NOROVIRUS IN CHILD CARE

Everyone Plays a P.A.R.T.

INSTRUCTOR’S MANUAL

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USDA
NOROVIRUS IN FACILITIES

Everyone Plays a P.A.R.T.

INSTRUCTOR’S MANUAL

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INSTITUTE OF
child nutrition
RESOURCES • TRAINING • RESEARCH

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INSTITUTE OF CHILD NUTRITION
The University of Mississippi

Building the Future Through Child Nutrition

The Institute of Child Nutrition was authorized by Congress in 1989 and established in 1990 at the University of Mississippi in Oxford and is operated in collaboration with The University of Southern Mississippi in Hattiesburg. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

PURPOSE

The purpose of the Institute of Child Nutrition is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

MISSION

The mission of the Institute of Child Nutrition is to provide information and services that promote the continuous improvement of child nutrition programs.

VISION

The vision of the Institute of Child Nutrition is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

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Background Information

This training is designed for child care staff who work in foodservice areas or with responsibilities related to meal service. Additional policies and training should address excluding ill staff and children, isolation procedures and designated areas; cleaning and disinfection procedures within the facility including disinfection of toys, sleeping mats, playground equipment, transportation vehicles, soiled linens, carpets and children’s clothing; tracking ill students and staff; health department reporting procedures; and facility closure and evacuation procedures. The following websites from the Centers for Disease Control and Prevention may be useful in developing these additional policies.


Contact your local health department and state agency for information pertaining to your specific child care facility.
Training Overview and Objectives

_Norovirus in Child Care_ is intended to be a two-hour, face-to-face, hands-on norovirus training curriculum for those who handle food in child care facilities. This training curriculum includes interactive activities to better retain the learning objectives.

After completing this training, participants should be able to:

- Describe why norovirus is a concern in child care settings.
- List the symptoms of norovirus.
- Describe how norovirus is transmitted.

**PREVENT**
- List personal hygiene habits that can prevent norovirus.
- Name illnesses and symptoms of illnesses that must be reported to the child care director, and identify the required director responses.

**ASSEMBLE A BODY FLUID CLEANUP KIT**
- Identify the components of a Body Fluid Cleanup Kit.

**RESPOND TO AN INCIDENT**
- Demonstrate correct use of Personal Protective Equipment.
- Describe proper body fluid cleanup procedures.

**TOTAL CLEANUP**
- Explain steps necessary to reopen a foodservice area after a vomiting incident.

Functional Area and Competencies

**FUNCTIONAL AREA IV: Health and Safety**

_Competency 4.1:_ Understands and complies with local, state and federal regulations and guidelines for safety and sanitation.

_Competency 4.3:_ Establishes policies and procedures to ensure food is prepared and served in a safe environment that meets food safety and sanitation standards.
Instructor’s Pre-Class Preparation

Instructions:
   a. Review each activity, the Participant’s Workbook, and the answer keys.
   b. In the back of the Instructor’s Manual is a reference list of valuable website links the instructor can review for background information.
   c. Provide one Participant’s Workbook for each attendee.
4. This workshop discusses using a strong disinfectant and disinfection procedures. This is different from typical foodservice sanitizers and sanitization steps. To familiarize yourself with the difference in the terms “Disinfect” and “Sanitize”, visit http://www.henrythehand.com/programs/patient-safety/mrsa/disinfect-vs-sanitize/
5. Download and print Ground Rules Posters from Institute of Child Nutrition (ICN): http://www.theicn.org
Preparation Checklist

LOCATION-PROVIDED SUPPLIES:

- Flipchart pad & easel
- Projector, screen, multi-plug cord

NOROVIRUS TOOL KIT:

- Markers in 4-5 colors
- UV-glowing lotion (e.g. GloGerm™ or GlitterBug©)
- Six-inch black light(s)
- Personal Protective Equipment
  - One (1) – Full-protection gown
  - One (1) – Face mask with eye protection or goggles
  - One (1) pair – Shoe covers
  - Twelve pairs (minimum) – Disposable medical grade gloves (latex-free), LARGE size or one-size-fits-all
- Blue painters tape
- Participant’s Workbook – one per participant
- Writing utensils (pencil or pen)
- ICN Evaluation Forms
- ICN Attendee Roster
- Certificate of Attendance
- Name tents for each participant
- Instructor’s Manual
- Pre- and Post-Assessments
- Mini-Posters (3)
  - Don’t Work When Sick
  - Assembling a Body Fluid Cleanup Kit
  - Use a Body Fluid Cleanup Kit

INSTRUCTOR-PROVIDED SUPPLIES:

- Laptop with presentation remote, PowerPoint slides, and videos
- External speakers (for videos)
- Extra black lights if desired for the group handwashing activity
- (Optional) Tape measure – at least 25 feet in length.
## Training-At-A-Glance

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>MATERIALS</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>• Flipchart pad&lt;br&gt;• Easel&lt;br&gt;• Markers&lt;br&gt;• Name tents&lt;br&gt;• Participant’s Workbook</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Pre-Assessment</td>
<td>• Pre-Assessments</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Everyone Plays a P.A.R.T. in Norovirus Control Video</td>
<td>• Video: <em>Everyone Plays a P.A.R.T. in Norovirus Control</em>&lt;br&gt;• Laptop Speakers&lt;br&gt;• DVD player&lt;br&gt;• Projector&lt;br&gt;• <em>Everyone Plays a P.A.R.T. in Norovirus Control</em> – Video Viewing Guide</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>

**Objective:** Describe why norovirus is a concern in child care settings.

Instruction and Discussion<br>&lt;5 minutes

**Objective:** List the symptoms of norovirus.

Instruction and Discussion<br>&lt;5 minutes

**Objective:** Describe how norovirus is transmitted.

Instruction and Discussion<br>&lt;5 minutes

**Objective:** List personal hygiene habits that can prevent norovirus.

Instruction and Discussion<br>&lt;5 minutes

| Handwashing Challenge                          | • UV glo-lotion<br>• Black light(s)<br>• Flip chart pads<br>• Easels<br>• Markers in a unique color for each team (4-5)<br>• Handwashing Challenge handout | 15 minutes |
| Wash Your Hands Video                          | • Video: *Wash Your Hands*<br>• Laptop Speakers<br>• DVD player<br>• Projector<br>• *Wash Your Hands* – Video Viewing Guide | 10 minutes |
| What Are Ready-to-Eat Foods?                  | • What Are Ready-to-Eat Foods? handout<br>• No Bare Hand Contact with Ready-to-Eat Foods handout | 5 minutes |

**Objective:** Name illnesses and symptoms of illnesses that must be reported to a child care director, and identify the required director responses.

Exclude or Restrict?<br>&lt;5 minutes
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>MATERIALS</th>
<th>DURATION</th>
</tr>
</thead>
</table>
| **Objective: Identify the components of a Body Fluid Clean-up Kit.** | • Identify the Components of the Body Fluid Cleanup Kit Handout  
• PowerPoint | 5 minutes |
| Identify the Components of the Body Fluid Cleanup Kit          | • Disposable gown  
• Gloves  
• Face mask with face shield  
• Shoe covers  
• Assembling a Body Fluid Cleanup Kit Handout  
• Assembling a Body Fluid Cleanup Kit (Sample SOP) | 5 minutes |
| Assembling a Body Fluid Cleanup Kit                            | • Disposable gown  
• Gloves  
• Face mask with face shield  
• Shoe covers  
• Assembling a Body Fluid Cleanup Kit Handout  
• Assembling a Body Fluid Cleanup Kit (Sample SOP) | 5 minutes |
| **Objective: Demonstrate correct use of Personal Protective Equipment.** | • Disposable gown  
• Gloves  
• Facemask with face shield  
• Shoe covers  
• Cleaning and Disinfecting Body Fluid Spills (Sample SOP)  
• Using a Body Fluid Clean Up Kit Handout | 5 minutes |
| Personal Protective Equipment Donning Demonstration            | • Disposable gown  
• Gloves  
• Facemask with face shield  
• Shoe covers  
• Cleaning and Disinfecting Body Fluid Spills (Sample SOP)  
• Using a Body Fluid Clean Up Kit Handout | 5 minutes |
| **Objective: Describe proper body fluid cleanup procedures.**   | • 1 pair of disposable gloves | <5 minutes |
| Re-gloving Demonstration                                      | • Multiple pairs of disposable gloves | 5 minutes |
| Re-gloving Practice                                            | • Flip chart  
• Easel  
• Markers | <5 minutes |
| High Touch Areas                                               | • Disposable gown  
• Gloves  
• Facemask with face shield  
• Shoe covers | 5 minutes |
| Personal Protective Equipment Removal Demonstration            | • Disposable gown  
• Gloves  
• Facemask with face shield  
• Shoe covers | 5 minutes |
| **Objective: Explain steps necessary to reopen a foodservice area after a vomiting incident.** | • Post-Assessments  
• Evaluations  
• Certificates | 10 minutes |
| Instruction and Discussion                                     | • Post-Assessments  
• Evaluations  
• Certificates | <5 minutes |
| **Wrap Up**                                                    | • Post-Assessments  
• Evaluations  
• Certificates | 10 minutes |

**TOTAL TIME: 2 HOURS**

*If extra time is available (20-40 minutes) perform the “Norovirus Challenge” game show before the Post-Assessment.*
Key Terms

- **Aerosolize**: easily disperses into droplets in the air.

- **Body Fluid Cleanup Kit**: a kit designed to clean up a body fluid spill; contains both appropriate personal protective equipment and cleaning supplies.

- **Contagious**: easily spread from person to person.

- **Contaminate**: expose a person, food, or surface to a pathogen or chemical.

- **Disinfect**: means the application of heat or chemicals on cleaned food-contact surfaces that kills all of the microorganisms on that surface.

- **Foodborne illness**: an illness that results from eating contaminated food.

- **Hand sanitizer**: alcohol-based hand antiseptics that can reduce the number of microorganisms on the surface of hands.

- **Jaundice**: yellowing skin or eyes due to disease of the liver caused by disease such as Hepatitis A.

- **Machine wash**: wash clothes in a washing machine.

- **Outbreak**: the occurrence of two or more cases of a similar illness resulting from ingestion of a common food.

- **Personal protective equipment (PPE)**: equipment designed to reduce the likelihood of exposure to infectious vomitus or fecal material.

- **Quat Sanitizer**: chemical disinfectant that contains quaternary ammonium compound.

- **Ready-to-eat food**: foods that can be eaten without further cooking or washing.

- **Sanitize**: means the application of heat or chemicals on cleaned food-contact surfaces that will cause a reduction of 5 logs, which is equal to a 99.999\% reduction, of microorganisms.

- **Single-use gloves**: disposable gloves that are designed and constructed for one time, one person use after which they are intended for discard.

- **Standard Operating Procedure**: food safety procedure put into place to gives instructions on how to handle a food safety issue, monitoring practices, corrective actions, and ways to verify and record food safety practices.
Introduction

SHOW SLIDE: Norovirus in Childcare

DO: Distribute a Participant’s Workbook to each person.

SAY: I am pleased to be here today. The Institute of Child Nutrition (ICN) partners with United States Department of Agriculture’s (USDA) Food and Nutrition Service (FNS) to provide training opportunities for child care professionals on current issues such as norovirus.

Everyone should have a Participant’s Workbook. In addition to the valuable take-home resources, this includes the activities we will complete together. There are key terms in your Participant’s Workbook if you need to refer to them.

SAY: Before we begin this training, let’s get to know each other.

ACTIVITY – Ice Breaker

• Purpose: To introduce participants to each other.
• Preparation: Review the activity directions. Be prepared to add additional comments not provided by the participants.
• Materials: Flipchart pad, easel, marker, and name tents
• Time: 2 minutes of individual work, 3 minutes of group mingling, and 5 minutes debrief

SAY: Norovirus - you may have heard about it related to cruise ships, but it also impacts child care facilities and other institutional and group settings. Child care facilities can share many common characteristics with cruise ships when it comes to transmitting norovirus.

Let’s start out by folding your name tent in half and putting your first name in large letters on one side. On the back side list at least three ways that a child care facility is similar to a cruise ship.

DO: Allow participants 2 minutes to do this independently.

SAY: Now, take your name tent and list, and move around the room to find someone you do not know or do not know well. Introduce yourself and share your list with this person, then allow them to introduce themselves and share their list. If time allows, move on to another person to share your name and list.

DO: Allow 3 minutes of group mingling.

SAY: Let’s quickly share your name and one similarity on your list. It is okay to repeat what someone else has said.

DO: Write the participants’ comments on the flip chart, putting a check mark beside duplicate comments.
Possible responses:

- Multi-use rooms: food, classes and activities share common tables
- High-touch surfaces: hand rails, toys, door handles, key boards, etc.
- Increased proximity to infected people; increased opportunity for person-to-person contact; repeated exposure over hours or days
- Food: large volume, high distribution, some external/unregulated

**SAY:** We can see from this list that child care facilities have many qualities that make them susceptible to norovirus outbreaks.

Norovirus is the leading cause of foodborne illness, and it is estimated that more than half of all food-related outbreaks of illness are caused by norovirus. Today, we will discuss how everyone plays a part in preventing norovirus and controlling its spread.

**SHOW SLIDE:** *Goals for Today*

**SAY:** During this presentation, I will cover many topics related to norovirus, including:

- What is norovirus, and why is it a concern in child care?
- How to recognize the symptoms of norovirus, and what is the duration?
- How norovirus is transmitted?
- How can we prevent norovirus in child care settings?
- What steps to take if a body fluid incident or norovirus outbreak occurs in our child care facility?

**SHOW SLIDE:** *Pre-Assessment*

**ACTIVITY – Pre-Assessment**

**Purpose:**

(1) To pre-assess participants’ knowledge of norovirus and
(2) To establish the lesson content.

**Preparation:** Review the activity directions.

**Materials:** Pre-Assessment

**Time:** 7-10 minutes of individual work

**SAY:** Before we begin, I am going to distribute the Pre-Assessment. Please do not write your name on the assessment, instead write an identifier in the top right corner. Identifiers can be the last four (4) digits of your phone number, a favorite word, etc. Please remember your identifier because you will need to list it on your Post-Assessment. Answer the questions to the best of your ability. We will discuss the content during the training, and we will review the answers at the end. This activity should take about ten (10) minutes and is meant to be done individually. I will collect the Pre-Assessment after everyone has finished.
DO: Allow participants 7-10 minutes to complete the Pre-Assessment. Collect the Pre-Assessment.

SHOW SLIDE: **Norovirus Video**

ACTIVITY – Norovirus Scenario Video

- **Purpose:** To introduce norovirus
- **Preparation:** Review the activity directions below. Download and review the complete video (*Everyone Plays a P.A.R.T. in Norovirus Control*). Review answer key.
- **Time:** 4 minute video, 4-6 minutes of participant feedback.

*TECHNOLOGY TIP:* The WMV version of the video can be embedded into the PowerPoint slide. Select “Insert” on the toolbar. Choose “Video” on the toolbar ribbon and the drop down “Video from File”. Locate the folder containing the video, select the video and select “Insert”. For additional assistance contact ICN’s Information Services through the ICN Help Desk.

SAY: To further access your food safety knowledge please turn in your Participant’s Workbook to the video viewing guide. We will watch a short video scene where several food safety mistakes are made, especially related to norovirus prevention. As the video plays, write down any mistakes seen. While the video takes place in a school environment, the food safety mistakes are also applicable within a child care environment.

DO: Play video.

SHOW SLIDE: **Video Viewing Guide – Norovirus**

SAY: We have just seen how a few simple mistakes can lead to a big outbreak. What mistakes did you see?
EVERYONE PLAYS A PART IN NOROVIRUS CONTROL – Video Viewing Guide – Answer Key

Instructions:
As you watch the video Everyone Plays a P.A.R.T. in Norovirus Control look for mistakes made by Nina, Linda and Mia. Record the mistakes below.

1. Nina went to work when she was ill with reportable symptoms.
2. Nina failed to wash her hands after leaving the restroom at work before starting her shift.
3. Nina did not report her symptoms to her manager, even when asked.
4. The sanitizer bucket was on the prep table.
5. The manager/Linda did not know to exclude Nina from work for a specific period of time.
6. The manager/Linda and Nina touched ready-to-eat foods with their bare hands. Nina has a cut on her hand that is not properly covered.
7. After wiping Nina’s face (having contact with her), manager/Linda did not wash her hands before touching food and food contact surfaces.
8. Food in the work area (25 foot radius) was stored instead of being disposed after the vomiting incident.
9. The kitchen should have been shut down for thorough cleaning and disinfecting after a vomiting incident.
10. Mia and Linda did not use personal protective equipment to clean up after the vomiting incident.
11. Linda used the same towel to wipe vomit off of Nina and also to clean food contact surfaces.
12. Mia did not remove the vomit/waste before mopping.
13. Mia did not dispose of the mop water (saved for later use); and did not disinfect the mop bucket or mop head after use.
14. Food contact surfaces within a 25 foot radius were not disinfected.
15. The manager/Linda and Mia did not wash their hands properly after the cleanup.
OBJECTIVE: Describe why norovirus is a concern in child care settings.

SHOW SLIDE: Why is Norovirus a Concern?

SAY: Norovirus is the leading cause of foodborne illness in the US, attributed to over 50% of all foodborne illness outbreaks. Unlike some viruses, this virus is very tough and resistant. It can survive in temperatures as low as 0 °F and as high as 140 °F. In addition, norovirus can survive for at least a week on surfaces such as stainless steel. Another challenge is that common foodservice sanitizers are not effective in killing norovirus. This is especially important when sanitizing after staff or children have vomited or contaminated a surface. In this case, the use of a special disinfectant is required to effectively kill norovirus.

Raise your hand if you use chlorine as a sanitizer chemical in your kitchen or other food service areas. Chlorine is a commonly used sanitizing chemical in child care facilities. Safe chemical ranges for sanitizing with chlorine are between 50 - 100 parts per million (PPM) which is about 1 teaspoon of bleach for one gallon of water. However, this level is too low of a concentration to kill norovirus. You can only kill norovirus with use chlorine at a disinfectant level of 1,000-5,000 ppm, or 4 - 16 tablespoons of bleach per one gallon of water! Quat sanitizers, which are quaternary ammonium based cleaners, at any concentration are ineffective against norovirus.

OBJECTIVE: List the symptoms of norovirus.

SHOW SLIDE: Norovirus Symptoms

SAY: Please turn in your Participant’s Workbook to the Norovirus handout and follow along.

Norovirus illness is sometimes referred to as the stomach flu or food poisoning due to the similarity in symptoms. Symptoms of norovirus include nausea, vomiting, and diarrhea accompanied by abdominal cramps. Some people also complain of headache, fever or chills, and muscle aches. Symptoms usually begin 12 - 48 days after exposure to the virus and usually last for 1 - 3 days.

During this time people can feel very ill and often vomit violently or have explosive diarrhea many times a day. Most people recover completely within 1 to 2 days with no long-term complications of norovirus illness. However, persons who are unable to drink enough liquids to replace those lost with vomiting and/or diarrhea may become dehydrated and require special medical attention. Young children, the elderly, and persons with other illnesses are the most likely to have severe symptoms. You, as child care workers, work with young children who are considered a highly susceptible population to foodborne illness.
**NOROVIRUS**

**What is norovirus?**

Norovirus is a virus that causes illness sometimes referred to as the “stomach flu,” although it is not related to the flu (or influenza). Infection with norovirus affects the stomach and intestines, causing an illness called gastroenteritis. Norovirus was named for Norwalk, Ohio in 1968 after an outbreak in a school. More than half of all foodborne illness outbreaks are caused by norovirus.

**What are the symptoms of norovirus?**

Norovirus symptoms include nausea, vomiting, diarrhea, and stomach cramps. Some people also complain of headache, fever or chills, and muscle aches. Symptoms usually begin 12 - 48 days after contact with the virus and usually last for 1 - 3 days. During that time, people can feel very ill and often vomit violently or have explosive diarrhea many times a day.

**How is norovirus spread?**

Norovirus is found in the stool or vomit of infected people. Those infected by norovirus are contagious for up to three days after their symptoms resolve. The virus is very contagious and easily spread by:

- Eating food or drinking liquids contaminated with norovirus.

- Touching surfaces or objects contaminated with norovirus, and then placing a hand to the mouth. For example, during family-style dining meal service, a child picks up tongs previously handled by another child with norovirus, takes some carrots, and then eats the carrots with their hands. In another example, a child care employee touches a door knob infected with norovirus and then serves food.

- Having direct contact with stool or vomit from a person who is infected.

- Having contact with tiny droplets of vomit that becomes airborne during a vomiting incident or from splashing. Droplets can travel through the air up to 25 feet to land on food and food contact surfaces.

**Why is norovirus important for child care employees?**

People working with food who are sick with norovirus can easily make others ill. A sick child care employee can – without meaning to – contaminate the food he or she is handling. Children and staff may become ill by eating contaminated food resulting in an outbreak. People infected with norovirus are contagious from the moment they begin feeling ill to at least 3 days after symptoms are gone, but some people may be contagious for as long as 2 weeks after recovery. It is important for people to use good handwashing and other hygienic practices such as properly wearing disposable gloves, especially after they have recently recovered from norovirus illness.
NOROVIRUS

How can norovirus be prevented?

Everyone plays a part in the prevention of norovirus by practicing good personal hygiene, which includes:

• Frequent handwashing with soap and water, especially after each toilet visit, before eating or preparing food, before putting on clean gloves, and after changing diapers in child care settings.

• Preventing bare hand contact with all ready-to-eat and ready-to-serve foods.

• Reporting illness symptoms to your child care director.

• This includes symptoms of vomiting, diarrhea, jaundice or yellowing of the skin or eyes, a sore throat with fever, and infected cuts on hands, wrists, or exposed arms.

• You should also tell your child care director if you have been diagnosed with or in contact with others having foodborne illnesses, which in addition to norovirus includes Hepatitis A, Shigella, E. coli, Salmonella Typhi, and nontyphoidal Salmonella.

• Staying home when you are ill. For illnesses like norovirus, your child care director will ask that you stay home until your symptoms have been resolved for two days.

Norovirus is the leading cause of foodborne disease in the United States and has been a primary source of outbreaks in child care centers. Follow prevention steps to reduce the likelihood of an outbreak in your center.
SHOW SLIDE: *Highly Contagious*

**SAY:** It only takes a few particles of norovirus to cause illness – around 18. Looking at the numbers of particles spread by vomiting and in feces, we can all understand why proper control of norovirus is critical to stopping the spread of the virus. In one gram of feces (about the size of a raisin), you have over 1 trillion particles of norovirus. There are about 300,000 virus particles in one projectile vomiting incident.

Norovirus is a very contagious illness. People infected with norovirus are contagious from the moment they begin feeling ill until several days after recovery. Those people working with food in a child care who are sick with norovirus are a big risk to others because they handle the food and drinks, both children and staff will consume. A sick food handler can easily – without meaning to – contaminate the food he or she is preparing or serving. Many of those eating the contaminated food may become ill, causing an outbreak.

**ASK:** Have you ever heard of a child care or school being shut down because of a norovirus outbreak?

**DO:** Allow participants time to reply.

**OBJECTIVE:** Describe how norovirus is transmitted.

**SHOW SLIDE:** *Norovirus Transmission*

**ASK:** How do people become infected with norovirus? (wait for audience responses)

**SAY:** People can become infected with norovirus in several ways, including:

• Having direct contact with the stool or vomit of a person who is infected;

• Eating food that has been contaminated by either direct contact with contaminated hands or work surfaces that are contaminated with stool or vomit;

• Touching surfaces or objects contaminated with norovirus and then placing their hand in their mouth; or

• Norovirus can also be transmitted through tiny airborne droplets. Because it is so small, it is aerosolized in the air when someone vomits or flushes the toilet.

**SHOW SLIDE:** *Transmission by Air: 25 feet*

**Instructor’s Note:** This slide includes animation that depicts the 25 foot spread of aerosolized particles.

**SAY:** Imagine an ill child is preparing to sit down to eat.

**DO:** Click next (slide advance): the green dot moves into the dining area.
SAY: Then the child vomits.

DO: Click next (slide advance): a green mass flows over the area to depict the 25 foot spread of aerosolized droplets.

SAY: Norovirus can spread through the air and throughout the seating area to people, food, and surfaces. Anyone who comes in contact with these droplets may also become ill.

(Option: Use a tape measure to demonstrate the 25 foot zone being described.)

SHOW SLIDE: Everyone Plays a P.A.R.T.

SAY: As a child care provider, you play a part in reducing the likelihood of an outbreak due to norovirus by:

• Preventing norovirus by following good personal hygiene practices,
• Assembling and having ready a Body-Fluid Cleanup Kit,
• Responding correctly to a vomiting incident, and
• Completing a total cleanup process after an incident.

OBJECTIVE: List personal hygiene habits that can prevent norovirus.

SHOW SLIDE: Prevent

SAY: Let’s start by learning ways to prevent a norovirus outbreak. Practicing good personal hygiene can prevent norovirus in your child care center. This includes frequent handwashing with soap and water, especially after each toilet visit; before eating, preparing, or serving food; when changing diapers or assisting with toilet visits; and any time hands become contaminated. Let’s see who is a handwashing star.

ACTIVITY – Handwashing Challenge

• Purpose: To reinforce the importance of thorough handwashing.

• Preparation: Review the activity directions. Practice using the props. Draw an oversized picture of the front and back of a set of hands.

• Materials: UV-glowing lotion, black light(s), flipchart pad, easel, markers in a unique color for each team (4-5), Participant’s Workbook Handwashing Challenge page.

• Time: 3 minutes to apply lotion and wash hands, (simultaneously – 3 minutes of audience brainstorming), 5-6 minutes of group post-handwashing assessment, 3-4 minutes of team feedback and activity summary.

DO: Divide the participants into teams (3-5 depending on audience numbers) and have each team select a representative. (Option: if the audience is larger than 25 attendees, request 3 volunteers to participate).
SAY: We are going to have a handwashing competition. The selected individuals will be showing us how well they can wash their hands.

DO: Squirt approximately 1 tablespoon of ultraviolet-glowing lotion (GloGerm™ or Glitter Bug©) into the palm of each volunteer’s hand. Ask participants to rub this into their hands like it is hand lotion. Select one volunteer and ask the volunteer to raise their hands to head height (so attendees in the back of the room can see the demonstration). Use the black light to show how well covered the hands/wrist are with the glowing lotion.

<Option: Have participants stand in a circle to see the demonstration.>

SAY: Imagine that you have just used the restroom. This simulates the amount of contamination that could be on your hands. Shortly, all volunteers will need to leave the room and wash their hands.

ASK: How long should we wash our hands?

DO: Wait for an audience response.

SAY: That is correct; we should scrub for at least 20 seconds with soap and water. Okay volunteers, please go out and wash your hands. (Volunteers leave)

(While volunteers are out of the room) When the volunteers return we will use the black light to see how well they washed their hands. Places that are not washed well will continue to glow. Please turn in your Participant’s Workbook to the Handwashing Challenge page. Each team will use the black light and this page to record where the volunteers’ hands or wrists glow. We will count the number of glowing areas and see who washed their hands the best.

ASK: What are some reasons that we or others may skip handwashing or may not wash our hands thoroughly?
DO: List audience responses on a flip chart. Post on the wall with tape.

ASK: What are ways we can overcome some of these barriers to good handwashing habits?

DO: List audience responses on a flip chart. Post on the wall with tape.

When the volunteers return, ask each group to use the black light and record areas on the hands and wrists that still glow on the Handwashing Challenge page.

While the groups are working, draw on flipchart paper an oversized picture of the front and back of a set of hands (like the Handwashing Challenge page) with a marker. Have a marker in a unique color for each team (3-5 colors).

SAY: (Volunteers return) Okay, let’s see how well the volunteers washed their hands.

DO: Have one person from each team report on the number of glowing areas found and have them use their marker to draw on the flipchart where these glowing areas were located. Acknowledge and congratulate the person with the cleanest hands.

SAY: We have learned two important lessons – First, even though we have been trained before and have been washing our hand all of our lives, we can always do a better job with handwashing. Also, let’s note the areas that were most commonly missed.

DO: Refer to the flipchart where teams have marked areas missed during handwashing.

SAY: As you can see, the areas of the hands that we most frequently miss are the wrists, cuticles and under our nails, between our fingers, and our non-dominant thumb.

SHOW SLIDE: Wash Your Hands

ACTIVITY – Wash Your Hands Video

• **Purpose:** To reinforce when hands should be washed and the steps for thorough handwashing.

• **Preparation:** Review the activity directions below. Download and review the complete video Wash Your Hands. Review answer key.

• **Props:** Video, laptop speakers, DVD player, Wash Your Hands – Video Viewing Guide, Proper Handwashing handout.

• **Time:** 5 minute video, 4-6 minutes of participant feedback.

* **TECHNOLOGY TIP:** The WMV version of the video can be imbedded into the PowerPoint slide. Select “Insert” on the toolbar. Choose “Video” on the toolbar ribbon and the drop down “Video from File”. Locate the folder containing the video, select the video and select “Insert”. For additional assistance contact ICN’s Information Services through the ICN Help Desk.
SHOW SLIDE: Video Viewing Guide – Wash Your Hands

SAY: Turn to the Wash Your Hands – Video Viewing Guide in your Participant’s Workbook. We are going to watch a video. As we are watching the video, please list the steps for correct handwashing and times when hands should be washed. While the video takes place in a school environment, the hand washing best practices are applicable to child care environment.

DO: Show the video Wash Your Hands.

ASK: What are the steps for proper handwashing?

DO: Wait for audience responses.

SAY: Correct. In addition, (list any steps on the answer key that were not mentioned).

DO: Refer participants to the Proper Handwashing handout in the Participant’s Workbook for proper handwashing procedures.

ASK: Based on the video we saw, when should we wash our hands?

DO: Wait for audience responses.

SAY: That is correct. In addition... (list any responses on the answer key that were not mentioned).
**WASH YOUR HANDS – Video Viewing Guide – Answer Key**

**Instructions:**

As you watch the video *Wash Your Hands*, record how hands are washed and when hands are washed below.

<table>
<thead>
<tr>
<th>How to Wash Hands</th>
<th>When to Wash Hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following steps are required for effective handwashing:</td>
<td>• When arriving for the day</td>
</tr>
<tr>
<td>1. Use the handwashing sink with running warm water.</td>
<td>• When moving from one assigned task to another</td>
</tr>
<tr>
<td>2. Rinse hands and exposed parts of the arms under running water and apply soap.</td>
<td>• When entering a food preparation area</td>
</tr>
<tr>
<td>3. Lather hands together for at least 20 seconds, paying close attention to</td>
<td>• Before, during, and after preparing food</td>
</tr>
<tr>
<td>fingernails, between the fingers/fingertips, and surfaces of the hands and</td>
<td>• Before serving food</td>
</tr>
<tr>
<td>arms.</td>
<td>• Before putting on new, single-use gloves, and between glove changes</td>
</tr>
<tr>
<td>4. Rinse thoroughly with clean, warm running water.</td>
<td>• Before handling clean dishes or utensils</td>
</tr>
<tr>
<td>5. Thoroughly dry the hands and exposed portions of arms with single-use paper</td>
<td>• When changing food preparation tasks, such as between working with ready-to-eat</td>
</tr>
<tr>
<td>towels or a heated-air, hand-drying device.</td>
<td>and raw foods</td>
</tr>
<tr>
<td>6. Avoid recontamination of hands and arms by using a paper towel to turn off</td>
<td>• After handling soiled dishes or utensils</td>
</tr>
<tr>
<td>hand sink faucets and/or to open the restroom door.</td>
<td>• After touching bare human body parts, for example, parts other than clean hands</td>
</tr>
<tr>
<td></td>
<td>and clean, exposed portions of arms</td>
</tr>
<tr>
<td></td>
<td>• After using the toilet</td>
</tr>
<tr>
<td></td>
<td>• After changing diapers or cleaning up a child who has used the toilet</td>
</tr>
<tr>
<td></td>
<td>• After blowing their nose, coughing, or sneezing</td>
</tr>
<tr>
<td></td>
<td>• After touching an animal or animal waste</td>
</tr>
<tr>
<td></td>
<td>• After handling pet food or pet treats, including visits to petting zoos</td>
</tr>
<tr>
<td></td>
<td>• After touching garbage</td>
</tr>
<tr>
<td></td>
<td>• When leaving for the day</td>
</tr>
<tr>
<td></td>
<td>• Whenever hands are soiled</td>
</tr>
<tr>
<td></td>
<td>• After breaks</td>
</tr>
<tr>
<td></td>
<td>• After eating, drinking, or chewing gum</td>
</tr>
<tr>
<td></td>
<td>• After using the telephone</td>
</tr>
<tr>
<td></td>
<td>• After handling raw food</td>
</tr>
<tr>
<td></td>
<td>• After clearing or cleaning tables</td>
</tr>
<tr>
<td></td>
<td>• After using chemicals</td>
</tr>
</tbody>
</table>
PROPER HANDWASHING

What is proper handwashing?

Proper handwashing is cleaning hands and exposed arms by applying soap and warm water, rubbing them together vigorously, rinsing them with clean water, and drying them thoroughly. Handwashing is important to get rid of dirt and reduce germs that can cause illness. The following steps are required for proper handwashing:

1. Wet hands with clean, running, warm water and apply soap.
2. Rub hands together to make a lather and scrub them well; making sure to scrub the backs of their hands, between their fingers, and under their nails.
3. Continue rubbing hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
4. Rinse hands well under running water.
5. Dry hands using a paper towel or air dry them.
6. Avoid re-contaminating hands when turning the water off and discarding paper towels. Turn the water off using a paper towel, or a similar barrier. Trash cans with foot-pedal operated lids are preferable.
7. When assisting a child in handwashing, either hold the child (if an infant) or have the child stand on a safety step at a height at which the child’s hands can hang freely under the running water.
8. Assist the child in performing all of the above steps, and then wash your own hands.

Why is handwashing important?

Handwashing is critical to preventing the transmission of pathogens (germs) that cause illness. A child care center employee can transfer germs from hands to food, or food contact surfaces. Children that subsequently eat contaminated food may become sick. Proper handwashing helps to prevent foodborne illness.

When should child care center employees wash their hands?

Hands should be washed immediately:

- When arriving for the day.
- When moving from one assigned task to another.
- When entering a food preparation area.
- Before, during, and after preparing food.
- Before serving food.
- Before putting on new, single-use gloves, and between glove changes.
- Before handling clean dishes or utensils.
- When changing food preparation tasks, such as between working with ready-to-eat and raw foods.
- After handling soiled dishes or utensils.
- After touching bare human body parts, for example, parts other than clean hands and clean, exposed portions of arms.
- After using the toilet.
- After changing diapers or cleaning up a child who has used the toilet.
- After sneezing, coughing, or blowing of the nose.
- After touching an animal or animal waste.
- After handling pet food or pet treats, including visits to petting zoos.
- After touching garbage.
- When leaving for the day.

Can hand sanitizers be used in place of proper handwashing in food preparation areas?

No. Hand sanitizers do not take the place of proper handwashing.
SAY: This video was a school example. In child care settings are there other times we should wash our hands?

DO: Wait for responses.

Possible responses:

- Before feeding children and infants
- After handling pets, pet food or pet cages
- After visiting a petting zoo
- After being outside or on the playground
- Before and after diaper changes or assisting with toilet visits
- Before and after tending to someone who is sick or injured
- After using chemicals
- After touching dirty aprons, clothing, or surfaces

SAY: Remember, hand sanitizers do not kill norovirus and cannot take the place of proper handwashing. If used, hand sanitizers should be applied only after proper handwashing.

SHOW SLIDE: Prevent – RTE Foods

ACTIVITY – Preventing Bare Hand Contact with Ready-to-Eat Foods

- Purpose:
  (1) To identify ready-to-eat foods and
  (2) To reinforce the importance of no bare hand contact with ready-to-eat foods.
- Preparation: Review the activity directions. Review answer key.
- Materials: What are Ready-to-Eat Foods?, No Bare Hand Contact with Ready-to-Eat Foods handout
- Time: 3 minutes of team work, 2 minutes of answer review.

SAY: Practicing good personal hygiene also includes preventing bare hand contact with ready-to-eat foods. Please turn to the What are Ready-to-Eat Foods? activity in your Participant’s Workbook.

DO: Create 4 teams. Assign 1 question per team.

SAY: Each team can refer to the information on in the No Bare Hand Contact with Ready-to-Eat Foods handout in their Participant’s Workbook, if needed.

DO: Allow participants 3 minutes to complete their assigned question.

SAY: Let’s review your answers.
DO: Call on each team spokesperson to share their answers. Clarify and elaborate on the answers provided as needed.

WHAT ARE READY-TO-EAT FOODS? - Answer Key

Instructions:
Work with your team to answer your assigned questions about ready-to-eat foods.

1. What are ready-to-eat foods? (definition)
   
   • Possible answers: Foods that are never cooked or eaten without further preparation, washing, or cooking.

2. Why are ready-to-eat foods more likely to spread norovirus?
   
   • Possible answers: Handling ready-to-eat foods with unclean hands or utensils will contaminate them. These foods will be served without further preparation, washing, or cooking. Cooking is an important step used to kill pathogens. Employees who do not follow good personal hygiene practices could make many people ill.

3. What are examples of ready-to-eat foods served in child care centers?
   
   • Possible answers: Salads, fresh fruit, fresh vegetables, deli meats, cold sandwiches, cheeses, and all cooked foods that are ready-to-serve. In addition, infant formulas and baby food would be ready-to-eat foods.

4. In addition to gloves, what else can a child care provider use to prevent bare hand contact?
   
   • Possible answers: Utensils such as tongs, spoons, forks, scoops, and deli sheets.
NO BARE HAND CONTACT WITH READY-TO-EAT-FOODS

Is it necessary to use single-use gloves when handling ready-to-eat food?

A barrier, such as single-use gloves, is necessary when working with ready-to-eat foods. Single-use gloves, along with handwashing, can be effective in preventing germs on the hands from contaminating food. However, gloves are effective in preventing contamination only if used properly.

What are the instructions for properly wearing single-use gloves?

Glove use should not take the place of handwashing. Child care employees should properly wash their hands before putting on new single-use gloves. Employees should:

• Wear single-use gloves, or use another suitable utensil, when preparing and serving ready-to-eat foods.

• Change single-use gloves between tasks, such as between working with ready-to-eat and raw foods.

• Replace single-use gloves that are torn, damaged, or contaminated.
  » Single-use gloves may become contaminated after sneezing, coughing, or touching skin and hair; touching equipment, such as door handles; handling other food; or conducting other tasks.

• Do not wash or reuse single-use gloves.

• Cover an infected wound or lesion with a waterproof covering and a single-use glove.

• Ensure that single-use gloves fit properly.

• Consider using non-latex gloves to address latex allergies.
OBJECTIVE: Name illnesses and symptoms of illnesses that must be reported to a child care director, and identify the required director responses.

SHOW SLIDE: Prevent – Report Symptoms

SAY: Prevention of all foodborne illnesses like norovirus includes working only when we are well and knowing which symptoms to report to the child care director. Symptoms that must be reported include vomiting, diarrhea, jaundice or yellowing of the skin or eyes, a sore throat accompanied by a fever, and infected cuts on hands, wrists, or exposed arms. We should also tell our child care director if we have been diagnosed with or exposed to others with any foodborne illnesses. Several illnesses are easily transmitted from person to person and through food and must also be reported to the health department. In addition to norovirus, report illnesses due Hepatitis A, Shigella spp (shigellosis), E. coli, Salmonella Typhi (typhoid fever), and nontyphoidal Salmonella (salmonellosis).

SHOW SLIDE: Prevent – Exclude and Restrict

SAY: To reduce the chance that food will be contaminated by ill or infected child care staff, child care directors may either exclude or restrict ill staff. Exclusion means child care staff are not permitted to work. In child care, employees with symptoms of vomiting, diarrhea, jaundice (yellowing of the skin or eyes), a sore throat and fever, or those who have been diagnosed with a foodborne illness must be excluded.

Restriction means a child care center employee’s activities are limited to prevent the risk of transmitting a disease that is spread through food. A restricted employee cannot handle food, clean equipment, utensils, food linens, or unwrapped single-service or single-use articles. Job duties for employees who are restricted may include working in non-food cleaning or maintenance tasks. In child care, employees who have been exposed to an illnesses due Norovirus, Hepatitis A, Shigella (shigellosis), E. coli, Salmonella Typhi (typhoid fever), and nontyphoidal Salmonella (salmonellosis) through an outbreak or a household member should be restricted. In addition, employees with an uncovered cut on the hand or arms must be restricted. An employee with a properly covered wound (clean bandage and glove) does not have to be restricted.

In most cases, the child care director reserves the right to remove, adjust, or retain the exclusion or restriction. In some cases, an approval from a medical provider or the local health department is required to lift an exclusion or restriction depending on the illness. For illnesses like norovirus, employees will be asked to stay home until symptoms have been resolved for at least 2 days. This information is also covered in the Restricting or Excluding Ill Child Care Employees handout in your workbook.

Contact your local health department and State agency for information pertaining to your local and state policies.
RESTRICTING OR EXCLUDING ILL CHILD CARE EMPLOYEES

What symptoms or conditions should child care employees report to their director?

The following symptoms or conditions should be reported:

- Diarrhea or vomiting;
- Sore throat with a fever;
- An infected cut or wound on hands or arms;
- Jaundice (eyes or skin turns yellow);
- Diagnosis with a foodborne illness; and
- Exposure to a foodborne illness.

Who can exclude or restrict a child care center employee?

The director has the authority to exclude or restrict an employee from work. The local health department may also have the authority to exclude or restrict an employee who has symptoms of, or has been diagnosed with, foodborne illness. It is recommended that the director work with the health department in these situations.

When can an excluded or restricted child care center employee return to work?

In most cases, the director removes, adjusts, or retains the exclusion or restriction. In some cases, approval from the local health department or a medical provider is required to remove an exclusion or restriction. The director should consult with the local health department to address questions about when an excluded or restricted employee can return to regular work.

What should the child care center director do when an employee reports a diagnosis of foodborne illness or displays symptoms?

The director is responsible for taking action to prevent the employee from transmitting disease to children by excluding or restricting the employee. In some cases, the director may be required to report certain illnesses and symptoms to the health department.

What is exclusion?

Exclusion means a child care center employee is not permitted to come to work.

What is restriction?

Restriction means a child care center employee’s activities are limited to prevent the risk of transmitting a disease through food. A restricted employee cannot handle food, clean equipment, utensils, or linens. Job duties for employees who are restricted may include working in non-food cleaning or maintenance tasks.
SHOW SLIDE: **Exclude or Restrict Activity**

SAY: Let’s turn to the Exclude or Restrict? activity in your workbook and complete a quick quiz.

ACTIVITY – Exclude or Restrict

- **Purpose:** Apply restriction and exclusion criteria for reportable symptoms and illnesses.

- **Preparation:** Review the activity directions. Review the participant worksheet. Review answer key.

- **Materials:** Exclude or Restrict? activity in Participant’s Workbook.

- **Time:** 3 minutes of individual or group work. 5-8 minutes of answer review.
**EXCLUDE or RESTRICT? - Answer Key**

**Instructions:**

For each of the symptoms or illnesses, should the employee be **excluded**, **restricted**, or **allowed to work**?

**Definitions:**

- **Exclude:** Child care center employee who is not permitted to come to work.
- **Restrict:** Child care center employee’s activities are limited to prevent the risk of transmitting a disease that is spread through food. A restricted employee cannot handle food, clean equipment, utensils, food linens, or unwrapped single-service or single-use articles.

<table>
<thead>
<tr>
<th>MAY WORK</th>
<th>EXCLUDE</th>
<th>RESTRICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica has a cold with watery eyes, sneezing, and sniffles.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Nina is having bouts of vomiting.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Jorge has a cut on his hand that is infected and uncovered.</td>
<td></td>
<td>✔ Until cut is properly covered</td>
</tr>
<tr>
<td>Mia’s husband has been diagnosed with norovirus.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Leonard has a persistent cough.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Aggie has a sore throat and fever.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Annette has diarrhea.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Linda has been diagnosed with norovirus.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Ben’s last episode of diarrhea was 48 hours ago.</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

Contact your local health department and State agency for information pertaining to your local and state policies and procedures.
INSTITUTE OF CHILD NUTRITION

SHOW SLIDE: **FDA “Three-Legged Stool”**

SAY: The Food and Drug Administration (FDA) refers to the “three legged stool” for norovirus prevention:

(1) thorough and effective handwashing;

(2) no bare hand contact with ready-to-eat foods; and

(3) an employee health and wellness program.

ICN has many resources to assist child care staff and directors in creating a food safety program – such as best practices in food safety, training resources, and job aids for personal hygiene issues including handwashing, glove use, and exclusion and restriction of ill employees. Web links to those ICN resources are provided in the back of your Participant’s Workbook. ICN’s Employee Health and Personal Hygiene materials will be an essential tool to develop a food safety program.
OBJECTIVE: Identify the components of a Body Fluid Cleanup Kit.

SHOW SLIDE: **Body Fluid Cleanup Kit**

SAY: The FDA *Food Code* made a change related to norovirus prevention: Clean-up of Vomiting and Diarrheal Events. This recommendation states that: “A food establishment shall have procedures for employees to follow when responding to vomiting or diarrheal events. The procedures shall address the specific actions employees must take to minimize the spread of contamination and the exposure of employees, consumers, food, and surfaces to vomitus or fecal matter.”

In this next section, we will learn important procedures to put in place in your child care facility.

SAY: Your Participant’s Workbook contains valuable resource links, handouts, posters, and sample best practices that your facility can implement or adapt to comply with these new recommendations.

**ACTIVITY – Body Fluid Cleanup Kit**

- **Purpose:** To pre-assess participants’ knowledge of Personal Protective Equipment (PPE) and cleaning tools.

- **Preparation:** Review the activity direction. Review the participant worksheet. Review answer key.

- **Materials:** Identify the Components of the Body Fluid Cleanup Kit in Participant’s Workbook.

- **Time:** 5 minutes of participation and participant feedback.

SAY: Please turn to the *Identify the Components of the Body Fluid Cleanup Kit* activity in your Participant’s Workbook. Let’s stand and determine which items are for personal protective equipment and which are for cleaning. If the item is personal protective equipment make the letter “P” with your body.

DO: Demonstrate forming a “P” by turning to the left and curling your arms inward to your waist.

SAY: If the item is for cleaning, use your arms to form a “C”.

DO: Demonstrate by turning to the left, curling one arm at head level and one arm at waist level to form a “C”.
SHOW SLIDE: **Items/PPE/Cleaning Chart**

Instructor’s Note: This slide is animated. The answers (check marks) enter each time you click next slide advance.

**DO:** Ask for participants to respond by using their bodies to form a “P” or “C” as they answer. As they provide the answer, ‘reveal’ the correct answer on the slide by clicking “next” (using the slide advance) and demonstrate the correct letter (P or C).

**SAY:** Great job! You can be seated. This information is also covered in the Assembling a Body Fluid Cleanup Kit handout and Assembling a Body Fluid Cleanup Kit (Sample SOP) in your Participant’s Workbook. Please take a moment and place a check mark in the column that corresponds to the information we just covered.

**DO:** Be sure to cover the concentration ratio of bleach found below the activity.
**Identify the Components of the Body Fluid Cleanup Kit - Answer Key**

**Instructions:**

Below are items in a Body Fluid Cleanup Kit. Place a check mark in the column that best describes each item.

- Which are for Personal Protective Equipment (PPE)?
- Which are for cleaning?

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>PPE</th>
<th>CLEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket and spray bottle</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Disposable gown</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Effective disinfectant*</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Facemask with eye protection or goggles</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Gloves</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Paper towels</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Plastic garbage bag</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Sand or liquid spill absorbent material</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Flat edge scoop, small shovel or dustpan</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Shoe covers</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

* EPA-registered disinfectants effective against norovirus ([www.epa.gov/pesticide-registration/list-g-epa-registered-hospital-disinfectants-effective-against-norovirus](http://www.epa.gov/pesticide-registration/list-g-epa-registered-hospital-disinfectants-effective-against-norovirus)) or chlorine bleach (8.25% concentration) at 1000 - 5,000 parts per million (ppm) (4 tablespoons and 16 tablespoons (1 cup) of bleach with 1 gallon of water). It is recommended that 1 cup of bleach per 1 gallon of water be used on surfaces that have had direct contact with body fluids.

* Read the label on the bleach bottle:
  Sodium hypochlorite is the active ingredient in chlorine bleach. Different brands of bleach may have different amounts of this ingredient; the most common being 8.25% sodium hypochlorite. Read the label to find out the concentration of sodium hypochlorite and prepare the disinfecting solution as appropriate.

Contact your local health department and state agency for information pertaining to your local and state policies.
SHOW SLIDE: **Assemble – PPE**

**DEMONSTRATION – Personal Protective Equipment**

- **Purpose:** To display and describe the purpose of PPE.
- **Preparation:** Review the demonstration directions.
- **Materials:** Disposable gown, gloves, facemask with face shield, and shoe covers
- **Time:** As content is discussed.

**DO:** As each item is mentioned, lift it up so that all participants can see.

**SAY:** All body fluids, including vomit, should be treated as infectious. That's why every child care facility should **Assemble** a Body Fluid Cleanup Kit for their operation. This kit should include Personal Protective Equipment to keep employees safe while cleaning, including a disposable gown, gloves, facemask with eye protection or goggles, and shoe covers. We will learn how to wear these items in a few minutes.

SHOW SLIDE: **Assemble – Cleaning Supplies**

**DO:** As each item is mentioned, refer to the photos on the screen.

**SAY:** The Body Fluid Cleanup Kit should contain supplies to remove and dispose of the waste. This includes a bucket and spray bottle for mixing chemicals, disposable paper towels, a designated, disposable mop head for body fluid cleanup, and a plastic garbage bag with twist-ties. Additional items to include are a disposable scoop, small shovel, or dustpan to help pick up the waste and sand or liquid spill absorbent material to make the waste more solid and less likely to splash or splatter during cleanup. Pre-assembled kits containing the recommended supplies are available through many chemical supply companies.

SHOW SLIDE: **Assemble – Disinfectants**

**SAY:** The final item required for the Body Fluid Cleanup Kit is a disinfectant effective against norovirus. As mentioned earlier, common foodservice sanitizers are not effective in killing norovirus. This means that the chemicals we normally use to sanitize food contact surfaces should not be used to cleanup body fluids. A list of EPA-registered disinfectants against norovirus can be found on the website listed on your *Assembling A Body Fluid Cleanup Kit* handout. These should be used following the manufacturer’s directions for concentration. In the absence of such a product, chlorine bleach mixed to 1,000 - 5,000 parts per million (PPM) should be used. This is a very high concentration of chlorine and should be mixed wearing personal protective equipment and used in a well-ventilated area. The solution should also be made fresh before each use because the solution loses concentration over time. Once opened, bleach loses its effectiveness after 30 days. Use a new, unopened bottle of bleach every 30 days for preparing solutions. Also remember that bleach should not be mixed with any other chemical.

Store the Body Fluid Cleanup Kit with an unopened container of household bleach, or the EPA-approved disinfectant; the bucket designated for chemical use; and the spray bottle in an area designated for chemical storage and/or
OBJECTIVE: Demonstrate correct use of Personal Protective Equipment.

SHOW SLIDE: Respond

SAY: Cleanup of body fluids that may contain norovirus is different from routine cleaning and sanitizing and involves a more stringent cleaning and disinfecting process. It is important to Respond correctly to a vomiting incident. For body fluid contamination in food preparation, service, or dining areas, stop all operations immediately. All children and staff within a 25 foot radius should be removed from the area and should immediately wash their hands. Potentially contaminated clothing should be removed, machine washed in hot water using the longest available cycle, and dried on the hottest setting. Please follow along with the Cleaning and Disinfecting Body Fluid Spills (Sample SOP) and Using a Body Fluid Cleanup Kit handout in your workbook.

SHOW SLIDE: Respond – Put on PPE

ACTIVITY – Put on Personal Protective Equipment

• Purpose: To demonstrate proper use of Personal Protective Equipment.

• Preparation: Review the activity directions. Assemble materials.

• Materials: Shoe covers, disposable gown, pair of gloves and face shield.

• Time: 4-5 minutes to assist volunteer and describe the purpose of each component.

DO: Request an audience volunteer to correctly put on the PPE items as they are described. (Optional – the instructor can put on the PPE instead of using an audience member.)

SAY: Only child care or custodial staff trained in the appropriate use of the Body Fluid Cleanup Kit should respond to an incident. Part of an appropriate response includes protecting employees from contamination. This means wearing Personal Protective Equipment to protect clothes and shoes.

DO: Assist the volunteer in putting on the gown and shoe covers.

SAY: Also the equipment protects the face from splashing and air-borne particles and hands from direct contact with body waste. You may want to consider double gloving.

DO: Assist the volunteer in putting on the face mask with eye protection or goggles and gloves.

SAY: While wearing PPE – remember to keep hands away from your face and replace gloves if they become torn or dirty. Later we will see how to remove and properly discard all PPE in the garbage bag provided.

Instructor’s Note: Volunteer keeps the PPE on until later.
OBJECTIVE: Describe proper body fluid cleanup procedures.

SHOW SLIDE: **Respond – Cover and Remove Waste**

**DO:** Put on a set of disposable gloves (you will need to be wearing these for the regloving demo). As each step is described, mock demonstrate the use and refer to the slide photos.

**SAY:** Use the contents of the Body Fluid Cleanup Kit to remove the waste. First, use sand, or liquid spill absorbent material to absorb and solidify the waste.

Use the disposable scoop and paper towels to remove the sand and body fluid. Dispose of the sand and waste in a plastic garbage bag. Remove your gloves and dispose of them in the plastic garbage bag.

SHOW SLIDE: **Respond – Reglove**

**SAY:** After touching and cleaning up waste, the gloves are now contaminated. To prevent cross contamination, at this point it is important to discard the soiled gloves and put on new gloves. Skipping this step could mean anything we touch will be contaminated by dirty gloves.

**DEMONSTRATION – Changing Gloves**

- **Purpose:** To demonstrate the correct technique for removing contaminated gloves and regloving.
- **Preparation:** Review the activity direction. Practice the technique to ensure smooth delivery.
- **Materials:** Disposable gloves
- **Time:** 2 minutes: Perform/Demonstrate as discussing content.

**DO:** DEMONSTRATE while describing, making sure to raise hands/arms high so that all participants can see. *HINT: This may be a good time to have participants stand and form a circle around you for best viewing and as a break from sitting.*

**SAY and DO:** The best way to prevent spreading germs while removing soiled gloves is to

- Pull one glove back by the cuff until it comes off inside-out.
- Cup it in the palm of your gloved hand.
- Hook two fingers of your bare hand inside the cuff of the remaining glove.
- Pull back so this glove also comes off inside-out, with the first glove tucked inside it.
- Discard the gloves in the designated garbage bag.
Before regloving it is always important to thoroughly wash your hands with soap and running water for 20 seconds.

**ACTIVITY – Changing Glove Practice**

- **Purpose:** To apply knowledge and practice regloving techniques.
- **Preparation:** Review the activity directions.
- **Materials:** 1 set of gloves per table or team
- **Time:** 3 minutes of practice.

Let’s practice this method of correctly removing gloves. Each table/team will have one set of gloves. One person will demonstrate to the others how to correctly remove gloves.

Divide participants into teams. Provide gloves to each group/team/table, and have them demonstrate and practice this glove removal technique. Walk around to help.

Now, let’s try double gloving.

Demonstrate double gloving, then have participants practice the technique.

Great job everyone. Let’s continue with the cleanup.

It is very important to clean the area BEFORE disinfecting. Clean the affected area with soap and water, and paper towels or a disposable mop head. This includes surfaces that came into direct contact with body fluids, and surfaces that may not have. After cleaning, dispose of the paper towels and/or disposable mop head into a garbage bag.

Dispose of the gloves in a plastic garbage bag; wash hands and put on new gloves.

Next, mix a fresh solution of the provided disinfectant. If you are using a chemical from the EPA’s list, follow the manufacturer’s directions for the recommended concentration. Wear all PPE, including the face mask with eye protection, or goggles. Ensure that area is well ventilated (mix solution outdoors if necessary). If you are using bleach, mix 1 cup of bleach per gallon of water in a well-ventilated area. Do not mix bleach with any other chemical. Transfer solution to a labeled spray bottle. Then spray to saturate all surfaces, including food contact surfaces and high touch areas within a 25-foot radius with the disinfectant. Leave the chlorine disinfecting solution on the affected areas and surfaces for a minimum of 5 minutes. In another EPA-approved disinfectant is used, follow the manufacturer’s instructions for contact time.
SHOW SLIDE: **High Touch Areas**

**SAY:** It is important to clean and disinfect high touch areas outside of the 25 foot zone as a preventive measure. Let’s make a list of high-touch areas. An example is a door handle. Can you name others?

**ACTIVITY – High Touch Areas**

- **Purpose:** To assess and reinforce participants’ knowledge of high-touch areas.
- **Preparation:** Review the activity directions. Review possible responses.
- **Materials:** Flip chart pad, easel, marker
- **Time:** 2 minutes of participant feedback.

**DO:** Use a sheet of flipchart paper to list audience responses.

Possible responses:
- handles on doors, equipment, dispensers, ice machines, and carts
- telephones, key boards, and light switches
- sink faucets, soap and sanitizer dispensers
- surfaces in common areas including dining areas, break rooms, and restrooms
- toys, desks and tables

SHOW SLIDE: **Respond – Rinse**

**SAY:** All surfaces, including food contact surfaces within the 25-foot zone, were sprayed with a strong disinfectant. Now it is important to use a clean-water rinse on all treated food contact surfaces within this 25-foot radius. Rinse these surfaces with clean water, and paper towels and/or a disposable mop head. Allow these areas to air dry to prevent contamination.

SHOW SLIDE: **Wash Hands and Change Gloves**

**SAY:** Dispose of gloves and paper towels in a plastic garbage bag. Wash hands and change gloves.

SHOW SLIDE: **Respond - Disinfect Cloth Surfaces**

**SAY:** It is unlikely that our kitchen or dining area will have cloth or carpet. However, if carpet, upholstery, or other absorbent surfaces are contaminated, first remove as much waste as possible. Then, clean and disinfect with a chemical disinfectant if possible, and finally steam clean the area for a minimum of 5 minutes at a minimum temperature of 170 °F.

SHOW SLIDE: **Respond - Dispose of Exposed Food**

**SAY:** All uncovered or exposed food within this 25 foot radius should be thrown away. In addition, discard intact and sealed containers or single-service items within the 25 foot radius if the item’s surface cannot be adequately cleaned and disinfected.
SHOW SLIDE: **Wash Hands and Change Gloves**
SAY: Wash hands and change gloves after handling containers.

SHOW SLIDE: **Respond – Disinfect Non-disposable Tools**
SAY: After cleanup and disinfection of the affected area, discard all disposable tools in the designated garbage bag. All non-disposable tools such as buckets, and mop handles should be cleaned with hot, soapy water and then disinfected using the appropriate disinfectant for norovirus. Complete an incident report.

SHOW SLIDE: **Respond – Remove PPE**

**DEMONSTRATION – Removing Personal Protective Equipment**

- **Purpose:** To demonstrate the correct technique for removing contaminated PPE.
- **Preparation:** Review the activity directions. Practice the technique to ensure smooth delivery.
- **Materials:** Volunteer dressed in PPE items.
- **Time:** 3 minutes: Demonstrate while discussing content.

DO: Bring the volunteer dressed in PPE back up to the front. As each step is described, assist the volunteer in correctly removing the PPE. Assist the volunteer as needed to steady their balance.

SAY: Finally, remove your Personal Protective Equipment. Remove gloves as described before. Remove the face shield. Next, take off the gown by turning the sleeves inside out. Finally, remove the shoe covers. Place the PPE in the garbage bag.

SHOW SLIDE: **Respond – Disposal**
SAY: Place all garbage bags into a second garbage bag (double bag). Use a twist-tie to seal the garbage bag and take it to the disposal area specified by your facility’s administration. Wash your hands.

DO: Thank the volunteer for assisting and have them return to their seat.

SHOW SLIDE: **Respond – Wash Up**
SAY: As an extra precaution for protecting you from germs, remove your uniform and securely tie in a separate garbage bag. These clothes should be machine washed in hot water using the longest available cycle and dried on the hottest setting. Wash your hands, exposed arms, and face with soap, then apply hand sanitizer to hands before putting on a clean uniform.
OBJECTIVE: Explain steps necessary to reopen a foodservice area after a vomiting event.

SHOW SLIDE: Total Cleanup

SAY: Total cleanup after a vomiting incident and before returning to normal operations is very important. After the disinfection step all surfaces were rinsed with clean water. Before returning to normal operations, we should follow our standard cleaning procedures. We should thoroughly wash, then rinse these surfaces. Finally, use the chemical you would normally use to sanitize food contact surfaces. Allow these surfaces to air dry. These steps are outlined in your Participant’s Workbook.

Total cleanup also includes restocking the contents of the Body Fluid Cleanup Kit and storing it for the next use.

After a cleanup event, all employees should be alert for the signs and symptoms of norovirus and be reminded to report foodborne illness symptoms to their child care director, including vomiting or diarrhea. Don’t Work When Sick, Assembling a Body Fluid Cleanup Kit, and Use a Body Fluid Cleanup Kit mini-posters are available on the ICN website for you to use when training your staff.

DO: Pass around mini-posters provided in your toolkit.

SHOW SLIDE: Everyone Plays a P.A.R.T.

SAY: Today we have learned about norovirus – it is highly contagious, easily spread, and difficult to kill. Everyone plays an important part in norovirus prevention:

- Preventing norovirus through good personal hygiene,
- Assembling and having ready a Body Fluid Cleanup Kit,
- Responding correctly to a vomiting incident, and
- Completing a total cleanup after an incident.

Norovirus is the leading cause of foodborne disease in the United States. We all play a part in reducing the likelihood of an outbreak in child care facilities.
*NOTE: A Jeopardy-type game show of norovirus questions in PowerPoint format has been developed. If time permits, you may want to break the class into teams and perform the game show before the post-assessment. You will need to use a flip chart and marker (or pad and pen) for score keeping. While the PowerPoint is in presentation mode, select the question/point level. The built-in hyperlink will take you to the multiple choice questions. In the bottom, right corner of the question slide is a hyperlink to the answer slide. In the bottom, right corner of the answer slide is a hyperlink to the table or game board. Practice using these hyperlinks before presenting the game show.

![The Norovirus Challenge!](image)

SHOW SLIDE: **Post-Assessment**

**ACTIVITY – Post Assessment**

- **Purpose:** To assess participants’ learned knowledge of norovirus
- **Preparation:** Review the activity directions.
- **Materials:** Post-Assessment
- **Time:** 7-10 minutes of individual work

**SAY:** Let’s also take a minute to review what we have learned. I will have you do the Post-Assessment, complete a course evaluation and we’ll be sure everyone signed the roster. Please make sure to put the identifier that you used for the Pre-Assessment in the top right corner. I will now pass out the Post-Assessment. Answer the questions to the best of your ability. We have gone over all of the content during the session.

**DO:** Allow participants time to complete and hand in the Post-Assessment, then review the answers, clarify any missed points, and answer questions to the best of your ability. If there are questions you cannot answer, please refer participants to the ICN and/or resource lists provided in the Participant’s Workbook.
SHOW SLIDE: **Resources from ICN**

**SAY:** The Participant’s Workbook has web-based references. ICN has several resources available for you to take this training and information back to your team, including a video, an on-line course on norovirus prevention, mini-posters, fact sheets, and Standard Operating Procedures. These can be accessed through the ICN website: www.theicn.org.

SHOW SLIDE: **Resources**

**SAY:** Another important resource for norovirus prevention is provided by The National Education Association Health Information Network through funding by USDA Food and Nutrition Service. NEA-HIN developed *The Stomach Bug Book* – a great resource for developing a facility-wide approach to norovirus prevention and response. It is available in English and Spanish. The websites listed here are also in your Participant’s Workbook.

SHOW SLIDE: **Training Wrap-Up**

**DO:** Provide participants the training evaluation form. Make sure all participants have signed the Attendee Roster. Provide attendees a Certificate of Attendance.

**SAY:** Please complete the training evaluation forms.

SHOW SLIDE: **Institute of Child Nutrition**

**SAY:** Accessing ICN via the web is an excellent way to have access to important, timely, and expertly designed resources. Numerous food safety, food security, and emergency management resources are available to download for free from the web. Thank You for participating today!
References


  • Annex 3 2-201.11 Reporting of Symptoms (2013)
  • Annex 3 2-201.12 Exclusions & Restrictions (2013)
  • Annex 3 2-201.13 Removal of Exclusions & Restrictions (2013)
  • Annex 3 2-3 Hands and Arms (Cleaning) (2013)
  • Annex 3 3-301.11 Preventing Contamination from Hands (2013)
  • Annex 3 2-501.11 Clean-up of Vomiting and Diarrheal Events (2013)


