



### Trainer's Guide

Prior to beginning training, ensure that your training environment is comfortable and hospitable for those participating. The setting should be an appropriate temperature, the participants should have pens or pencils to take notes, and you could offer food/beverages. The content in this training is often in depth so the learning environment needs to be appropriate for the adult learner.

Make sure all the materials to be used during training have been gathered prior to starting the training session.

**Reminder:** The intent of this training is to provide infection prevention and control training that will inspire staff to make necessary changes to keep the residents/participants and their fellow staff safe. The way that the content is presented, including both verbal and non-verbal communication may affect how well the information is received.

### Speaker Notes:

*On this slide, introduce yourself and colleague(s) (if applicable)*

*Provide background on what your role is in your work setting (e.g., Infection Preventionists, Administrator, Director of Nursing (DON), etc.)*

"The purpose of this training is to provide infection prevention and control education that helps you understand the background of infection prevention and control and identify actions and steps that you should take during your work.

While it may be easy to believe that infection prevention and control is something that only needs to be done during an outbreak or a period of increased illness, this is not the case. Infection prevention is a set of behaviors and actions that should be taken all the time."

# General Infection Prevention & Control Background and Basics

## Trainer's Guide

If you are incorporating activities into your presentation, ensure all preparation and materials for the Infection Control Scavenger Hunt activity are ready before beginning this section.

It is important to emphasize now and throughout the training session that effective infection prevention and control is about *behavior and practices* and that staff have a lot of control over infection prevention and control outcomes.

### Speaker Notes:

“The first section of our training will be general infection prevention infrastructure. Throughout the training session, you will hear a lot about behaviors and practices that contribute to good infection control within the work setting. Some of these behaviors and practices are already in place and some may need improvement. As we move along, we will review the reasons behind these specific behavior and practice recommendations.”

## Objectives

- » Define Infection Prevention and Control
- » Discuss the goal of infection prevention and control
- » Discuss the importance of infection prevention and control in congregate care settings, including specific risk factors
- » Describe the purpose and components of an infection control plan/program (ICP)
- » Describe how to access the ICP
- » Discuss Standard Precautions
- » Describe how infections occur (the chain of infection)
- » List signs and symptoms of infections/communicable disease
- » Discuss Disease Surveillance & Reporting
- » Describe the role of staff in infection prevention and control

### Speaker Notes:

“At the conclusion of this section, participants should be able to...”

*Read slide*

## What is Infection Prevention and Control?

» A set of behaviors and practices that prevents or stops the spread of infections in settings where healthcare/personal care is delivered.

### Speaker Notes:

“What is infection prevention and control?”

According to the Centers for Disease Control and Prevention (the CDC), infection prevention and control is a set of behaviors and practices that prevents or stops the spread of infections in settings where healthcare or personal care is delivered.”

## The Goal of Infection Prevention

- » To implement practices that prevent the development and transmission of communicable diseases and infections among staff, residents/participants, and visitors.

### Speaker Notes:

“To implement (put into place) practices that prevent the development and transmission of communicable diseases and infections among staff, residents or participants, and visitors. Good infection prevention practices need to be done every day to keep ourselves safe and healthy, and to prevent passing illnesses to our residents/participants or to our family and friends.

People deserve to be safe in their own homes, and their place of work, and when they visit the facility. Also, it is worth mentioning again that the goal of this training is behavior change. Throughout this training, there will be multiple suggestions on how participants can change their behavior to improve infection prevention.”

## Why is Infection Prevention Important In Adult Congregate Care Settings?

- » To protect residents or participants, staff, and visitors in a high-risk environment from contracting communicable diseases

### Trainer's Guide

This slide is designed to be discussion based between the trainer and participants. This will allow you (the trainer) to gauge participant knowledge and to provide positive feedback and reinforce correct answers to participants. This would be a good opportunity to provide candy or reward items.

The last question posed in the speaker notes of this slide will establish the discussion for the next slide.

### Speaker Notes:

*Ask the following question:*

“Why is infection prevention important in adult congregate care settings?”

*Allow the participants an opportunity to respond. After responses are given, you can make the following statement or something similar.*

“It is because we want the residents or participants, staff, and visitors in high-risk environments protected from contracting infectious or communicable diseases.”

*Now ask the next question and allow the participants to respond before proceeding to the next slide.*

“Why are adult congregate care settings considered a high-risk environment?”

## What are the Risk Factors for Communicable Disease Associated with Adult Congregate Care Settings?

- » Age
- » Comorbidities and Chronic Illnesses
- » Medications
- » Congregation (Spending time in the same spaces)
- » Physical Decline & Cognitive Impairment

### Speaker Notes:

*Acknowledge correct answers that were already given by the participants.*

“Some of the reasons that adults in congregate care settings, like assisted living or adult day centers, are at higher risk for contracting a communicable disease include:

**Age:** The immune system starts to weaken with advancing age, and its ability to protect against infections may be compromised and begin to decline.

**Comorbidities and chronic illnesses:** Chronic illnesses and multiple chronic disease states (comorbidities) can increase the risk for infectious and communicable diseases.

**Medications:** Certain medications such as steroids can reduce the ability of the immune system to fight off infections.

**Congregation (spending time in the same spaces):** Communal and/or shared residences or group activities, including dining, increases opportunities for dangerous germs to spread. Germs are everywhere. The more people you have in a setting, the more germs there are within that setting and the easier they are to share from person to person.

**Physical decline and cognitive impairment:** These can reduce the ability to properly perform basic hygiene activities. For example, an individual that is cognitively impaired may not remember to wash his or her hands effectively, or at all, after using the restroom or someone with physical decline may have pain or mobility problems that cause them to skip hygiene activities.”

# Where is **your** facility's ICP located?

## Trainer's Guide

This slide is intended to be discussion-based. This will allow you an opportunity to provide additional information regarding location of the policies and procedures related to the infection control program.

**Remember:** the infection control program should be accessible to all staff at all times. If the infection control plan is housed online, how do staff access it? The trainer should provide all of the locations of the policies and procedures as part of the infection control program.

### Speaker Notes:

*Ask the following question:*

“Can anyone tell me where our infection control program is located?”

*Allow the participants an opportunity to respond.*

“The infection control program is located ... [*describe location or other instructions to access if the policies and procedures are housed electronically*] ...and is accessible to all staff at all times.”



## Infection Control Plan/Program (ICP)

- » Should be developed using evidence-based guidance and agency standards that determine what policies and procedures to include
- » Establish how to prevent, identify, investigate, report and control communicable diseases and infections
- » Establishes a set of expected practices or behaviors for infection prevention and control
- » May include definitions and provide background and rationale for a required ICP practice, including guidance about practice implementation.
- » Should include procedures that outline the specific steps and actions for performing infection prevention behaviors

### Speaker Notes:

“The Infection Control Program is a set of policies and procedures that are developed using evidence-based guidelines (those that are developed based on scientific evidence and research) and regulatory standards.

These policies and procedures provide expectations for practice implementation and outline the specific steps and actions for performing infection control and prevention activities.

A strong written infection control program is the foundation for the prevention of spread of infectious and communicable diseases and is essential and should include all the components listed here.”

# Components of an Infection Control Program

## » Standard Precautions

- Use of Personal Protective Equipment
- Respiratory Hygiene & Cough Etiquette

## » Transmission Based Precautions

## » Surveillance and Disease Reporting

## » Hand Hygiene

## » Prevention of Bloodborne Pathogens Transmission

- Injection Safety

## » Environmental Cleaning and Disinfection

- Laundry
- Personal Care Equipment

## » Waste Disposal

## » Pest Control

### **Speaker Notes:**

“Here are some of the components of an infection control program, including several topics that will be discussed more in-depth later during this training.

Infection control programs include policies and procedures that address:

Standard precautions, including the use of personal protective equipment and respiratory hygiene and cough etiquette, transmission-based precautions, disease surveillance and reporting, hand hygiene, prevention of bloodborne pathogens transmission, including injection safety, environmental cleaning and disinfection, which includes laundry and personal care equipment, waste disposal and pest control.”

## Putting the Plan into Practice

### » Follow Policies and Procedures

- Practice correct hand hygiene
- Use PPE appropriately when necessary
- Handle sharps safely
- Clean high touch surfaces at least daily
- Many more!

### » Hold Each Other Accountable

### Trainer's Guide

Discussion during this slide can be tailored to fit your facility with specific examples from your facility's policies and procedures for infection control.

Items listed that are not applicable to your setting do not need to be discussed during presentation of this slide. For example, if you do not provide injections or blood laboratory testing and do not have sharps, sharps safety would not need to be discussed.

### Speaker Notes:

“So, how can *you* help prevent the spread of infections in our facilities? It's simple! Follow policies and procedures and put good infection prevention behaviors into practice.

Practice correct hand hygiene, use PPE appropriately, when necessary, handle sharps safely, clean high touch surfaces at least daily, and many more.

Hold each other accountable. If you see your coworker not washing their hands after going to the bathroom, make sure to politely say something to keep everyone safe.”

## Standard Precautions

- » Standard Precautions are the minimum infection prevention practices that apply to all resident/participant care, regardless of infection status.

### Trainer's Guide

Standard precautions are more than a set of rules about when to use personal protective equipment (PPE). Standard precautions are actually a set of guidelines from the CDC that include common sense practices and practice recommendations. If you are unfamiliar with the full scope of standard precautions, you should take the time to familiarize yourself before discussing.

### Speaker Notes:

“Standard precautions are the minimum infection prevention practices that apply to all applicable interactions, all the time, regardless of any individual’s infection status and are not limited to direct care staff.

Standard precautions are based on an assessment of risk and anticipated exposures. They make use of common-sense practices and use of personal protective equipment that protects staff from infection and prevents the spread of infections from person to person.

Standard precautions are more than just wearing gloves for direct care.”

## Standard Precautions Practices

- » Perform hand hygiene
- » Use of personal protective equipment (PPE) whenever there is a possibility of being exposed to infectious material
- » Follow respiratory hygiene/cough etiquette principles
- » Ensure appropriate placement (use isolation when indicated)
- » Properly handle, clean and disinfect direct care equipment and devices; clean & disinfect the environment appropriately
- » Handle textiles and laundry carefully
- » Follow safe injection practices
- » Ensure staff safety, including proper handling of needles and other sharps

### Speaker Notes:

“The CDC includes each of these directives under the heading of standard precautions:”

*Read the list from the slide.*

“Remember, this list is what CDC considers the minimum infection prevention practices for **all** direct care.”

## How Infections Happen



### Speaker Notes:

“The image on this slide is the simplest form of the process sometimes known as the “chain of transmission” or “chain of infection.” This describes the basic process for how all pathogens (dangerous germs, like viruses, bacteria, fungi, and parasites) spread. In order for an infection to spread there must be these three things: 1. a source (a place where germs live), 2. a mode of transmission (a way for germs to move from place to place) and 3. a host (a susceptible person with a way for germs to enter their body). These are linked, and all three must be in place for a germ to spread.

Infection prevention and control measures are aimed at breaking this chain and stopping germs from spreading.

**A source** can be a person who is carrying a germ (sometimes they’ll have symptoms of an infection, but not always). A source can also be a surface or object in the environment, including dry surfaces (like handles or rails), wet surfaces (like sinks), dust or debris, or indwelling devices (like urinary catheters).

**A mode of transmission** is a way for germs to move from the source to the susceptible person. Germs don’t move themselves, they depend on people, the environment and/or medical equipment to move them.

Modes of transmission include touch, sprays and splashes, inhalation, and sharps injuries.

An example of touch transmission would be a staff's hands picking up a germ from a contaminated surface and transferring that germ to a susceptible person by touching them without proper hand hygiene.

An example of spray or splash transmission would be a cough or sneeze from an infected person. Coughs and sneezes can cause germ-filled droplets to transfer to surfaces or susceptible people within about six feet.

An example of inhalation occurs when germs are released into the air by an infected person in tiny particles called aerosols that can float on air currents over long distances and times and are then breathed in by a susceptible person.

An example of a sharps injury is an accidental puncture of a staff's skin by a used needle.

**A host** is a susceptible person who is vulnerable to a germ with a way for the germ to get into their body. Some germs can enter the body through breaks in the skin, through mucous membranes or through invasive devices. Certain medical conditions (like diabetes or cancer), certain medications (like steroids or cancer medications) and certain medical treatments (like catheters, tubes, or surgery) can increase susceptibility to germs.

This slide, and how infections happen, will be discussed repeatedly.

## Signs of Infection & Communicable Disease

- » Fever
- » Feeling Feverish or Experiencing Chills or Sweats
- » New Respiratory Symptoms (e.g., Coughing, Sneezing, Trouble Breathing)
- » Gastrointestinal Symptoms (e.g., Nausea, Vomiting, Diarrhea)
- » Change in Mental Status
- » Skin Symptoms (e.g., Redness, Swelling, Soreness)
- » Genitourinary Symptoms (e.g., burning or pain with urination, genital discharge)

### Speaker Notes:

“Here are some signs of infections and communicable diseases. It is important to report when these signs and symptoms are observed in residents/participants, yourself, or other staff, as they could indicate the presence of an infection that could be passed to others in the setting. It is important to note that this is not an inclusive list, there are other symptoms that could be exhibited with certain infections.

Regarding residents/participants with cognitive impairment: These individuals may not always be able to clearly communicate symptoms of illness. It can be especially difficult to detect a change in mental status for individuals with cognitive impairment. Close observations should be made with these individuals and a change in mental status should be reported if observations are outside of the normal mental status for that individual.”



## Surveillance for Communicable Diseases

- » Systematic collection of health information (like symptoms) that helps to identify the presence of communicable diseases or infections
- » Applies to staff and residents/participants
- » Ongoing surveillance helps determine when unusual levels or types of illness are occurring and when reporting to VDSS and VDH is necessary

### Trainer's Guide

During this slide, you may want to describe how your setting performs surveillance for disease and tracks the number of infections. This could include reports generated from records, periodic reports, or meetings. This could also include keeping an illness log for specific conditions. You may wish to describe who is responsible for collecting and monitoring surveillance information.

### Speaker Notes:

“Surveillance is the systematic collection of information (like the signs and symptoms that we discussed on the previous slide) that helps identify when there may be communicable diseases or infections in our setting. Both staff and our residents/participants should be monitored for signs of illness as illnesses can spread amongst staff, amongst our residents/participants or between the two. Performing ongoing surveillance helps determine when there are unusual levels or types of illness occurring and helps determine when reporting to VDSS and VDH is necessary.”

## What is the Process for Reporting Illnesses?

- » What's the process for reporting when YOU are sick?
- » What if you notice signs of infection in someone else?
  - What if a resident/participant is showing signs of illness?
  - What if a coworker is showing signs of illness?

### Trainer's Guide

Refer to your specific policies and procedures from your setting and provide your participants with the appropriate responses during your discussion.

### Speaker Notes:

“We have covered why it’s important to be aware of signs of infection and you’ve heard that it’s important that we collect that information so we can watch (or perform surveillance) for communicable diseases. But what is the process for reporting illnesses?”

*Encourage participants to respond to the question. Supplement with the correct information as needed. Share things like what types of symptoms would cause staff to stay out of work, who to call when they need to call out, and what to do if they become ill during a shift.*

*Ask the next question from the slide.*

“What if you notice signs of infection in someone else? What if a resident/participant is showing signs of illness? What if it is a coworker?”

*Encourage participants to respond to the questions. Supplement with the correct information as needed. Share things like who to tell and how to document if a resident/participant is exhibiting signs or symptoms of illness, or what to do if you notice signs of illness in a coworker.*

## Reporting Communicable Diseases and Outbreaks

- » Certain illnesses and outbreaks of illness require reporting
- » VDH publishes a Reportable Disease List – reporting of diseases on this list to VDH within the timeframe on the list is required by state law
  - <https://www.vdh.virginia.gov/content/uploads/sites/134/2023/03/VIRGINIA-REPORTABLE-DISEASE-LIST.pdf>
- » VDSS regulatory standards requires that outbreaks of illness be reported within 24 hours to both VDSS and VDH (local health department)

### Trainer's Guide

You may find it helpful to familiarize yourself with the Virginia Reportable Diseases list, so that you can be prepared to answer questions from your participants. The Reportable Disease List is extensive and includes both illnesses that are common (like COVID-19 or foodborne illnesses) and those that are very rare (like plague, or polio).

### Speaker Notes:

“Performing surveillance for communicable disease provides the information that we need in order to determine when an illness or cluster of illnesses (called an outbreak) in our setting must be reported. VDH publishes a reportable disease list and a required timeframe for reporting. Reporting of cases of reportable diseases to VDH is required by state law. VDSS regulatory standards additionally require that outbreaks of *any* illness are reported to both the VDSS licensing representative and to the local health department of VDH within 24 hours, even those that do not appear on the reportable disease list (like scabies and bedbugs for example).”

*Provide additional relevant information, like who in the setting is responsible for making reports to VDH and VDSS.*

# Infection prevention and control takes effort from **everyone**



## **Speaker Notes:**

“Effort and support from all staff from every department is crucial to prevent or stop the spread of infections. Every staff has a responsibility to know and implement the practices that break the chain of infection and keep ourselves and our residents/participants healthy.

Before this training, you may have been under the impression that infection prevention and control is something that is the responsibility of nursing or direct care staff only. Now that you’ve heard about infection prevention, the risk factors of our settings and practices that we must implement in order to break the chain of infection, you should see that **your role** is critical.”

# Infection Control Scavenger Hunt Activity

## Trainer's Guide

If you are incorporating activities in your presentation, do the Infection Control Scavenger Hunt Activity now. If you are not planning to incorporate this activity, skip over this slide.

# References

Centers for Disease Control and Prevention (CDC)

- » CDC - How Infections Spread  
<https://www.cdc.gov/infectioncontrol/spread/index.html>
- » CDC - Infection Control Basics  
<https://www.cdc.gov/infectioncontrol/basics/index.html>
- » CDC - Standard Precautions for All Patient Care  
<https://www.cdc.gov/infectioncontrol/basics/standard-precautions.html>

Virginia Department of Health

- » Disease Reporting and Control Regulations  
<https://www.vdh.virginia.gov/clinicians/disease-reporting-and-control-regulations/>

Virginia Department of Social Services (VDSS)

- » Adult Day Care Center Regulatory Standards  
[https://www.dss.virginia.gov/files/division/licensing/adcc/intro\\_page/code\\_regulations/regulations/final\\_adcc\\_reg.pdf](https://www.dss.virginia.gov/files/division/licensing/adcc/intro_page/code_regulations/regulations/final_adcc_reg.pdf)
- » Assisted Living Facility Regulatory Standards  
[https://www.dss.virginia.gov/files/division/licensing/alf/intro\\_page/code\\_regulations/regulations/final\\_alf\\_reg.pdf](https://www.dss.virginia.gov/files/division/licensing/alf/intro_page/code_regulations/regulations/final_alf_reg.pdf)

# Hand Hygiene

## Trainer's Guide

If you are incorporating activities into your presentation, ensure all preparation and materials for the Caught Red-Handed activity are ready before beginning this section.

### Speaker Notes:

“We will now begin our discussion of hand hygiene.”

## Objectives

- » Define hand hygiene
- » Discuss why hand hygiene is important
- » Discuss chain of transmission
- » Discuss when to use hand hygiene
- » Discuss gloves and fingernails in relation to hand hygiene
- » Compare hand hygiene methods

### **Speaker Notes:**

“Our objectives for this portion of the training are to...”

*Read slide.*



# What is **Hand Hygiene**?

**Speaker Notes:**

*Ask the question:*

“What is hand hygiene?”

*Allow the participants an opportunity to respond before moving to the next slide, which will have the answer.*

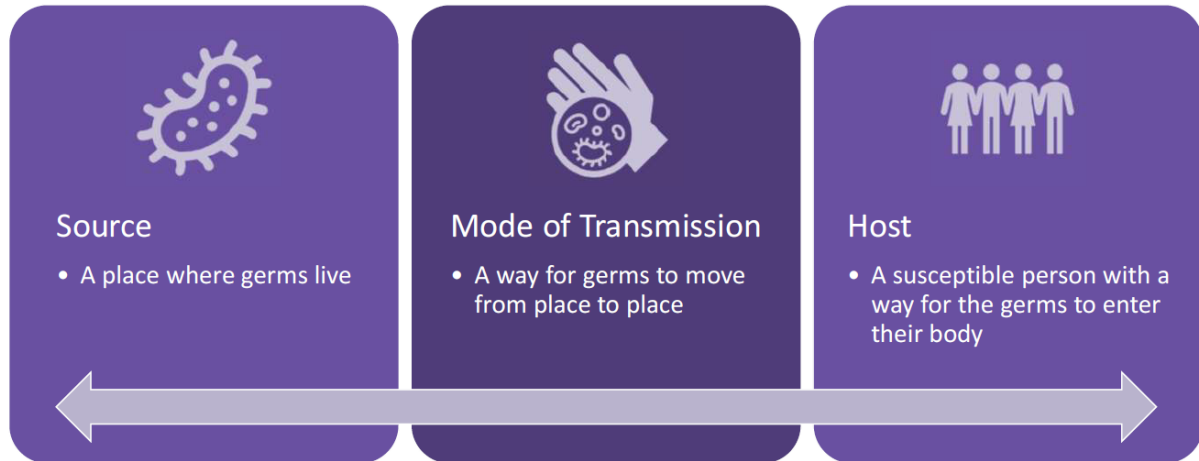
## **Hand Hygiene is ... the act of cleaning your hands**

- » **Washing with soap and water**
- » **Using antiseptic hand wash or rub**
  - Includes gel or foam alcohol-based hand sanitizer
- » **Surgical hand antisepsis**
  - Surgical scrub

### **Speaker Notes:**

“Hand hygiene is the act of cleaning your hands. This can be done in three different ways: washing hands with soap and water, using alcohol-based hand sanitizer, or by performing surgical hand antisepsis also known as a surgical scrub. We will focus on the first two for purposes of this training since surgical scrub is not applicable to adult congregate care settings.”

## Why is Hand Hygiene Important?



### Trainer's Guide

If you are delivering all of the sections of the training to your participants, you will have already reviewed the chain of infection in detail in the prior section on infection control basics. You can adapt the speaker notes to simplify the discussion on this slide if you believe that the information is still fresh in your participants' minds. If you are using this section as a standalone training, be sure to review this slide in detail. If you are abbreviating your discussion of this slide, be sure not to skip the speaker notes from the line that begins with *hand hygiene* below.

### Speaker Notes:

“The image on this slide is the simplest form of the process sometimes known as the “chain of transmission” or “chain of infection.” This describes the basic process for how all pathogens (dangerous germs, like viruses, bacteria, fungi, and parasites) spread. For an infection to spread there must be these three things: 1. a source (a place where germs live), 2. a mode of transmission (a way for germs to move from place to place) and 3. a host (a susceptible person with a way for germs to enter their body). These are linked, and all three must be in place for a germ to spread.

Infection prevention and control measures are aimed at breaking this chain and stopping germs from spreading.

**A source** can be a person who is carrying a germ (sometimes they'll have symptoms of an infection, but not always). A source can also be a surface or object in the environment, including dry surfaces (like handles or rails), wet surfaces (like sinks), dust or debris, or indwelling devices (like urinary catheters).

**A mode of transmission** is a way for germs to move from the source to the susceptible person. Germs don't move themselves, they depend on people, the environment and/or medical equipment to move them.

**A host** is a susceptible person who is vulnerable to a germ with a way for the germ to get into their body. Some germs can enter the body through breaks in the skin, through mucous membranes or through invasive devices. Certain medical conditions (like diabetes or cancer), certain medications (like steroids or cancer medications) and certain medical treatments (like catheters, tubes, or surgery) can increase susceptibility to germs.”

**Hand hygiene** interrupts the chain of infection by stopping touch transmission of pathogens from contaminated hands. Hands can pick up germs from sources like resident/participant contact or contact with contaminated surfaces or objects, including equipment. These pathogens can be transferred to other surfaces or directly to other individuals by touching them.

Hand Hygiene is a **simple** and **effective** way to prevent the spread of pathogens that cause infections.

**Speaker Notes:**

“Practicing proper hand hygiene is the **most effective** way to reduce the spread of pathogens that cause infections.”

*Ask the following question and allow your participants time to respond before moving to the next slide, which will reveal the answer.*

“Now that we have discussed why hand hygiene is so important, who can tell me when hand hygiene should be performed?”

*Move to the next slide once some responses have been given.*

## When to Perform Hand Hygiene

- » Whenever hands are visibly dirty or contaminated
- » Immediately before touching a resident/participant OR their immediate surroundings
- » Immediately after touching a resident/participant OR their immediate surroundings (even if you didn't touch the resident/participant)
- » Before AND after putting on and removing personal protective equipment (PPE), like gloves
- » After using the restroom
- » Before and after eating

### Speaker Notes:

“You must always perform hand hygiene ... “

*Read slide.*

## Other Important Moments for Hand Hygiene

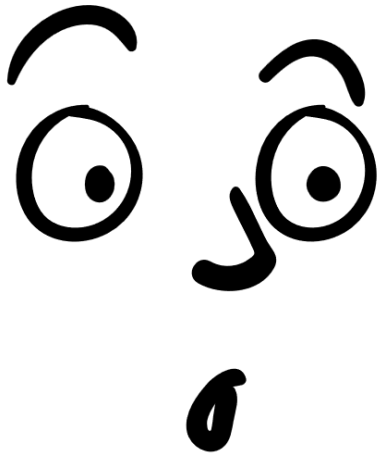


### Trainer's Guide

During this slide, highlight any unique moments or situations for your setting. For example, if support animals or pets are present in your setting, highlight that section or point out unique circumstances for your participants.

### Speaker Notes:

“There are many other moments when hand hygiene should be performed. These include after you cough, sneeze, blow your nose or touch your face, after petting an animal or touching their food, treats, cages, or waste, after touching or taking out the garbage, after coming in from outdoors or outings and after any contact with chemicals. Chemicals would include cleaning or disinfecting agents, or smoking or vaping. If your hands come into contact with chemicals like nicotine or vapor, residue can be transferred to people or surfaces.”



Some healthcare personnel practice hand hygiene about **half** the time they should.

Do **you** clean your hands as often as you should?

#### Trainer's Guide

This question is not meant to be answered out loud. It is simply meant to get your staff thinking about whether they practice hand hygiene every time that they should.

#### Speaker Notes:

“Research shows that some healthcare personnel practice hand hygiene only about half the time that they should. Healthcare personnel may **need** to clean their hands as many as 100 times per 12-hour shift! Now that we have just reviewed many of the moments when hand hygiene **should** be performed, think about your own practices. It’s not necessary to answer this question out loud, but it is important for us all to be more aware of where we can do better. Do you think you clean your hands as often as you should?”



Hand Hygiene is  
**everyone's responsibility.**



**Speaker Notes:**

“A lot of this discussion seems like it is heavily focused on direct care staff. That’s because there are a lot of interventions that are targeted for direct care staff and there is a lot of evidence about how their hand hygiene compliance can impact disease transmission. That doesn’t mean that other staff don’t have a critical role to play or that attention to hand hygiene is not important for them. Germs are everywhere on every surface that people touch, and they can be transferred by anyone. Housekeepers, dietary staff, and administrative staff all have tasks that take them into the same areas where residents/participants and other staff or visitors spend time and touch many of the same surfaces. Even if you never provide direct care, you have a critical role to play in hand hygiene.”

What are some **barriers** that could **prevent** you or others from practicing proper hand hygiene?

### Trainer's Guide

This slide would be a good opportunity to provide an example of when hand hygiene isn't always effectively practiced in your setting from personal experience. For example, ensuring that all residents with cognitive impairment thoroughly wash their hands prior to and after meals and/or after being assisted in the restroom because of time constraints. Another example would be not washing your hands prior changing a resident's bandage dressing on a cut or wound because there's not a sink nearby.

You want to encourage a discussion of potential barriers while brainstorming solutions. It is important to reinforce that just because something is difficult, or there is a barrier present, that does not give permission to not do what is expected.

### Speaker Notes:

*Ask the question:*

“What are some barriers that could prevent you or others from practicing proper hand hygiene?”

*Give the participants an opportunity to respond. If the participants are reluctant to discuss barriers, consider selecting from the following list to lead discussion, or produce your own examples from personal experience or observations:*

*Repeatedly cleaning hands causes skin irritation and dryness*

*Sinks are not conveniently located or are not easily accessible*

*Soap or hand sanitizer dispensers are empty*

*Feeling rushed and not wanting to take the time*

*Feeling like hand washing is not that big of a deal or believing isn't important.*

## Which hand hygiene method is recommended for most clinical situations?

- A. Soap and water
- B. Alcohol-based hand sanitizer
- C. Use soap and water after every third use of hand sanitizer
- D. Use soap and water after every fifth use of hand sanitizer

### **Speaker Notes:**

*Ask the question and read the response choices.*

“Which hand hygiene method...”

*Allow participants the opportunity to respond before proceeding to the next slide, which will have the answer.*

## **B. Alcohol-based hand sanitizer**

### **Speaker Notes:**

Alcohol-based hand sanitizer or ABHS, is the most effective product for reducing the number of germs on hands. According to the CDC, it is also the preferred method of hand hygiene in most clinical situations.

## **ABHS is recommended for most clinical situations, because it:**

- » **Is more effective at killing potentially deadly germs on hands than soap**
- » **Is easier to use while providing care, especially**
  - when moving from soiled to clean activities with the same resident/participant between glove changes
  - when moving between residents/participants in shared rooms or common areas
- » **Improves skin condition with less irritation and dryness than soap and water**
- » **Improves compliance with hand hygiene**

### **Trainer's Guide**

The preference for ABHS over handwashing in most clinical situations is a relatively new concept and may provoke a negative or disbelieving response in your participants. Each of the statements on this slide are backed by the CDC and are based on solid clinical evidence.

### **Speaker Notes:**

ABHS is recommended because it “Is more effective at killing potentially deadly germs on hands than soap

Is easier to use while providing care, especially when moving from soiled to clean activities (between your glove changes) with the same resident/participant or when moving between residents/participants in shared rooms or common areas,

Improves skin condition with less irritation and dryness than soap and water and, most importantly, ABHS improves hand hygiene compliance because staff are more likely to clean hands when they should if ABHS is available.”

## When to Wash Hands with Soap and Water

- » When hands are visibly soiled
- » Before and after preparing food
- » Before and after serving food to others
- » Before and after eating
- » After using the restroom
- » After caring for individuals with spore-producing illness (e.g., *C difficile*)
- » After exposing hands to chemicals (e.g., smoking or vaping)

### Speaker Notes:

“Though use of ABHS is recommended for *most* clinical situations, there are times when hands must be washed with soap and water. These include ... “

*Read slide.*

## Don't Forget About Your Fingernails!

- » Appropriate hand hygiene includes diligently trimming and cleaning fingernails, which can harbor dirt and germs and can contribute to the spread of some infections
- » Staff should keep nails short and scrub the underside of nails with ABHS or soap and water every time hand hygiene is performed
- » An ideal length for nails is no longer than  $\frac{1}{4}$  inch past the top of the finger



### Trainer's Guide

Reference your setting's specific policies on fingernail length and use of artificial nails if applicable and tailor this slide to match.

### Speaker Notes:

*Read slide, then*

“The longer the nail, the more surface area exists for germs to attach. Studies have also found that artificial nails may contribute to transmission of certain healthcare-associated pathogens and healthcare workers with artificial nails are more likely to harbor some types of bacteria on their fingertips than those with natural nails.”

# Caught Red-Handed Activity

## Trainer's Guide

If you are incorporating activities in your presentation, do the Caught Red-Handed activity now.  
If you are not planning to incorporate this activity, skip over this slide.

### Speaker Notes:

“We are going to take a break from our presentation to do an activity.”



## How to Clean Hands with ABHS

- » Apply the right amount of sanitizer, this should be enough to cover all surfaces of the hands and fingers
- » Rub hands together, covering all surfaces (including thumbs, fingertips, under fingernails and between fingers, which are frequently missed) until the hands feel dry
- » This should take around 20 seconds.
- » Don't wave or blow on your hands to try and make them dry faster.

### Speaker Notes:

*If you have just completed the Caught Red-Handed Activity, transition from the discussion about proper hand hygiene during that activity to the discussion here. If you did not incorporate the Caught Red-Handed activity, you could have your participants demonstrate proper hand hygiene with ABHS after reviewing this slide. Ensure that you are familiar with the hand motions necessary to cover all surfaces so you can demonstrate and provide feedback on performance.*

“In order to correctly use ABHS...”

*Read slide*

## How to Use Pocket ABHS



Use these steps to avoid contaminating your hands after you clean them.

**Step 1:** Hold container in one hand and dispense enough gel or foam to cover both hands into the other hand.

**Step 2:** Close lid and store container before rubbing hands together.

**Step 3:** Rub for approximately 20 seconds, coating all surfaces of both hands, until hands feel dry.

**Step 4:** Go directly to patient or resident without putting hands back into pockets or touching anything else.



### Speaker Notes:

“Providing and using pocket-sized ABHS is a good way to increase access to hand hygiene opportunities when access to mounted ABHS dispensers is not practical. Care must be taken to avoid contaminating clean hands...”

*Read slide*

## How to Wash Hands with Soap and Water

- » Wet your hands first with water
- » Apply the amount of soap recommended by the manufacturer to your hands
- » Rub your hands together vigorously for at least 15-20 seconds, covering all surfaces of the hands and fingers (including thumbs, fingertips, under fingernails and between fingers).
- » Rinse your hands with water and use disposable towels to dry.
- » Use a disposable towel to turn off the faucet.
- » Avoid using hot water, to prevent drying of skin.

### Speaker Notes:

*If you did not incorporate the Caught Red-Handed activity, you could have your participants demonstrate proper hand hygiene with soap and water after reviewing this slide. Ensure that you are familiar with the hand motions necessary to cover all surfaces so you can demonstrate and provide feedback on performance.*

“In order to correctly wash hands with soap and water...”

*Read slide*

## A Note About Gloves

- » Glove Use is Never a Substitute for Cleaning Your Hands
- » Always clean your hands after removing gloves, dirty gloves can soil hands

### Trainer's Guide

Glove use is covered in detail in the section of training that covers use of personal protective equipment (PPE). The notes here are specifically related to the belief by some that if hands have been covered by gloves there is no need to clean them as they are perceived to have remained clean.

### Speaker Notes:

*Read slide.*

Proper hand hygiene  
could save  
**ONE MILLION LIVES**  
every year

**Speaker Notes:**

“The impact of hand hygiene on the world is huge. One million lives could be saved every year if everyone would simply clean their hands when they should. Our residents/participants and coworkers are counting on us to help keep them safe with clean hands. Let’s commit to all do our part.”

## References

Centers for Disease Control and Prevention

» ABHS Pocket Cards

<https://www.cdc.gov/handhygiene/pdfs/ABHS-PocketCards-P.pdf>

» Hand Hygiene in Healthcare Settings

<https://www.cdc.gov/handhygiene/index.html>

» When and How to Wash Your Hands (Community Settings)

<https://www.cdc.gov/handwashing/when-how-handwashing.html>

# Use of Personal Protective Equipment (PPE)

for Standard Precautions and Transmission-Based Precautions

## Trainer's Guide

If you are incorporating activities into your presentation, ensure all preparation and materials for the Donning (Putting On) & Doffing (Taking Off) Personal Protective Equipment activity are ready before beginning this section.

Throughout this section, you should incorporate discussion of your setting-specific policies and procedures regarding the use of personal protective equipment.

### Speaker Notes:

“This section will review the use of personal protective equipment (PPE) for standard and transmission-based precautions and provide an overview of the types of PPE that you are likely to encounter or use.”

## Objectives

- » Define personal protective equipment (PPE)
- » Discuss importance of use of PPE and impact on staff and resident/participant safety and transmission of infections
- » Describe use of PPE for Standard Precautions
- » Discuss types of PPE and their use
- » Describe use of Transmission-Based Precautions, including selection of proper Personal Protective Equipment

### Speaker Notes:

“Our objectives for this portion of the training are to...”

*Read slide.*



## What is Personal Protective Equipment (PPE)?



PPE refers to protective clothing or other equipment designed to protect the wearer from physical harm.



This includes protection from injuries or exposure to dangerous substances, including germs.



Use of PPE can be traced back to ancient times.

### Speaker Notes:

“Personal protective equipment (PPE) refers to protective clothing or other equipment designed *to protect the wearer from physical harm*. This includes protection from injuries or exposure to dangerous substances, including germs.

Use of PPE dates back to ancient times, when soldiers used protective head, face, and body armor to protect themselves from injury.”



Early healthcare PPE was based on **current understanding** of diseases and how they are transmitted, **just like it is today.**

**Speaker Notes:**

“Early healthcare PPE was based on current understanding of diseases and how they are transmitted, just like it is today.

During the mid-1600's when the black plague was rampant, doctors wore glass, goggles, and beaked masks stuffed with spices to fend off the "vapors" that they then believed to cause disease.

Modern use of PPE is based on our current understanding of how potentially dangerous pathogens (or germs) are transmitted.”

## Types of PPE Used in Healthcare Settings

- » Gloves
- » Facemasks
- » Gowns
- » Goggles
- » Face Shields
- » Respirators



### Speaker Notes:

“The types of PPE used in healthcare settings act as a barrier between pathogens (dangerous germs, including viruses and bacteria) or dangerous substances and the user's skin, mouth, nose, or eyes. The types of PPE include gloves, facemasks, gowns, goggles, face shields, and respirators.”

## Importance of PPE

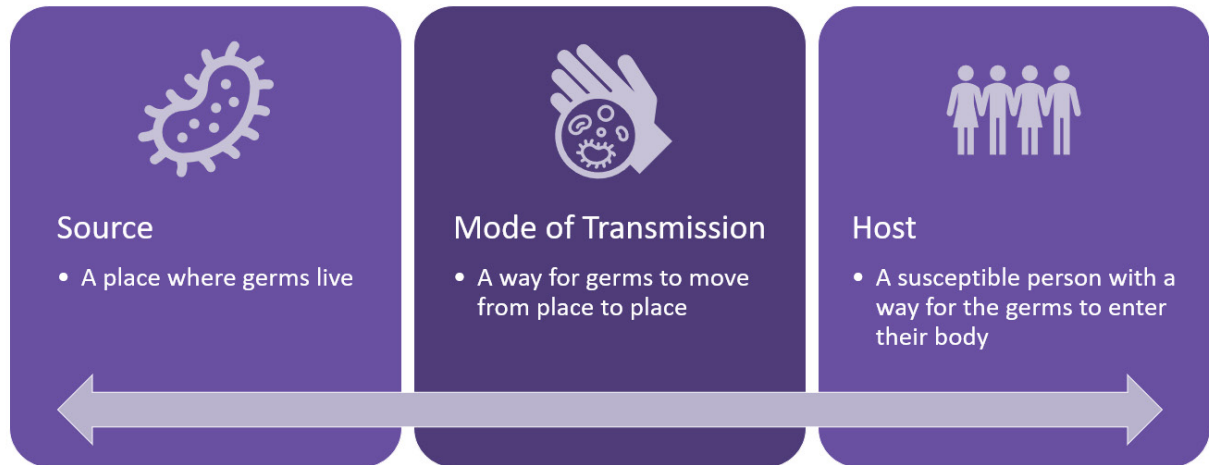
- » PPE protects staff against contamination by pathogens (harmful germs) and helps break the chain of transmission of infections
- » PPE protects staff from injury or contamination from hazards that they encounter as a part of their jobs (like cleaning and disinfecting agents).

### Speaker Notes:

“PPE is important because it serves two major functions to protect staff. PPE protects staff against contamination by pathogens (harmful germs) and helps break the chain of transmission of infections.

PPE protects staff from injury or contamination from hazards that they encounter as a part of their jobs (like cleaning and disinfecting agents).”

## How Does PPE Stop Transmission of Infections?



### Trainer's Guide

If you are delivering all of the sections of the training to your participants, you will have already reviewed the chain of infection in detail in the prior section on infection control basics. You can adapt the speaker notes to simplify the discussion on this slide if you believe that the information is still fresh in your participants' minds. If you are using this section as a standalone training, be sure to review this slide in detail. Make sure you read the *use of personal protective equipment interrupts the chain of transmission* section in the speaker notes regardless of if you are delivering the entire presentation or this section as a standalone.

### Speaker Notes:

“The image on this slide is the simplest form of the process sometimes known as the “chain of transmission” or “chain of infection.” This describes the basic process for how all pathogens (dangerous germs, like viruses, bacteria, fungi, and parasites) spread. In order for an infection to spread there must be these three things: 1. a source (a place where germs live), 2. a mode of transmission (a way for germs to move from place to place) and 3. a host (a susceptible person with a way for germs to enter their body). These are linked, and all three must be in place for a germ to spread.

Infection prevention and control measures are aimed at breaking this chain and stopping germs from spreading.

**A source** can be a person who is carrying a germ (sometimes they'll have symptoms of an infection, but not always). A source can also be a surface or object in the environment, including

dry surfaces (like handles or rails), wet surfaces (like sinks), dust or debris, or indwelling devices (like urinary catheters).

***A mode of transmission*** is a way for germs to move from the source to the susceptible person. Germs don't move themselves, they depend on people, the environment and/or medical equipment to move them.

***A host*** is a susceptible person who is vulnerable to a germ with a way for the germ to get into their body. Some germs can enter the body through breaks in the skin, through mucous membranes or through invasive devices. Certain medical conditions (like diabetes or cancer), certain medications (like steroids or cancer medications) and certain medical treatments (like catheters, tubes, or surgery) can increase susceptibility to germs.

***Use of personal protective equipment interrupts the chain of transmission*** by cutting off the mode of transmission that moves germs from place to place. Proper use of PPE can keep staff from moving germs from place to place on their hands or uniforms. Proper use of PPE can protect staff from contamination by germs from droplets transferred by splashes or sprays (like coughs and sneezes) and can stop transmission of germs through tiny particles in the air called aerosols.

## OSHA & CDC

The OSHA Bloodborne Pathogens standard (29 CFR 1910.1030) and CDC Standard Precautions guidelines both include requirements for the use of **personal protective equipment**, such as gloves, gowns, masks, eye protection (e.g., goggles), and face shields, to protect workers from exposure to infectious diseases.



### Speaker Notes:

“Both the Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control and Prevention (CDC) have requirements and guidelines for the use of personal protective equipment including gloves, gowns, masks, eye protection (like goggles) and face shields to protect workers from exposure to infectious diseases.”

## **CDC - Standard Precautions**

- » Standard Precautions are the minimum infection prevention practices that apply to all resident/participant care, regardless of infection status.
- » Proper use of PPE is an important component of Standard Precautions
- » Standard Precautions are designed to protect staff from potential infection from exposure to blood, saliva or other potentially infection materials (OPIM)
- » PPE for Standard Precautions includes gloves, face masks, protective eye wear, face shields, and protective clothing (gowns or lab coats)

### **Speaker Notes:**

*Read Slide*



# Use of Gloves



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## Speaker Notes:

“Now we will begin our discussion of the specific types of PPE with gloves.”

## CDC Standard Precautions – Glove Use

- » Wear gloves when it can be **reasonably anticipated** that contact with blood or other potentially infectious materials (OPIM), mucous membranes, nonintact skin, or potentially contaminated intact skin (e.g., of a person incontinent of stool or urine) could occur
- » Exposure to OPIM also includes contact with contaminated or potentially contaminated environmental surfaces, laundry, equipment or devices.

### Speaker Notes:

“Wear gloves when it can be *reasonably anticipated* that contact with blood or other potentially infectious materials (OPIM), mucous membranes, nonintact skin, or potentially contaminated intact skin (for example, of a person incontinent of stool or urine) could occur.

Exposure to OPIM also includes contact with contaminated or potentially contaminated environmental surfaces, laundry, equipment, or devices.”

## Donning (Putting On) Gloves\*



\*When wearing multiple items of PPE, gloves are typically the last piece that you will put on



### Speaker Notes:

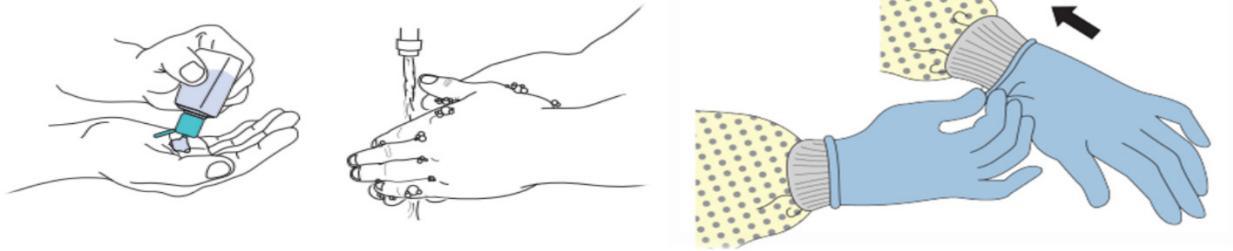
“Always perform hand hygiene immediately before donning any PPE, including gloves.

Select gloves of an appropriate material and size, inspect the gloves for any rips or tears and discard damaged gloves.

Hold gloves by the cuff and work your hand and fingers down into the glove. Pull the cuff up over your wrist.

When you're wearing multiple items of PPE, gloves are typically the last piece of PPE that you will put on, so they don't become contaminated.”

## Donning (Putting On) Gloves



### Speaker Notes:

“This image shows how to remove gloves according to the instructions on the last slide.”

*You may wish to read the steps again with the image displayed if needed to increase understanding.*

“To safely put on gloves:

- Perform hand hygiene immediately before donning any PPE, including gloves
- Select gloves of an appropriate material and size, inspect the gloves for any rips or tears and discard damaged gloves.
- Hold gloves by the cuff and work your hand and fingers down into the glove. Pull the cuff up over your wrist.
- When you're wearing multiple items of PPE, gloves are typically the last piece of PPE that you will put on, so they don't become contaminated.”

## Doffing (Taking Off) Gloves

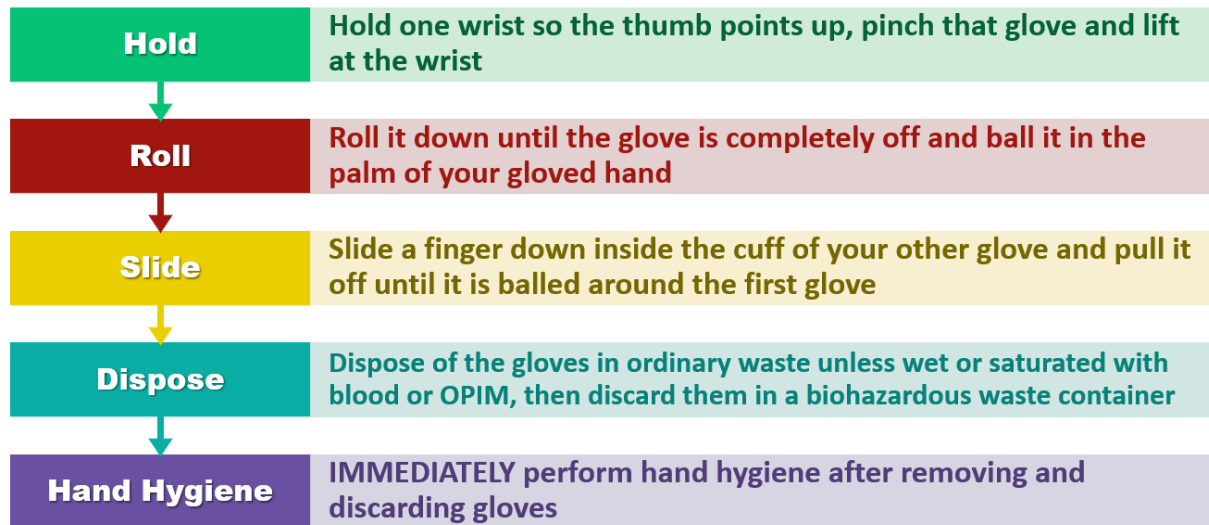
Remove gloves  
**carefully** to avoid  
contaminating  
your hands

Don't **snap** gloves,  
which could cause  
germs to spray

### Speaker Notes:

“When removing gloves, you must be careful to avoid contaminating your hands.  
Never snap gloves when removing them, as this can cause germs to spray.”

## Doffing (Removing) Gloves

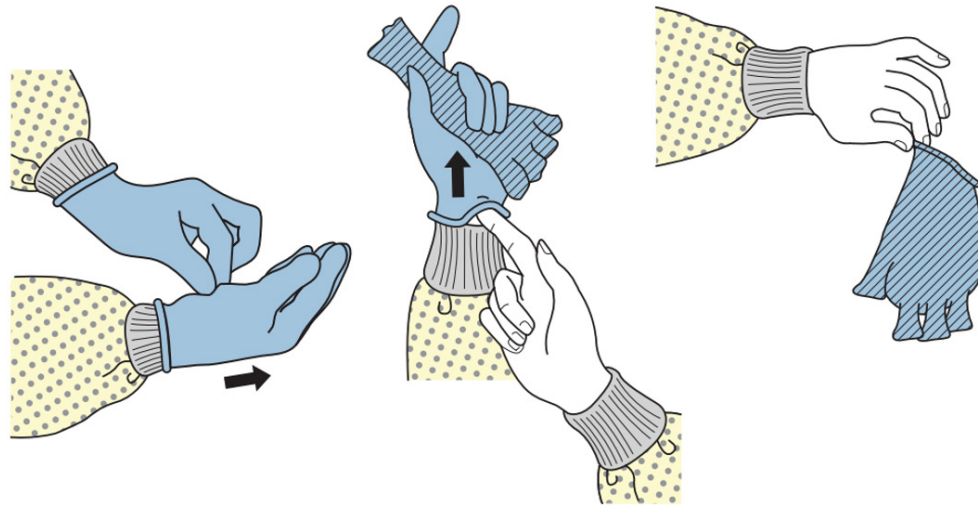


### Speaker Notes:

“To remove gloves:

- Hold one wrist so the thumb points up, pinch that glove, and lift at the wrist
- Roll it down until the glove is completely off and ball it in the palm of your gloved hand
- Slide a finger down inside the cuff of your other glove and pull it off until it is balled around the first glove
- Dispose of the gloves in ordinary waste unless they are wet or saturated with blood or OPIM, then discard them in a biohazardous waste container
- IMMEDIATELY perform hand hygiene after removing and discarding gloves”

## Doffing (Removing) Gloves



 VIRGINIA DEPARTMENT OF  
SOCIAL SERVICES

### Speaker Notes:

“This image shows how to remove gloves according to the instructions on the last slide.”

*You may wish to read the steps again with the image displayed if needed to increase understanding.*

“To safely remove gloves and avoid contaminating your hands in the process:

- Hold one wrist so the thumb points up, pinch that glove, and lift at the wrist
- Roll it down until the glove is completely off and ball it in the palm of your gloved hand
- Slide a finger down inside the cuff of your other glove and pull it off until it is balled around the first glove
- Dispose of the gloves in ordinary waste unless they are wet or saturated with blood or OPIM, then discard them in a biohazardous waste container
- IMMEDIATELY perform hand hygiene after removing and discarding gloves”

## Change Gloves & Clean Hands

- » Don't attempt to clean disposable gloves with soap and water or alcohol-based hand sanitizer!
- » Remove gloves, perform hand hygiene and put on new gloves if:
  - Gloves become damaged
  - Gloves become visibly soiled with flood or body fluids during a task
  - You are moving from work on a soiled body site to a clean body site on the same resident/participant
  - You are moving from providing care for one resident/participant to another

### Speaker Notes:

“Disposable gloves are not meant to be cleaned. Never attempt to clean disposable gloves with soap and water or alcohol-based hand sanitizer.

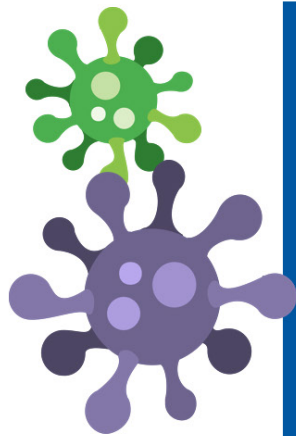
Always remove your gloves, clean your hands, and put on a fresh pair of gloves if:

- Your gloves are damaged
- Your gloves are visibly soiled
- You are moving from working on a soiled body site (like peri care) to a clean body site (like mouth care) on the same resident or participant
- Or if you are moving from one resident or participant to another

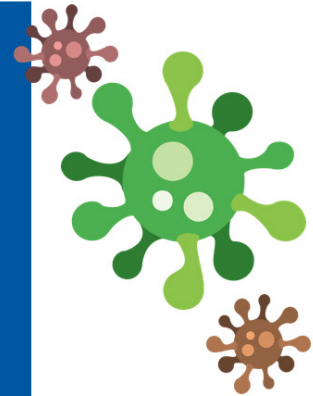
Gloves must be removed and discarded *before* leaving the area where they were used. Used gloves should not be worn in corridors. Hands must be cleaned with ABHS or soap and water after each time gloves are worn.”



## Gloves Don't Prevent Cross-Contamination



Gloves can transfer germs from people to surfaces and from surfaces to people.



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VIRGINIA DEPARTMENT OF SOCIAL SERVICES

### Speaker Notes:

“Using gloves does not prevent cross-contamination. Gloves can pick up and transfer germs from people to surfaces and from surfaces to people. Wearing gloves can sometimes give the illusion of cleanliness, but it is important to recognize that gloves can become soiled.”

# Use of Mouth, Nose and Eye Protection

Masks, Face Shields and Goggles



## Speaker Notes:

“Now we will discuss the use of mouth, nose, and eye protection, including masks, face shields, and goggles.”

## Cloth Face Coverings

Are probably better than no facial covering at all for source control but are **NOT for use in direct care environments** and **cannot be considered proper PPE**



### Speaker Notes:

“First, cloth face coverings. Cloth face coverings are probably better than no facial covering at all when it comes to source control (which we will discuss in detail later). But it’s important to note that cloth face coverings are NOT for use in direct care environments and cannot be considered proper PPE.

If there is ever a time that visitors need to be wearing masks and they arrive wearing a cloth mask, please politely give them a procedure/surgical mask as an alternative to wear for the duration of their stay.”

## **CDC Standard Precautions – Mouth, Nose and Eye Protection**

- » Full facial protection should be worn to protect the mucous membranes of the eyes, nose and mouth during procedures and care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions.
- » Select masks, goggles, face shields, and combinations of each according to the need anticipated by the task performed

### **Speaker Notes:**

“CDC Standard Precautions for the use of Mouth, Nose and Eye Protection states ...”

*Read slide.*

## Surgical or Procedure Masks

- » Loose-fitting disposable device that covers the mouth and nose of the wearer and helps to protect against contaminants
- » Regulated by the FDA
- » May have ear loops or ties
- » May be referred to as surgical, isolation, dental or medical procedure masks
- » Come with or without attached eye protection
- » Come in different thicknesses and different levels of fluid resistance
- » When used properly are meant to block large-particle droplets, splashes, sprays or splatter that contain germs and keep them from reaching your mouth and nose



### Speaker Notes:

“Surgical or procedure masks are a type of loose-fitting disposable device that covers the mouth and nose of the wearer and helps to protect against contaminants. These masks are regulated by the Food and Drug Administration (FDA). Depending on the style, they may have ear loops or ties. This type of mask may also be referred to as surgical, isolation, dental or medical procedure masks. Some surgical or procedure masks come with attached eye protection. When used properly are meant to block large-particle droplets, splashes, sprays, or splatter that contain germs and keep them from reaching your mouth and nose.”

## CDC Standard Precautions – Respiratory Hygiene & Cough Etiquette

- » Offer facemasks to anyone with symptoms of respiratory infection (excluding sick staff or visitors from work or visitation is preferred)
- » Request that all residents/participants with respiratory symptoms wear a facemask while receiving face-to-face care and when in common areas

### Speaker Notes:

“For many the concept of Respiratory Hygiene and Cough Etiquette came into their consciousness during the COVID-19 pandemic. However, respiratory hygiene and cough etiquette have been around a lot longer than that- they were added to Standard Precautions in 2007.

These measures are designed to limit the spread of respiratory germs that are spread by the droplet and airborne routes and are applicable to *anyone* (staff, visitor, or resident/participant) who may have undiagnosed (or diagnosed!) respiratory infections.

One of the components of respiratory hygiene/cough etiquette is to offer a facemask to *any individual* that is experiencing respiratory symptoms. Having sick staff stay home and having ill visitors delay visitation is preferred whenever possible.

If a resident/participant is coughing or sneezing, ask them to wear a facemask especially while receiving face-to-face care, or when in common areas.”



**Speaker Notes:**

“There are two main reasons that masks are worn:

- 1. **To protect others** from the germs of the wearer, as source control.
- 2. **To protect the wearer** from exposure to potentially harmful contaminants like germs or chemicals, as PPE.”

## Donning (Putting On) Masks

- » Perform hand hygiene before donning any PPE, including masks
- » Secure all ties or elastic bands in proper locations (at middle of head and neck or behind ears)
- » Shape the flexible band to the bridge of your nose
- » Fit the mask snug to your face, over your nose and extending below your chin

### Speaker Notes:

“The following steps should be followed when putting on a mask:

- Perform hand hygiene before donning any PPE, including masks
- Secure all ties or elastic bands in proper locations (at middle of head and neck or behind ears)
- Shape the flexible band to the bridge of your nose
- Fit the mask snug to your face and extending below your chin”



## Mask Don'ts



**Don't** wear your facemask under your mouth or nose.

### Speaker Notes:

“Masks cannot be worn on your chin or under the nose, covering your mouth only. Wearing masks this way makes them ineffective.”

## Doffing (Removing) Masks

- » Perform hand hygiene before removing any PPE. If your hands become contaminated during mask removal, immediately hand hygiene again.
- » Grasp ties or elastics and remove them without touching the front of the mask. If there are two sets, remove the bottom ties or elastics first.
- » Dispose of masks in the ordinary waste unless they are wet or saturated with blood or OPIM, then discard them in a biohazardous waste container
- » IMMEDIATELY perform hand hygiene after removing and discarding mask

### Speaker Notes:

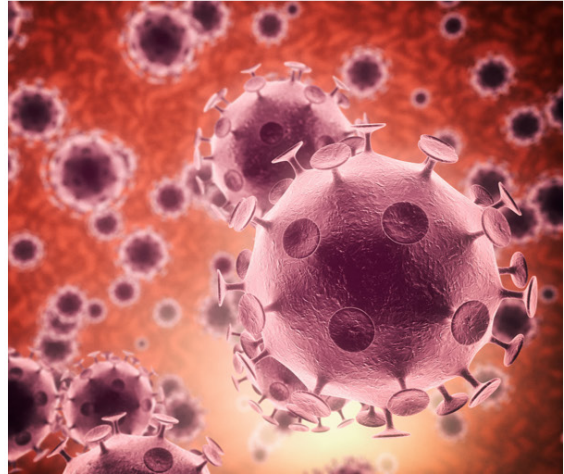
“The steps to follow when removing a mask are:

- Perform hand hygiene before removing any PPE. If your hands become contaminated during mask removal, immediately hand hygiene again.
- Grasp ties or elastics and remove them without touching the front of the mask. If there are two sets, remove the bottom ties or elastics first.
- Dispose of masks in the ordinary waste unless they are wet or saturated with blood or OPIM, then discard them in a biohazardous waste container.
- IMMEDIATELY perform hand hygiene after removing and discarding mask.”

## Doffing (Removing) Masks

Remember:  
The front of the mask is  
contaminated!

**DO NOT TOUCH**



### Speaker Notes:

“When removing a mask, always remember NOT TO TOUCH the front of the mask, as it is contaminated.”

## Eye Protection

### Goggles

- » Appropriately fitted, indirectly-vented goggles with a manufacturer's anti-fog coating provide the most reliable practical eye protection from splashes, sprays, and respiratory droplets
- » While highly effective as eye protection, goggles do not provide splash or spray protection to other parts of the face

### Face Shields

- » Are commonly used as an infection control alternative to goggles
- » Can provide protection to more areas of the face than goggles.
- » Should have crown and chin protection and wrap around the face to the point of the ear, which reduces the likelihood that a splash could go around the edge of the shield and reach the eyes

### Speaker Notes:

*Read slide*

“Both options work for protecting eyes from contamination. However, it is important to remember that many situations will require that you also wear a mask to add protection for your mouth and nose.”

## Safety Glasses

- » Safety glasses provide impact protection but do not provide the same level of splash or droplet protection as goggles and generally should not be used for infection control purposes



### Speaker Notes:

*Read slide*

## Regular Prescription Glasses DO NOT Count!

- » Regular prescription eyeglasses and contact lenses are not considered eye protection
- » Regular prescription eyeglasses do not provide protection against splashes, sprays or splatters of potentially infectious materials
- » Contact lenses or glasses can be worn in conjunction with certain types of approved protective eyewear



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### Speaker Notes:

*Read slide*

## Donning (Putting On) Eye Protection

- » Perform hand hygiene
- » Remove clean eye protection from packaging
- » Put on eye protection, securing any straps or bands to ensure a snug fit

*Note: When you are wearing eye protection with a mask or respirator, your mask or respirator must be put on first.*

### Speaker Notes:

“The following steps should be followed to put on eye protection...”

*Read slide.*

## Doffing (Removing) Eye Protection

- » Remember – the outside of your eye protection is contaminated!
- » Remove eye protection with un-gloved hands (used gloves are contaminated)
- » Grasp the strap or band toward the back of the head and lift eye protection away from the face
- » Dispose of disposable eye wear in a waste container or place reusable eyewear in a designated receptacle for reprocessing
- » Perform hand hygiene after removing PPE and at any point during the removal process if hands become accidentally contaminated

### Speaker Notes:

“The following steps should be followed when removing eye protection...”

*Read slide.*



# Use of Gowns



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## Speaker Notes:

“Now we will discuss use of gowns, a type of protective clothing.”

## CDC Standard Precautions - Gowns

- » Worn to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, or OPIM
- » Should be worn during handling of soiled laundry to prevent transfer of pathogens to skin and clothes from contaminated linens

### Speaker Notes:

“According to CDC Standard Precautions...”

*Read slide.*

“Care scenarios that would necessitate wearing a gown would include the care of a person with vomiting or incontinent diarrhea.”

*You can additionally discuss other care scenarios from your setting where splashes or sprays of blood, body fluid or OPIM might occur, if relevant.*

## Types of Gowns

### Surgical Isolation Gowns & Surgical Gowns



### Non-Surgical Gowns (Isolation, Procedure, or Cover Gowns)



### Speaker Notes:

“There are three types of medical gowns: surgical isolation gowns, surgical gowns, and non-surgical gowns. Non-surgical gowns are often known as isolation, procedure, or cover gowns. Surgical isolation gowns and surgical gowns are Class II medical devices and are most frequently used in specialty inpatient settings, like operating rooms, intensive care units or labor and delivery units.

Non-surgical gowns are the type most frequently seen in adult congregate care settings. They are a Class I medical device and are intended to protect the wearer from transfer of microorganisms and body fluids in low or minimal risk care or isolation situations, which would include routine care in a standard inpatient unit, for isolation for common pathogens or in an ICU.”

## Donning (Putting On) Gowns

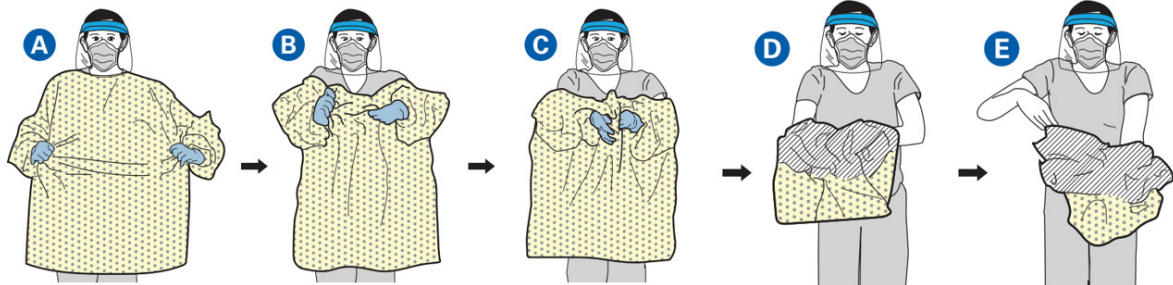
- » When multiple pieces of PPE are to be worn, gowns are typically put on first
- » Perform hand hygiene
- » Put on gown so that the torso is fully covered from the neck to the knees and arms are covered down to the wrist, then wrap the gown around to the back
- » Secure ALL ties or fasteners (usually are present at neck and waist)
  - Do not wrap ties around to the front of the gown!

### Speaker Notes:

“The proper procedure for putting on gowns is..”

*Read slide*

## Doffing (Removing) Gowns – Option 1



### Speaker Notes:

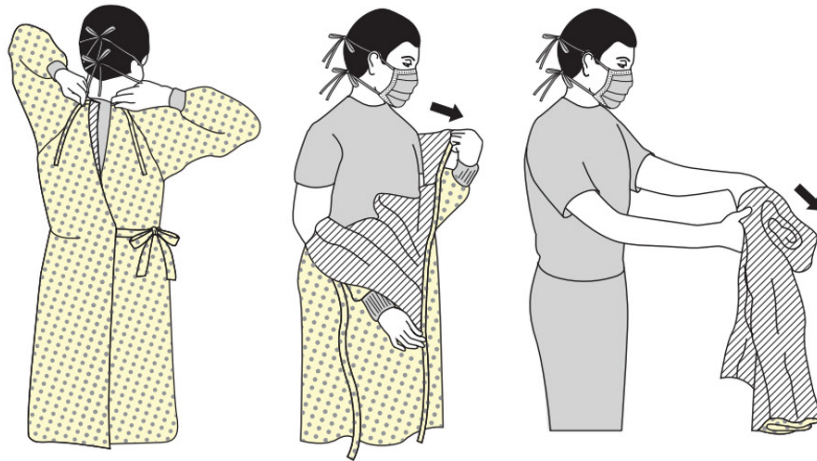
“When removing gowns, it’s important to remember that the gown front and sleeves and the outside of your gloves are contaminated and if your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer.

There are two different ways to remove your gown. The first method removes both gown and gloves together, and requires that you are using a disposable gown (and not one that will be laundered for reuse):

- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands.
- While removing the gown, fold or roll the gown inside-out into a bundle.
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands.

Place the gown and gloves into a waste container.”

## Doffing (Removing) Gowns – Option 2



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### Speaker Notes:

“The second option to remove a gown requires that gloves have already been removed during an earlier step. This is also the method that should be used for reusable/laundryable gowns since the ties cannot be broken. It remains important to keep in mind that the front of the gown and the sleeves are contaminated. If at any point your hands become contaminated, immediately perform hand hygiene.

To remove the gown:

- Unfasten gown ties, ensuring that sleeves don't touch your body when you're reaching for the ties
- Pull the gown away from your neck and shoulders, touching the inside of the gown only
- Turn the gown inside out as you remove it and roll it onto a ball or packet
- Discard gown in waste container or laundry bin”

## Cleaning and Disinfection of Reusable Gowns

- » Typically made of polyester or polyester-cotton fabrics. Gowns made of these fabrics can be safely laundered after each use according to routine procedures and reused
- » Reusable gowns should be placed into appropriately labeled laundry receptacles with lids after doffing
- » Routinely inspect & maintain (e.g., mend a small hole in a gown, replace missing fastening ties) reusable gowns
- » Replace reusable gowns when needed (e.g., when they are thin or ripped)
- » Store laundered gowns in a manner such that they remain clean until use

### Speaker Notes:

*Reusable/laundryable gowns are used in some settings in place of disposable gowns. If your setting does not use reusable gowns, you may skip this slide, informing your participants that your setting does not use reusable gowns.*

*If your setting does use reusable gowns, read the slide and supplement with any setting-specific information, such as where laundry receptacles are located and where clean gowns are stored.*

# Donning (Putting On) & Doffing (Taking Off) Personal Protective Equipment Activity

## Trainer's Guide

If you are incorporating activities in your presentation, do the Donning (Putting On) & Doffing (Taking Off) Personal Protective Equipment activity now. If you are not planning to incorporate this activity, skip over this slide.

### Speaker Notes:

“Now that we have gone over the information about how to put on and remove PPE, we are going to give you an opportunity to practice by doing an activity.”



# Use of Respiratory Protection

## Particulate Respirators



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### Trainer's Guide

During this section, you should incorporate discussion of your setting-specific policies and procedures regarding the use of respiratory protection.

### Speaker Notes:

“Next, we will briefly discuss the use of respirators. Respirators are a special type of PPE that protect users by filtering out particles, chemicals or gases from the air inhaled by the wearer. Particulate respirators are the type used in healthcare, which are used to filter out very small particles in the air called aerosols that are produced by some communicable diseases, like active tuberculosis or COVID-19.”

## Respiratory Protection Program Elements

- » Selecting a respirator
- » Medical evaluations
- » Fit testing procedures
- » Use of respirators
- » Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, and otherwise maintaining respirators
- » Training employees in respiratory hazards
- » Training employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and maintenance procedures
- » Policy/procedure for regularly evaluating the effectiveness of the program

### Speaker Notes:

“Setting-specific policies and procedures for respiratory protection are to be outlined in an OSHA-compliant respiratory protection program. Respiratory protection programs include policies and procedures for...

*Read slide”*

*Supplement this slide with setting-specific information from your respiratory protection program.*

## Types of Respiratory Protection



### Trainer's Guide

If your setting provides/requires N95s or other respiratory protection, discuss your setting-specific respiratory protection program and review information about the type(s) of respirators that you provide, including a demonstration of donning (putting on) and doffing (removing) as appropriate for your participants.

### Speaker Notes:

“The type of respiratory protection that is selected for use in a setting depends on factors identified in the respiratory protection program. These factors include the types of hazards that are anticipated, and what types of respiratory protection the staff can be successfully fitted for.

The types that are shown here are a filtering facepiece respirator (commonly called an N95), an elastomeric full-face respirator, a powered air-purifying respirator (PAPR) and an elastomeric half-face respirator. Of these, you are most likely to see the N95 in a typical congregate care or healthcare setting.”

## Standard Precautions

» Standard Precautions are the minimum infection prevention practices that apply to all residents/participants, regardless of infection status.

### Trainer's Guide

Standard precautions are more than a set of rules about when to use personal protective equipment (PPE). Standard precautions are actually a set of guidelines from the CDC that include common sense practices and practice recommendations. If you are unfamiliar with the full scope of standard precautions, you should take the time to familiarize yourself before discussing. This would be an appropriate point to reference your setting-specific policies on standard precautions.

### Speaker Notes:

“Standard precautions are the minimum infection prevention practices that apply to all applicable interactions, all the time, regardless of any individual’s infection status and are not limited to direct care staff.

Standard precautions are based on an assessment of risk and anticipated exposures. They make use of common-sense practices and use of personal protective equipment that protects staff from infection and prevents the spread of infections from person to person.

Standard precautions are more than just wearing gloves for direct care.”

# Transmission-Based Precautions

- » Contact Precautions
- » Droplet Precautions
- » Airborne Precautions

## Trainer's Guide

It is likely that your setting may restrict admission or retention for persons who require some transmission-based precautions. You may wish to supplement this slide and the following four with setting-specific information and reference your policies and procedures.

### Speaker Notes:

Transmission-based precautions are the second level of basic infection control and are used **in addition** to Standard Precautions for the care of persons who may be infected or colonized with certain infectious germs or pathogens that need additional precautions to prevent transmission.

The type of precautions used is based upon how the infectious agent (or suspected agent) spreads.

Contact Precautions are used for persons known or suspected to be infected with pathogens that have increased risk for transmission through contact with the person or their immediate environment.

Droplet Precautions are used for persons known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking (e.g. influenza).

Airborne Precautions are used for persons known or suspected to be infected with pathogens transmitted by the airborne route (e.g., tuberculosis, measles, chickenpox, disseminated herpes zoster).

## Contact Precautions

- » Used for the care of persons known or suspected to be infected with pathogens that have increased risk for transmission through contact with the person or their immediate environment (e.g., *C. Difficile*, norovirus, infectious diarrhea of unknown cause)
- » Wear a gown and gloves for all interactions that may involve contact with the resident/participant or their environment
- » Ensure disinfection products used are effective against the known or suspected pathogen
- » Contact Precautions may be combined with Droplet Precautions for some pathogens

### Speaker Notes:

“Contact Precautions are used for the care of persons known or suspected to be infected with pathogens that have increased risk for transmission through contact with the person or their immediate environment (for example, *C. Difficile*, norovirus, infectious diarrhea of unknown cause). When Contact Precautions are in use, staff and visitors must wear a gown and gloves for all interactions that may involve contact with the resident/participant or their environment. Putting on PPE upon room entry and properly discarding before exiting the room is done to contain pathogens. Ensure that disinfection agents used for that room or area are effective against the known or suspected organism, which can be verified by reading the product label or checking the EPA list for that organism. Spore-producing illnesses like *C. Difficile* require disinfecting with bleach-based products to be effective. When certain pathogens are suspected or identified, contact precautions may be combined with droplet precautions, in which case staff and visitors would use ALL PPE for BOTH types of precautions.”

## Droplet Precautions

- » Used for the care of persons known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a resident/participant who is coughing, sneezing, or talking (e.g., influenza)
- » Wear a mask
  - Put on mask upon entry to the room or space
  - Individual settings or situations may additionally require goggles or a face shield for full face protection
- » Resident/participant should use source control (wear a mask) if able to do so safely
- » Droplet precautions may be combined with Contact Precautions for some pathogens

### Speaker Notes:

“Droplet precautions are used for the care of persons known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking (e.g. influenza). Staff and visitors must wear a **mask**. Put on mask upon entry to the room or space. Individual settings or situations may additionally require goggles or a face shield for full face protection. The resident/participant should use source control (wear a mask) if they are able to do so safely. Droplet precautions may be combined with Contact Precautions for some circumstances, in which case staff and visitors would use ALL PPE for BOTH types of precautions. “

## Airborne Precautions

- » Used for the care of persons known or suspected to be infected with pathogens transmitted by the airborne route (e.g., tuberculosis, measles, chickenpox, disseminated herpes zoster)
- » Ensure placement in an airborne infection isolation room (AIIR).
  - If unavailable ensure placement in a private room and keep the door closed
- » Wear a fit-tested NIOSH-approved N95 or higher-level healthcare respirator
  - Individual settings or situations may additionally require goggles or a face shield for full face protection
- » Resident/participant should use source control (wear a mask) if able to do so safely
- » Airborne precautions may be combined with Contact Precautions for some pathogens

### Speaker Notes:

“Airborne Precautions are used for the care of persons known or suspected to be infected with pathogens transmitted by the airborne route (e.g., tuberculosis, measles, chickenpox, disseminated herpes zoster). Ensure placement in an airborne infection isolation room (AIIR). If an AIIR is unavailable ensure placement in a private room and keep the door closed. Wear a fit-tested NIOSH-approved N95 or higher-level healthcare respirator. Individual settings or situations may additionally require goggles or a face shield for full face protection. The resident/participant should use source control (wear a mask) if they are able to do so safely. Airborne precautions may be combined with Contact Precautions for some circumstances, in which case staff and visitors would use ALL PPE for BOTH types of precautions. “



## General Guidelines when Transmission-Based Precautions are in Use

- » Limit transport and movement of residents/participants outside of the room to medically-necessary purposes.
- » Use disposable or dedicated resident/participant-care equipment (e.g., blood pressure cuffs).
- » Prioritize cleaning and disinfection of the rooms of residents on transmission-based precautions ensuring rooms are frequently cleaned and disinfected (e.g., at least daily) focusing on frequently touched surfaces and equipment in the immediate vicinity of the resident/participant.
  - Ensure disinfectants are listed as effective against the known or suspected pathogen

### Speaker Notes:

“Here are some general guidelines when any type or combination of transmission-based precautions are in use:

- Limit transport and movement of individuals outside of the room to medically necessary purposes. When transport or movement is necessary, cover or contain the infected or colonized areas of the individual’s body. Remove and dispose of contaminated PPE and perform hand hygiene prior to transporting individuals on Contact Precautions. Put on clean PPE to handle the resident/participant at the transport location.
- Use disposable or dedicated resident/participant-care equipment (e.g., blood pressure cuffs). If common use of equipment for multiple individuals is unavoidable, clean and disinfect such equipment before use on another individual.
- Prioritize cleaning and disinfection of the rooms of residents on contact precautions ensuring rooms are frequently cleaned and disinfected (e.g., at least daily) focusing on frequently touched surfaces and equipment in the immediate vicinity of the person. Ensure that disinfectants are listed as effective against the known or suspected pathogen.”

# References

## Centers for Disease Control and Prevention (CDC)

- » CDC Infection Control Home  
<https://www.cdc.gov/infectioncontrol/index.html>
- » CDC How Infections Spread  
<https://www.cdc.gov/infectioncontrol/spread/index.html>
- » CDC Infection Control Basics  
<https://www.cdc.gov/infectioncontrol/basics/index.html>
- » CDC Infection Control Guidelines Library  
<https://www.cdc.gov/infectioncontrol/guidelines/index.html>
- » CDC PPE Sequence  
<https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>

## Occupational Safety and Health Administration (OSHA)

- » OSHA Bloodborne Pathogens Standard  
<https://www.osha.gov/bloodborne-pathogens/standards>
- » OSHA Respiratory Protection Standards  
<https://www.osha.gov/respiratory-protection/standards>

## Virginia Department of Health

- » How to Develop a Respiratory Protection Program  
<https://www.vdh.virginia.gov/content/uploads/sites/174/2022/01/Resource-Guide-for-Developing-a-Respiratory-Program-21.pdf>

# Preventing Transmission of Bloodborne Pathogens

## Trainer's Guide

Throughout this section, you should incorporate discussion of your setting-specific policies and procedures that pertain to bloodborne pathogens and your setting's specific exposure control plan.

## Objectives

- » Define bloodborne pathogens
- » Describe risks for exposure to bloodborne pathogens
- » Discuss the chain of infection for bloodborne pathogens
- » Discuss the components of an exposure control plan
- » Define engineering and work practice controls for the prevention of bloodborne pathogen exposure
- » Discuss safe injection practices, use of PPE, and Hepatitis B vaccination
- » Describe steps to take if an exposure occurs

### Speaker Notes:

*Read slide*

## What are Bloodborne Pathogens?

- » Bloodborne pathogens (BBP) are microorganisms present in human blood, saliva, and other body fluids that cause disease.
- » The human bloodborne pathogens of greatest concern include:
  - Hepatitis B Virus (HBV)
  - Hepatitis C Virus (HCV)
  - Human Immunodeficiency Virus (HIV)

### Speaker Notes:

*Read slide*

## Risks for Bloodborne Pathogen Exposure

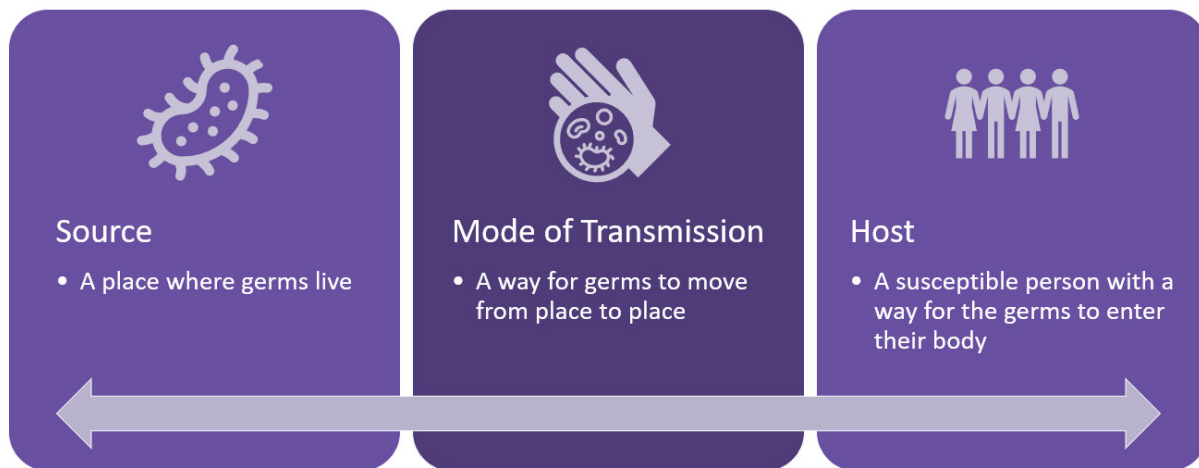
- » Anyone who could come into contact with blood or other potentially infectious materials (OPIM) or to surfaces contaminated by blood or OPIM is at risk for exposure to bloodborne pathogens

### Speaker Notes:

“Anyone who could come into contact with blood or other potentially infectious materials (OPIM) or to surfaces contaminated by blood or OPIM is at risk for exposure to bloodborne pathogens.

The Occupational Safety and Health Administration (OSHA) defines OPIM as the following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and **all body fluids in situations where it is difficult or impossible to differentiate between body fluids.**”

# Transmission of Bloodborne Pathogens



## Trainer's Guide

If you are delivering all the sections of the training to your participants, you will have already reviewed the chain of infection in detail in the prior section on infection control basics. You can adapt the speaker notes to simplify the discussion on this slide if you believe that the information is still fresh in your participants' minds. If you are using this section as a standalone training, be sure to review this slide in detail. If using this slide as part of the entire curriculum or as a standalone, make sure you read the "**Transmission of bloodborne pathogens is prevented**" section below.

### Speaker Notes:

"The image on this slide is the simplest form of the process sometimes known as the "chain of transmission" or "chain of infection." This describes the basic process for how all pathogens (dangerous germs, like viruses, bacteria, fungi, and parasites) spread. In order for an infection to spread there must be these three things: 1. a source (a place where germs live), 2. a mode of transmission (a way for germs to move from place to place) and 3. a host (a susceptible person with a way for germs to enter their body). These are linked, and all three must be in place for a germ to spread.

Infection prevention and control measures are aimed at breaking this chain and stopping germs from spreading.

**A source** can be a person who is carrying a germ (sometimes they'll have symptoms of an infection, but not always). A source can also be a surface or object in the environment, including

dry surfaces (like handles or rails), wet surfaces (like sinks), dust or debris, or indwelling devices (like urinary catheters).

**A mode of transmission** is a way for germs to move from the source to the susceptible person. Germs don't move themselves, they depend on people, the environment and/or medical equipment to move them.

**A host** is a susceptible person who is vulnerable to a germ with a way for the germ to get into their body. Some germs can enter the body through breaks in the skin, through mucous membranes or through invasive devices. Certain medical conditions (like diabetes or cancer), certain medications (like steroids or cancer medications) and certain medical treatments (like catheters, tubes, or surgery) can increase susceptibility to germs.

**Transmission of bloodborne pathogens is prevented** by cutting off the mode of transmission that could move dangerous organisms from blood or OPIM to a susceptible staff person, placing them at risk for infection. The interruptions to the mode of transmission are accomplished through a set of practices and controls, including work practices, administrative controls, engineering controls and proper use of PPE. We will discuss these in more detail in the following slides.”



## OSHA Requirements for Control of Exposure to Bloodborne Pathogens

“In order to reduce or eliminate the hazards of occupational exposure to bloodborne pathogens, an employer must implement an exposure control plan for the worksite with details on employee protection measures. The plan must also describe how an employer will use engineering and work practice controls, personal protective clothing and equipment, employee training, medical surveillance, hepatitis B vaccinations, and other provisions as required by OSHA's Bloodborne Pathogens Standard ([29 CFR 1910.1030](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030)).”

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030>

### Speaker Notes:

*Read slide*

## Some Exposure Control Plan (ECP) Elements

- » Employee Education and Training
- » Implementation of Universal Precautions
- » Engineering and Work Practice Controls
- » Personal Protective Equipment
- » Housekeeping (including removal of regulated waste)
- » Hepatitis B Vaccination
- » Post-Exposure Evaluation and Follow-Up

### Trainer's Guide

Reference your specific setting's exposure control plan on this slide and during this section and provide setting-specific information and examples as appropriate.

### Speaker Notes:

“OSHA determines requirements for the written exposure control plan (abbreviated ECP). Some of the required elements include...”

*Read slide*

“There are just some of the requirements placed on employers for the written plan to protect staff.”

Treat **all** blood and bodily fluids  
as if they are infectious.

**Speaker Notes:**

“Treat **all** blood and bodily fluids as if they are infectious. All the recommendations for use of personal protective equipment under universal precautions are covered by implementation of Standard Precautions, which have more stringent requirements. For settings where healthcare is delivered, Standard Precautions define the minimum infection control practices for use with the care of all persons at all times.”

## Examples of Engineering Controls

- » Reduce risk for exposure by removing or isolating the hazard
- » Includes implementation of commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure
  - Employers must provide proper training on the use of devices
- » Includes things like safety needles, single-use, auto-disabling lancets and sharps disposal containers

### Speaker Notes:

*Read slide*

## Examples of Work Practice Controls

### » Development and Implementation of the Exposure Control Plan (ECP)

### » Policies and Procedures that Reduce Risks

- Labeling biohazardous waste
- Not overfilling sharps containers
- Performing hand hygiene after removing gloves
- Not bending or breaking sharps
- Additional safe injection practices

### Trainer's Guide

The examples on this slide represent only a small fraction of the potential examples of work practice controls. Consider giving additional examples from your setting's ECP or infection control program policies and procedures.

### Speaker Notes:

“Work practice controls reduce the likelihood of exposure by ensuring tasks are done in the safest way possible. This includes the policies and procedures about the way tasks are to be performed, and the exposure control plan. Examples of work practice controls include policies that require labeling of biohazardous waste, that prohibit overfilling of sharps containers, that require staff to clean their hands after removing gloves or that prohibit staff from bending or breaking sharps and additional safe injection practices.”

## Safe Injection Practices

- » **Use aseptic technique to avoid contamination of sterile injection equipment**
- » **Do not administer medications from a single syringe to multiple individuals**
  - Changing the needle is not sufficient to prevent transmission of bloodborne pathogens
- » **Use single-dose vials for injectable medications whenever possible**
- » **If multidose vials must be used**
  - They must be used and stored according to manufacturer's instructions
  - They must be accessed only with a sterile syringe and sterile needle/cannula

### Trainer's Guide

Consider referencing additional setting-specific policies and procedures for safe injection practices, if applicable. If your setting does not administer injectable medications, you may skip this slide with an explanation that your setting does not perform injections.

### Speaker Notes:

“Some additional safe injection practices include...”

*Read slide.*

“Aseptic technique refers to methods used to prevent contamination with microorganisms.”

# Personal Protective Equipment

- » Gloves
- » Masks
- » Gowns
- » Face Shields
- » Goggles



## Trainer's Guide

A comprehensive review of the use of personal protective equipment for standard precautions is provided in the prior section. If you are using this section as a separate refresher training, you may wish to additionally provide information from that section to supplement here.

### Speaker Notes:

“Personal protective equipment must be made available to protect staff from potential exposures to bloodborne pathogens. Personal protective equipment should be selected based on anticipated exposure types (such as direct contact, splatter/spray, etc.), according to the principles of Standard Precautions, which are more stringent than the older definition of Universal Precautions.”

## Hepatitis B Vaccination

- » OSHA requires employers to make Hepatitis B vaccination available to all staff with potential exposure to bloodborne pathogens

### Trainer's Guide

Reference your setting's ECP for specific information on how your staff can access the Hepatitis B vaccine, if desired.

### Speaker Notes:

“OSHA requires employers to make Hepatitis B vaccination available to all staff with potential exposure to bloodborne pathogens. Vaccination is recommended for anyone who has not previously received a Hepatitis B vaccine series or if they are unsure and do not have access to their immunization records. Repeating the Hepatitis B vaccine series is not harmful.”



## If an Exposure Occurs

- » Wash needlesticks and cuts with soap and water
- » Flush splashes to nose, mouth, or skin with water
- » Irrigate eyes with clean water, saline, or sterile wash
- » Report all exposures promptly to ensure that appropriate follow-up care is received

### Trainer's Guide

Reference your setting specific ECP for information regarding exposure notifications and follow-up information. The information provided here includes only the first aid/initial response steps and there are additional requirements for employers regarding documentation, evaluation, and follow-up. Be sure to share facility-specific information with your participants, including who and how to report exposures.

### Speaker Notes:

“If an exposure occurs, the steps that should be taken immediately include...”

*Read slide.*

## References

### National Institute of Occupational Safety and Health (NIOSH)

- » NIOSH Bloodborne Infectious Diseases  
<https://www.cdc.gov/niosh/topics/bbp/default.html>
- » NIOSH Bloodborne Pathogen Exposure  
<https://www.cdc.gov/niosh/docs/2007-157/default.html>

### Occupational Safety and Health Administration (OSHA)

- » OSHA Bloodborne Pathogens and Needlestick Prevention  
<https://www.osha.gov/bloodborne-pathogens>
- » OSHA Quick Reference Guide to the Bloodborne Pathogens Standard  
<https://www.osha.gov/bloodborne-pathogens/quick-reference>
- » OSHA Worker Protection Against Occupational Exposure to Infectious Diseases  
<https://www.osha.gov/bloodborne-pathogens/worker-protections>

# Environmental Infection Control & Considerations for Non-Care Areas

## Trainer's Guide

If you are incorporating activities into your presentation, ensure all preparation and materials for the Finding Important Information on Disinfectant Labels activity and/or the Fluorescent Marker (Glo Germ) Evaluation of Cleaning and Disinfection Activity are ready before beginning this section.

Throughout this section, you should incorporate discussion of your setting-specific policies and procedures regarding environmental infection control (cleaning and disinfection) and considerations for non-care areas.

### Speaker Notes:

“This section will cover environmental infection control and considerations for non-participant/resident care areas, including the kitchen, dining area and laundry area.”

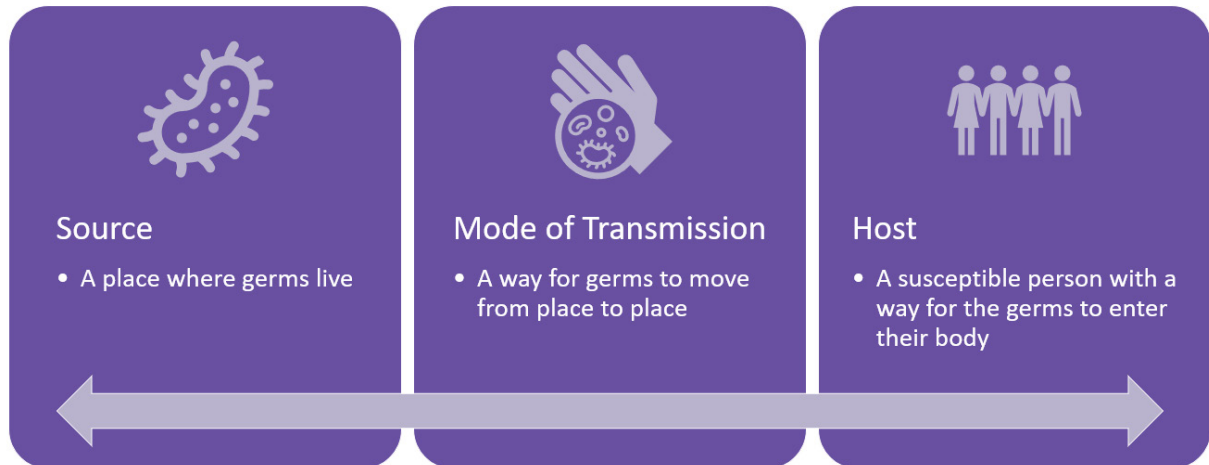
## Objectives

- » Explain how cleaning and disinfection interrupts the chain of infection
- » Describe the differences between cleaning and disinfection
- » Identify information on disinfectant labels
- » Define the following terms: contact time, high-touch surfaces, routine cleaning and terminal cleaning
- » Describe general techniques for environmental cleaning and disinfection and cleaning and disinfection of care equipment & devices
- » Describe infection control practices for the dining, kitchen and laundry areas

### Speaker Notes:

*Read slide.*

## Eliminating Sources of Infection on Surfaces



### Trainer's Guide

If you are delivering all the sections of the training to your participants, you will have already reviewed the chain of infection in detail in the prior section on infection control basics. You can adapt the speaker notes to simplify the discussion on this slide if you believe that the information is still fresh in your participants' minds. If you are using this section as a standalone training, be sure to review this slide in detail. If using this slide as part of the entire curriculum or as a standalone, make sure you read the **"Eliminating sources of infection on surfaces"** section below.

### Speaker Notes:

"The image on this slide is the simplest form of the process sometimes known as the "chain of transmission" or "chain of infection." This describes the basic process for how all pathogens (dangerous germs, like viruses, bacteria, fungi, and parasites) spread. In order for an infection to spread there must be these three things: 1. a source (a place where germs live), 2. a mode of transmission (a way for germs to move from place to place) and 3. a host (a susceptible person with a way for germs to enter their body). These are linked, and all three must be in place for a germ to spread.

Infection prevention and control measures are aimed at breaking this chain and stopping germs from spreading.

**A source** can be a person who is carrying a germ (sometimes they'll have symptoms of an infection, but not always). A source can also be a surface or object in the environment, including

dry surfaces (like handles or rails), wet surfaces (like sinks), dust or debris, or indwelling devices (like urinary catheters).

**A mode of transmission** is a way for germs to move from the source to the susceptible person. Germs don't move themselves, they depend on people, the environment and/or medical equipment to move them.

**A host** is a susceptible person who is vulnerable to a germ with a way for the germ to get into their body. Some germs can enter the body through breaks in the skin, through mucous membranes or through invasive devices. Certain medical conditions (like diabetes or cancer), certain medications (like steroids or cancer medications) and certain medical treatments (like catheters, tubes, or surgery) can increase susceptibility to germs.

**Eliminating sources of infection on surfaces** is done through cleaning and disinfection, which physically removes pathogens (or germs) and/or kills them, eliminating them and a potential source of infection.”

# Cleaning & Disinfection

## Cleaning

- » The process of physically removing foreign material (e.g., soil and organic material) from surfaces
- » Uses water and detergent or enzymatic products that help lift soil from surfaces
- » Reduces the number of germs by removing them from surfaces, but does not always kill them

## Disinfection

- » Use of products designed to kill germs on surfaces
- » Most products are designed for a specific purpose (e.g., for use on hard surfaces)
- » One of the most reliable ways to eliminate germs from surfaces
- » Requires that soil has been physically removed from surfaces before use

### Speaker Notes:

“Cleaning and disinfection are two words that are often used interchangeably but they have important differences. Cleaning is the act that removes soil from surfaces. Cleaning uses detergents or enzymatic products that lift dirt away from surfaces. Cleaning may reduce the number of germs left behind, but it doesn’t always kill them. Disinfecting, on the other hand, kills or irreversibly inactivates, bacteria and viruses. Disinfecting is one of the most reliable ways to lower risk of spreading germs from contaminated surfaces. For disinfecting products to work properly, soil must be physically removed from surfaces first.”

## Disinfectant Labels Contain Important Information

- » Active ingredients
  - » EPA registration number
  - » Signal words (caution, warning, danger)
  - » Precautionary statements
  - » First aid/accidental Exposure
  - » Storage and disposal
- » Directions for Use
    - Where to use
    - What germs are killed
    - What surfaces
    - Preparation instructions (e.g., dilution measurements)
    - How to apply or use
    - Contact time

### Speaker Notes:

“It is important to know how to identify important information about the cleaning and disinfectant agents that you’re required to use. Labels are legally required to have all of the following information...”

*Read slide*

“Access to this information is a reason that it is important to make sure that all your cleaning solutions are properly labeled. It’s impossible to know if you’re using the right agent for the right purpose with the right precautions if you are using a product not properly labeled. The EPA registration number is useful if you ever need to know what organisms your cleaning product is designed to kill. For example, if you are disinfecting in an area under transmission-based precautions, you can use the EPA information to verify that your disinfectant is effective against the target pathogen that you are trying to eliminate.”



# Finding Important Information on a Disinfectant Label Activity

## Trainer's Guide

If you are incorporating activities in your presentation, do the Finding Important Information on a Disinfectant Label activity now. If you are not planning to incorporate this activity, skip over this slide.

### Speaker Notes:

“Since we have just reviewed disinfectant labels, we will now have an opportunity to practice finding important information.”

## Defining Contact Time

- » Also referred to as dwell time, wet time, kill time
- » The amount of time a surface must remain wet with disinfectant in order for germs to be killed
- » Contact times vary widely between products and may depend on what germ you are attempting to kill
- » May require multiple applications of product to keep the surface wet for the required amount of time

### Speaker Notes:

“One of the pieces of information that you can find on a disinfectant label is the contact time for that product. Contact time is also referred to as dwell time, wet time or kill time in some settings and is the time the surface needs to stay wet after applying the cleaning agent for adequate disinfection to take place. It is important to remember that if the agent dries before the required contact time, then the product needs to be reapplied or it will not be effective. Always check the label on the cleaning agents used for the correct contact time”.

## Defining High Touch Surfaces

- » Surfaces most likely to be touched by residents/participants and staff
- » Examples: handrails, doorknobs, light switches, elevator buttons, arms of chairs
- » Pose the highest risk for touch transmission of pathogens
- » Should be cleaned and disinfected more frequently than surfaces that are not touched as often

### Speaker Notes:

“High touch surfaces are the surfaces most likely to be touched by residents or participants and staff. Examples include handrails, doorknobs, light switches, elevator buttons, and arms of chairs. These surfaces are the most likely to collect dangerous pathogens and pose the highest risk for touch transmission. High touch surfaces should be cleaned and disinfected more frequently than surfaces that are not touched as often.”

*Ask your participants to name other high touch surfaces in your setting. Offer additional examples as appropriate.*

# Routine & Terminal Cleaning

## Routine Cleaning

- » Focuses on the resident/participant areas that are used frequently
- » Includes cleaning high touch surfaces, common areas and bathrooms
- » May be scheduled, but also includes addressing typical soil, such as spills or accidents as they occur
- » Frequency of routine cleaning depends on setting-specific policies and how much the space gets used
- » Includes both cleaning and disinfection, depending on surface type and use

## Terminal Cleaning

- » Refers to a type of deep cleaning that occurs when a room or space is changed over
- » May occur when:
  - A resident moves out of a room in a residential setting (e.g., transfers or dies)
  - When a person who has been ill permanently leaves a space (e.g., sick holding rooms in ADCCs or COVID unit rooms)
  - When a person who has been ill recovers and transmission-based precautions are discontinued
- » Always includes both cleaning and disinfection

## Trainer's Guide

This is a good slide to reference your setting specific policies regarding routine and terminal cleaning, including scheduled cleaning and responsibilities for responding to spills and accidents.

## Speaker Notes:

*Read slide and give setting specific policy information.*

## General Environmental Cleaning and Disinfection Techniques

- » **Always read and follow manufacturer instructions**
  - Includes wearing and changing PPE when needed
- » **Keep clean and soiled supplies separate**
- » **Start with cleaner areas and then proceed to dirtier areas**
  - Includes cleaning healthy areas before sick areas, cleaning common spaces before individual care areas, and cleaning low touch surfaces before high touch surfaces
- » **Start with high surfaces within a space and proceed to lower surfaces**
- » **Establish a pattern for cleaning to make sure you do not miss areas within a space (e.g., moving clockwise or up and down rows within a room)**

### Speaker Notes:

“General environmental cleaning techniques include taking steps to ensure that staff are prevented from harm, that products are used as intended and that germs are not accidentally moved from one area to another (cross-contamination).

Specific procedures may apply to cleaning and disinfection of certain areas, but in general ... “

*Read slide*

## **Cleaning & Disinfection of Care Equipment and Medical Devices**

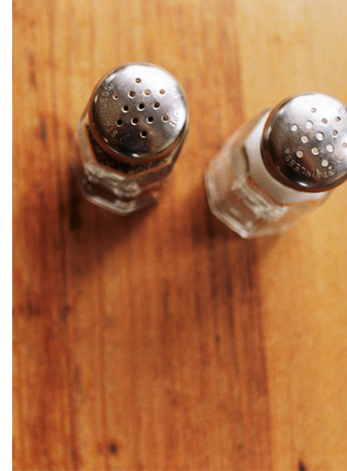
- » **Equipment & devices that are used for more than one person must be cleaned and disinfected (if applicable) between uses**
- » **NEVER reuse single-use items**
- » **Clean before disinfection**
- » **Ensure there is process that denotes and separates clean & soiled equipment**
  - Clean items should be stored in a dedicated clean storage area
  - Soiled items should be held in a dedicated area until reprocessed
  - NEVER place soiled items in clean storage spaces
- » **Clean all surfaces, including crevices**
- » **Use the correct products, and follow manufacturer's instructions**
- » **Ensure that disinfectants achieve the proper contact time**

### **Speaker Notes:**

*Read slide*

## Infection Control in the Dining Area

- » Ensure that hand hygiene is available and encouraged prior to entry into the dining room, provide help as necessary
- » Tables should be set immediately prior to meals
- » Rolled silverware may be less likely to be contaminated than open settings
- » Unused place settings should be removed after each meal
- » Tablecloths and cloth placemats should be replaced and laundered after every meal
- » Tabletops, chair arms and backs and items on tables (like salt and pepper shakers, condiments, etc.) should be cleaned after each meal



### Speaker Notes:

“Individuals should always clean their hands prior to sitting down for a meal. Eating brings the hands to the mouth area repeatedly, and any germs on the hands can easily be transferred into the mouth. Hand hygiene with soap and water is preferred prior to eating, but alcohol-based hand sanitizer or a warm water washcloth are preferable to no hand hygiene at all. Individuals who can clean their own hands should be encouraged to do so, and those who need assistance should receive it.

Tables should be set immediately prior to meals to avoid contamination of dishes, glassware, and silverware. This is especially important if the dining area is used for activities, anything other than dining, or if the dining area gets a lot of traffic passing through between meals. Rolled or wrapped silverware helps prevent contamination of the utensil itself. However, it is important to recognize that the outside of rolled silverware or packets can still become contaminated and those germs can be passed to other surfaces.”

# Fluorescent Marker (Glo Germ) Evaluation of Cleaning and Disinfection Activity

## Trainer's Guide

If you are incorporating activities in your presentation, do the Fluorescent Marker (Glo Germ) Evaluation of Cleaning and Disinfection Activity now. If you are not planning to incorporate this activity, skip over this slide.

### Speaker Notes:

“Now you will get an opportunity to practice some of the cleaning and disinfection techniques that we just discussed with an activity.”



## Infection Control & Food Safety in the Kitchen

- » Clean your hands and surfaces often
- » Separate, don't cross-contaminate
- » Cook to the right temperature, use a thermometer
- » Chill, refrigerate perishable foods promptly



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### Speaker Notes:

“Infection control in the kitchen is primarily centered around the prevention of foodborne illnesses (also called food poisoning). The CDC outlines four basic steps for food safety: clean, separate, cook and chill.

First, clean. Cleaning hands and surfaces often helps remove germs that can survive on hands and surfaces and spread around the kitchen. Washing hands with soap and water for at least 20 seconds before, during and after food preparation and before eating is recommended. During food preparation, hands should be washed after handling uncooked meat, chicken or other poultry, seafood, flour, or eggs. Utensils, cutting boards and countertops should be washed after preparation of each food item. Raw fruits and vegetables should be cleaned under running water before preparation or eating.

Next, separate items to prevent cross-contamination. Raw meats, poultry, seafood, and eggs can spread germs to ready-to-eat foods if they are not kept separate. These items should not be stored above ready to eat foods in the fridge, because they can leak their germs down onto foods below. You can also help decrease the risk of cross-contamination by NOT washing chicken. Washing chicken is not necessary and contributes to splattering of germs around the kitchen. Using separate cutting boards (sometimes color-coded) for different types of foods, like vegetables, poultry, or meats, can also help prevent cross-contamination.

Cook all foods to a safe temperature. Foods are safely cooked when the internal temperature is high enough to kill the germs that can make you sick. The only way to tell if food is safely cooked is to use a thermometer. You cannot reliably judge whether food is safely cooked by checking

color and texture. Consult a minimum internal temperature chart, like the one available at [foodsafety.gov](https://www.foodsafety.gov) for minimum temperatures for specific food types.

Chill all perishable foods promptly. Bacteria multiply rapidly when foods are in the “danger zone” between 40- and 140-degrees Fahrenheit. Ensure that refrigerator temperatures are 40 degrees Fahrenheit or below and that freezer temperatures are at 0 degrees Fahrenheit or below. Package warm or hot food into small portions for refrigeration so they will chill faster. Refrigerate leftovers within two hours, or within one hour if they are in a hot environment like a hot car or at a picnic. Thaw foods safely, in the fridge, microwave or under cold water. Never thaw food on the counter at room temperature.”

## Infection Control & Food Safety in the Kitchen

- » Ensure all food items are dated
- » Check expiration dates and discard expired/expiring foods regularly (at least every two days is a good guideline)
- » Wash hands in handwashing sinks only
- » Clean ice bins/ice machines routinely
  - Never store the scoop in the ice
- » Keep staff food separate from resident/participant food



### Speaker Notes:

“Additional measures for infection control in the kitchen include ensuring that food items are dated and all expired or expiring food is discarded. Checking for expired food at least every two days is a good guideline, but you should check dates on any food items before use as well. Ensure that hands are washed in designated handwashing sinks only. Ensure that ice bins or ice machines and scoops are cleaned regularly. Never store the ice scoop in the ice. Soil and germs from hands on the handle of the ice scoop can be transferred to the ice, which is a ready-to-eat food. Last, ensure that staff food and beverages are not stored with resident/participant food.”

## Infection Control in the Laundry Area

- » Laundry should be placed into bags or other closed/covered containers for transport
- » Use appropriate PPE when handling soiled laundry
- » Keep soiled and clean areas separate



### Speaker Notes:

“Infection control in the laundry area is centered around ensuring that germs from soiled or contaminated laundry do not contaminate surfaces, clean laundry or the skin or clothing of staff who are handling the laundry. Improper handling can transfer harmful germs, like those that cause Norovirus or C. Difficile and contribute to transmission.

Soiled laundry should be enclosed or covered during transportation to the laundry area. Contaminated or potentially contaminated laundry (laundry that is soiled by blood, body fluids or OPIM) should be enclosed in leakproof containers and clearly designated as contaminated. Proper PPE should be used to prevent the transfer of germs to the skin or clothing of staff handling laundry. Wearing gloves AND a gown during the handling of all soiled linen is recommended. Wearing a gown and gloves during the handling of *contaminated* linen is required to prevent contamination of the staff’s uniform.

PPE worn for the handling of soiled or contaminated laundry should NEVER be worn into clean laundry areas or when sorting or folding clean laundry. Germs from the PPE can be transferred to the clean items.

Washer areas should be considered soiled areas. Clean laundry should not be sorted or folded on top of washers as germs from soiled clothing can be found on the outside of the washing machine. Likewise, soiled laundry should never be stored or sorted on or around dryers, as these areas are for clean laundry only.

Special attention will have to be paid to maintain separation in small, residential type laundry areas.”

## References

Centers for Disease Control and Prevention (CDC)

- » Environmental Infection Control Guidelines -  
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/index.html>
- » Food Safety -  
<https://www.cdc.gov/foodsafety/>
- » Healthcare Environmental Infection Prevention -  
<https://www.cdc.gov/hai/prevent/environment/index.html>
- » How to Read a Disinfectant Label -  
<https://www.cdc.gov/hai/pdfs/howtoreadalabel-infographic-508.pdf>