves.
14. Explain that the instructor(s) will be moving around the room to assess how participants are doing, to answer questions, and to provide additional instructions as necessary.
15. When participants have completed their skills practice, or when the time has run out, call participants back to the large group and answer any questions participants may have.
16. If there is enough time, make sure each participant is given an opportunity to do their hand washing return demonstration. This demonstration should be assessed at a workstation with a working sink.

ACTIVITY 7.4 Demonstration: Disposing of Wastes

30 minutes

Learning Outcomes

By the end of this activity, participants will be able to:

- Explain when a direct-care worker should wear an apron, mask, or protective eye wear.
- Describe how to handle soiled linens.
- Describe how to dispose of wastes with body fluids.
- Describe how to dispose of sharp instruments.

Key Content

- ❖ Soiled linens and clothing should not be set down on any surface. They should go directly into a non-porous laundry bag. There are specific guidelines for cleaning with bleach (whites) or vinegar solution (colored clothing).
- ❖ Wastes that contain body fluids are never set down on any surface, but are immediately double-bagged in garbage bags.
- ❖ Used needles, syringes, razor blades, or other sharp instruments must be placed in puncture-proof plastic or metal containers, with secure lids.

Activity Steps

Interactive presentation and demonstration (30 minutes)

1. For each of the topics in this activity, the instructor will demonstrate proper procedure, then distribute the appropriate handout and review with participants. All materials and supplies should be ready in advance (see Advance Preparation).
2. Following the guidelines in Handout 7.13, “Touching and Washing Dirty Laundry Safely,” demonstrate how to handle dirty laundry. Explain each step and answer participant questions.
3. Distribute Handout 7.17. Give participants a chance to review the handout and then ask:
 - *How can you prevent the spread of germs when doing a consumer’s laundry?*
 - *How is doing a consumer’s laundry different from what you do at home?*
 - *Are there any other questions about the procedures for handling laundry?*
4. Review what is defined as “wastes” and how to dispose of them. Then following the guidelines in Handout 7.14, “Getting Rid of Wastes Safely,” demonstrate how to dispose of waste materials properly. Explain each step and answer any questions.

5. Distribute Handout 7.14. Give participants a chance to review the handout. Ask:
 - *How many plastic bags are needed to dispose of waste materials safely?*
 - *What guidelines protect you from spreading germs?*
 6. Define “sharps” and why they are dangerous. Following the guidelines in Handout 7.15, “Getting Rid of Sharps Safely,” demonstrate how to properly dispose of sharps. Explain the steps and ask for questions.
 7. Distribute Handout 7.15 and give participants a chance to review it. Ask:
 - *What items qualify as sharps and need to be disposed of in a special way?*
 - *How can you help the consumer dispose of sharps safely?*
 - *What are the special safety rules associated with needles and syringes?*
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Module 7 Handouts Controlling Infections

Activity 7.1: Overview of Infection

Handout 7.1 Infections and Germs

Handout 7.2 How Germs Spread

Handout 7.3 Who Is Most Likely to Get Sick from Germs

Handout 7.4 Signs of Infection

Handout 7.5 Infection Control and Standard Precautions

Handout 7.6 Strategies for Controlling Infections

Handout 7.7 Washing Your Hands

Activity 7.2: Infection Control Strategies, Standard Precautions, and Consumer Education

Handout 7.8 Wearing Gloves

Handout 7.9 Cleaning Up Germs

Handout 7.10 Making Cleaning Products

Activity 7.3: Demonstration and Practice Lab: Hand Washing, Using Gloves, and Mixing Universal Solutions

Handout 7.11

Show Your Skills: Washing Your Hands

Handout 7.12

Show Your Skills: Putting On and Taking Off Gloves

Activity 7.4: Demonstration: Disposing of Wastes

Handout 7.13

Touching and Washing Dirty Laundry Safely

Handout 7.14

Getting Rid of Wastes Safely

Handout 7.15

Getting Rid of Sharps Safely

Handout 7.1—Infections and Germs

Page 1 of 1

It's important to understand infections and how they spread. Here's what you need to know.

What are infections?

Infections are problems or diseases. They happen when germs get into the body and grow.

What are germs?

Germs are tiny living things. They live almost everywhere, inside and outside our bodies. Some germs help people. Others cause problems or diseases.

Types of germs include:

- Bacteria
- Fungi
- Parasites
- Viruses

Handout 7.2—How Germs Spread

Page 1 of 2

Infection is spread in 3 stages:

Stage 1

Germs live in a **host**. The host may be a person or other animal.

Stage 2

The germs move out of the first host.

Stage 3

The germs move into a new host.

How Germs Spread

Germs use many routes to get from one host to another. Here are some ways that germs spread:

Through the air

The first host coughs or sneezes. The new host breathes in the germs.

Handout 7.2—How Germs Spread

Page 2 of 2

Through body fluids

Germs get out of the first host in:

- Blood
- Fluid from a cut
- Fluid from a penis or vagina
- Mucus
- Pus
- Saliva
- Stools
- Urine
- Vomit

Germs get into the new host when infected body fluids:

- Are on a needle or other sharp thing that goes into the new host's skin
- Get into a cut or scratch
- Touch mucus membranes, like those inside your mouth

An **infected animal** bites the new host.

An **infected insect** bites the new host.

The new host **eats** infected food **or drinks** infected water.

The first host and the new host **touch each other**. Germs move from one open sore to another. Scabies and lice spread from one body to another.

Handout 7.3—Who Is Most Likely to Get Sick from Germs

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Some people are more likely than others to get sick from germs. They are **susceptible** to germs.

Susceptible people are:

- Already sick
- Under stress
- Very old
- Very tired
- Very young

Susceptible people:

- Don't eat a healthy diet
- Don't wash their hands well
- Have a weak immune system. That means their body is not good at fighting off things from outside.

Handout 7.4—Signs of Infection

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It's important to know the signs of infection. Here's what to look for.

If a cut is infected:

- Fluid comes out of the cut.
- The cut hurts.
- The skin around the cut is red and puffy. It feels warm.

If an organ or body system is infected, a consumer may feel:

- Pain in the infected area
- Sick to their stomach, or throw up
- Very hot or cold
- Very tired

Handout 7.5—Infection Control and Standard Precautions

Page 1 of 1

What is infection control?

Infection control is anything you do to prevent or stop germs from spreading.

Take these steps to control infections:

- Get rid of germs on things and work areas.
- Put waste in the right place.
- Wash your hands.
- Wear gloves, an apron, and a mask, as needed.

What are standard precautions?

You cannot always tell if someone is infected just by looking at them. So you need to follow these rules **every time** you work with a consumer. This is called **standard precautions**.

Handout 7.6—Strategies for Controlling

Page 1 of 1

It's important to understand how to control infections.

Follow these general rules.

To keep germs from spreading:

- Cover your mouth when you cough or sneeze.
- Do **not** come to work when you're sick.
- Eat a healthy diet.
- Keep your nails short.
- Wash your hands.
- Wear a mask and gloves, as needed.
- Wear simple jewelry.

Follow these specific rules.

To keep germs from spreading when you cook:

- Clean cooking areas before and after cooking meat, fish, and poultry.
- Put away food carefully.
- Rinse can tops before opening them.
- Wash fruits and vegetables before eating or cooking them.
- Wash meat, fish, and poultry before cooking them.

To keep germs from spreading when you clean:

- Keep your work area clean and free of insects.
- Put dirty linens in a laundry bag.
- Put out clean towels often.
- Throw away waste and used needles in the right place.

Handout 7.7—Washing Your Hands

Page 1 of 2

Why should you wash your hands?

- Washing your hands is the best way to control infections.

When should you wash your hands?

Follow these general rules.

Wash your hands:

- Before you touch a consumer. This protects the consumer from your germs.
- After you touch a consumer. This protects you from the consumer's germs.
- After you touch a thing or surface that could have germs on it.

Follow these specific rules.

Wash your hands before you:

- Leave a consumer's home

Wash your hands after you:

- Cough, sneeze, or blow your nose
- Get to a consumer's home
- Tear your glove
- Use the toilet

Handout 7.7—Washing Your Hands

Page 2 of 2

Wash your hands before and after you:

- Eat, drink, or touch food
- Put on your makeup or lip balm
- Smoke
- Touch a consumer
- Touch items used in personal care, like a toothbrush
- Touch your contact lenses
- Wear gloves

Questions and Answers

Question: The consumer's saliva is on my elbow. What should I do?

Answer: Sometimes a part of your body touches things that may have germs on them. If this happens, wash the part with soap and water right away. If germs get in your eyes, nose, or mouth, rinse them well with plenty of water.

Question: I know that germs live on faucets and inside sinks. How should I wash my hands?

Answer: Have a clean paper towel ready. Use it to turn the faucet on and off. If you touch the inside of the sink, wash your hands again.

Handout 7.8—Wearing Gloves

Page 1 of 2

It's important to understand how to wear gloves. Here's what you need to know.

Why should you wear gloves?

- Wearing gloves keeps you from touching body fluids. Body fluids have germs in them.

When should you wear gloves?

- In general, wear gloves any time you might touch body fluids.

You might touch body fluids when you:

- Assist a consumer with daily tasks, such as getting dressed
- Touch dirty clothes or linens

How often should you wear gloves?

- Use gloves only once. **Never** use them again, even if you wash them.

If a glove tears:

- Take off both gloves right away.
- Wash your hands well.
- Put on another pair of gloves.

Handout 7.8—Wearing Gloves

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Follow these specific rules for wearing gloves.

Wear gloves when you:

- Change bandages or dressings
- Clean areas where body fluids have spilled
- Collect or touch urine or stool samples
- Press down to stop bleeding
- Touch dirty items used in personal care
- Touch dirty or bloody linens, towels, or clothes

Wear gloves when you assist a consumer to:

- Bathe
- Take care of their mouth
- Clean between their legs
- Use a toilet, bedpan, or urinal
- Change their pad or brief
- Take care of their catheter

Questions and Answers

Question: One of the people I help is coughing and sneezing a lot. Other than gloves, what can I wear to protect myself from germs?

Answer: You can wear a mask.

Question: Sometimes the bed linens are very dirty. What can I wear to protect my clothes when I change the sheets?

Answer: You can wear an apron. You can also wear an apron when you assist a consumer to bathe.

Handout 7.9—Cleaning Up Germs

Page 1 of 2

Why should you clean up germs?

- Cleaning up germs keeps the consumer, family members, visitors, and you from getting sick.

How should you clean up germs?

To clean dishes:

- Wash the consumer's dishes with warm water and dish soap.
- Rinse and air-dry the dishes. If you dry dishes with a towel, use a clean towel each time.

To clean items used in personal care:

- Handle razors with care. Throw them away the same way you throw away needles.
- Wash thermometers in cool water and soap. Wipe them with alcohol before and after use.
- Make sure the consumer does not share personal care items with other family members.

To clean spilled body fluids:

- Put on gloves.
- Wipe up the spill with paper towels.
- Throw away the paper towels in the garbage. Use 2 bags.
- Take off your gloves. Wash your hands.
- Use bleach and water solution to get rid of germs.

Handout 7.9—Cleaning Up Germs

Page 2 of 2

Wear special gloves.

- Wear rubber utility gloves. They will protect your hands from cleaning products. Do **not** wear latex gloves.

Use different cleaning products for different jobs.

Use detergent and hot water to clean:

- Clothes
- Dishes
- Sheets and towels

Use bleach and water to clean:

- Bathroom and kitchen surfaces
- Body fluids
- Toilets

Use vinegar and water to clean:

- Surfaces in the bathtub, shower, and kitchen
- Urinals, bedpans, commodes, and toilets

Handout 7.10—Making Cleaning Products

Page 1 of 2

**Here's how to make bleach and water solution, or
“universal solution.”**

You will need:

- 1-cup measuring cup
- Empty plastic bottle with a cap. Make sure it can hold more than 11 cups of fluid.
- Label and marker, or permanent marker
- Liquid bleach
- Rubber utility gloves
- Water

Take these steps:

1. Wash your hands. Put on gloves.
2. Measure 10 cups of water. Pour them into the bottle.
3. Measure 1 cup of bleach. Pour it into the bottle.
4. Put the cap on the bottle. Shake the bottle.
5. Write “Bleach solution 1:10” and the date on the label or bottle.
6. Put away the solution and the things you used. Keep the solution and the bleach out of reach of children.
7. Take off and rinse the gloves. Hang them up to dry.
8. Wash your hands.

Handout 7.10—Making Cleaning Products

Page 2 of 2

Here's how to make vinegar and water solution.

You will need:

- 1-cup measuring cup
- Empty plastic bottle with a cap. Make sure it can hold more than 4 cups of fluid.
- Label and marker, or permanent marker
- Water
- White vinegar

Take these steps:

1. Wash your hands.
2. Measure 3 cups of water. Pour them into bottle.
3. Measure 1 cup of vinegar. Pour it into the bottle.
4. Put the cap on the bottle. Shake the bottle.
5. Write “Vinegar solution 1:3” and the date on the label or bottle.
6. Put away the solution and the things you used. Keep the solution out of reach of children.
7. Wash your hands.

Handout 7.11—Show Your Skills: Washing Your Hands

Page 1 of 1

Trainee's Name:

Date:

Trainer's Name:

What to Do	Shows Skill?	Trainer's Notes
Get ready to wash your hands.		
1. Stand back from the sink. Your clothes and hands must not touch the sink.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Turn on the water with a dry paper towel. Make it warm and comfortable.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Wash your hands.		
3. Get your hands wet. Point your fingertips down.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Put liquid soap on your hands and wrists.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Rub your hands, fingers, and wrists. Clean between your fingers.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Rinse your hands. Rub them under the water for at least 30 seconds. That's about how long it takes to sing "Happy Birthday" 2 times.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Finish washing your hands.		
7. Dry your hands with a clean paper towel. Do not shake water off your hands.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Turn off the water with a clean paper towel.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9. Throw the paper towel in the garbage.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Signature of Trainer(s)

Date

Signature of Trainee

Date

Handout 7.12—Show Your Skills: Putting On and Taking Off Gloves

Page 1 of 2

Trainee's Name:

Date:

Trainer's Name:

What to Do	Shows Skill	Trainer's Notes
Put on gloves.		
1. Wash your hands.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Dry your hands well with a paper towel.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Check the gloves for tears or holes. Do not use the gloves if you find any.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Put the gloves on when you are ready to work with a consumer.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Take off gloves.		
5. Use your gloved right hand to hold the left glove, near the wrist. Do not touch bare skin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Peel the left glove off from the wrist. It should now be inside out.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Ball up the left glove in your right hand. Leave it inside out.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Put 2 fingers of your left hand inside the right glove. Do not touch the outside of the glove with your bare hand.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9. Peel the right glove off from the wrist. It should now be inside out, over the left glove.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10. Throw away the gloves in the right place.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11. Wash your hands.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Signature of Trainer(s)

Date

Signature of Trainee

Date

Handout 7.13—Touching and Washing Dirty Laundry Safely

Page 1 of 2

Why should you handle dirty laundry with care?

- Dirty laundry may have body fluids on it. Body fluids have germs in them. Germs can make people sick.

How should you touch dirty laundry?

Take these steps:

1. Put on gloves and an apron.
2. Put a laundry bag where you can reach it.
3. Roll items away from your body. Wrap the dirty areas inside the clean areas.
4. **Never** shake out dirty laundry. This can put germs into the air.
5. Put dirty laundry right into the laundry bag. Do **not** put them on the floor, on a chair, or on a counter.
6. Take off your gloves. Wash your hands.

How should you wash dirty laundry?

To wash dirty white laundry:

1. Soak very dirty items in a bleach solution for at least 10 minutes.
2. Wash the laundry in the washing machine with 1 cup of bleach.
3. Wash the laundry with regular laundry soap.
4. Dry the laundry in the drier.

Handout 7.13—Touching and Washing Dirty Laundry Safely

Page 2 of 2

To wash dirty colored laundry:

1. Wash the laundry in the washing machine with 1 cup of household disinfectant, such as Lysol.
2. Wash the laundry with regular laundry soap.
3. Dry the laundry in the drier.

To wash laundry by hand:

1. Use a basin, bathroom sink, or bathtub. **Never** use the kitchen sink.
2. Put on gloves.
3. Wash the laundry in 1 ounce of disinfectant per gallon of water, plus detergent.
4. Rinse the laundry well at least 3 times.
5. Clean the basin, sink, or tub with universal solution.

Handout 7.14—Getting Rid of Wastes Safely

Page 1 of 2

Why should you handle wastes with care?

- Body fluids and things that touch body fluids have germs in them. Germs can make people sick.

How should you get rid of body fluids?

- Flush them down the toilet.

Body fluids include:

- Stools
- Urine
- Vomit

Things that touch body fluids are called waste materials.

Waste materials include:

- Used briefs and pads
- Used catheters
- Used dressings and bandages
- Used paper towels
- Used tissues

Handout 7.14—Getting Rid of Wastes Safely

Page 1 of 2

How should you get rid of waste materials?

Take these steps:

1. Keep a garbage can for waste materials in the consumer's room. Line it with 2 plastic bags. The inner bag is dirty. The outer bag is clean.
2. Put on gloves. Put on an apron if your clothes may get dirty. Put on glasses and a mask if fluids may splash your face.
3. Put the waste materials in the inner bag.
4. Close the inner bag tightly.
5. Take off your gloves, apron, glasses, and mask. Put them in the clean bag.
6. Wash your hands.
7. Close the clean bag. Take it out of the consumer's room.
8. Put the dirty bag in a second bag. Throw it away with other garbage. Keep it out of reach of animals and children.

Handout 7.15—Getting Rid of Sharps Safely

Page 1 of 2

What are sharps?

- Used needles and razors

Why should you handle sharps with care?

- Used needles and razors have body fluids on them. Body fluids have germs in them. So if you get stuck with a needle or cut with a razor, you can get sick.
- Needles and razors can tear through garbage bags. So they need to go in a sharps box.

How should you get rid of sharps?

You will need:

- Gloves
- Label or permanent marker
- Plastic bags
- Sharps box made of tough plastic with a cap

Handout 7.15—Getting Rid of Sharps Safely

Page 2 of 2

Take these steps:

1. Write “needles, sharps” on the label or box. Keep the box out of reach of children.
2. Put on gloves.
3. Put the box where the consumer can reach it **before** they use any sharps.
4. Assist the consumer to take the cap off the box.
5. Make sure the consumer puts used sharps in the box **right away**.
6. Make sure all the sharps are in the box.
7. Assist the consumer to put the cap on the box.
8. When the box is full, make sure the cap is on tightly. Put tape on the cap if you think it could come off.
9. Put the sharps box in 2 garbage bags. Throw it away with other garbage.

What should you not do?

Follow these safety rules for all sharps:

- **Never** put sharps anywhere except the sharps box.
- **Never** put sharps in a garbage bag.
- **Never** try to put a sharp in the box after the box is full.

Follow these safety rules for needles:

- **Never** bend or break a needle.
- **Never** recap used needles.
- **Never** take used needles out of syringes.
- **Never** use a needle again.