



**Indiana**  
**Department**  
**of**  
**Health**

## Back to the Basics

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OUR MISSION:

**To promote, protect, and improve  
the health and safety of all Hoosiers.**

OUR VISION:

**Every Hoosier reaches optimal health  
regardless of where they live, learn,  
work, or play.**



# Objectives

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- Identify and discuss basic principles of infection control
- Explain standard, transmission-based and enhanced barrier precautions
- Discuss the importance of rounding
- Respiratory Hygiene and Cough Etiquette—what are they?

# Principles of Infection Control

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There are 5 basic principles for infection control:

- Hand hygiene
- Personal protective equipment
- Injection safety
- Environmental cleaning/rounding
- Respiratory hygiene and cough etiquette

# Hand Hygiene

- Hand hygiene is the #1 intervention proven to prevent healthcare-associated infections and the spread of drug-resistant organisms.
- CDC recommends ABHR in most clinical situations.
- HCPs, on average, perform hand hygiene less than half of the times that they should.
- Areas frequently missed when cleaning hands:
  - Thumbs, fingertips, between fingers



# When is Hand Hygiene Needed?

## Key moments

- Before and after contact with a resident/patient
- After contact with the resident/patient's environment
- Immediately after touching blood, body fluids, non-intact skin, mucous membranes or contaminated items (even if you were wearing gloves during the contact)
- Immediately after removing gloves
- When hands are visibly soiled

## Areas of missed opportunity

- Before donning and after doffing PPE
- Prior to preparing medications
- After eating meals
- After using shared equipment (computers, pens, phones, etc.)
- Resident hand hygiene

**CLEAN HANDS COUNT** FOR HEALTHCARE PROVIDERS

**KNOW THE TRUTH TO PROTECT YOURSELF AND PROTECT YOUR PATIENTS**

**TRUTH:** Alcohol-based hand sanitizer is more effective and less drying than using soap and water.

**THE NITTY GRITTY:** Compared to soap and water, alcohol-based hand sanitizers are better at reducing bacterial counts on hands and are effective against multidrug-resistant organisms (e.g., MRSA). Additionally, alcohol-based hand sanitizers cause less skin irritation than frequent use of soap and water.

**TRUTH:** Alcohol-based hand sanitizer does not kill *C. difficile*, but it is still the overall recommended method for hand hygiene practice.

**THE NITTY GRITTY:** Always use gloves when caring for patients with *C. difficile*. In addition, when there is an outbreak of *C. difficile* in your facility, wash your hands with soap and water after removing your gloves.

**TRUTH:** Some healthcare providers miss certain areas when cleaning their hands.

**THE NITTY GRITTY:** Using alcohol-based hand sanitizer becomes a habit and sometimes healthcare providers miss certain areas:

**FINGERTIPS**

**THUMBS**

**BETWEEN FINGERS**

**MORE EFFECTIVE** + **LESS DRYING**

**BAD GERMS** **GOOD GERMS**

# Personal Protective Equipment

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## Knowing the proper PPE to use

- Standard precautions
- Transmission-based precautions
- Enhanced barrier precautions

## When and how long

- Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

<https://www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-duration-precautions.html>

# Standard Precautions

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The precautions HCPs take with each encounter to protect themselves from infection and prevent the spread of infection from between residents/patients.

Risk assessment:

- Exposure to blood, bodily fluids?
- Possibility of splash?



# Transmission-based Precautions



**STOP CONTACT PRECAUTIONS STOP**  
**EVERYONE MUST:**

-  Clean their hands, including before entering and when leaving the room.

**PROVIDERS AND STAFF MUST ALSO:**

-  Put on gloves before room entry. Discard gloves before room exit.
-  Put on gown before room entry. Discard gown before room exit.  
Do not wear the same gown and gloves for the care of more than one person.
-  Use dedicated or disposable equipment. Clean and disinfect reusable equipment before use on another person.

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**STOP DROPLET PRECAUTIONS STOP**  
**EVERYONE MUST:**

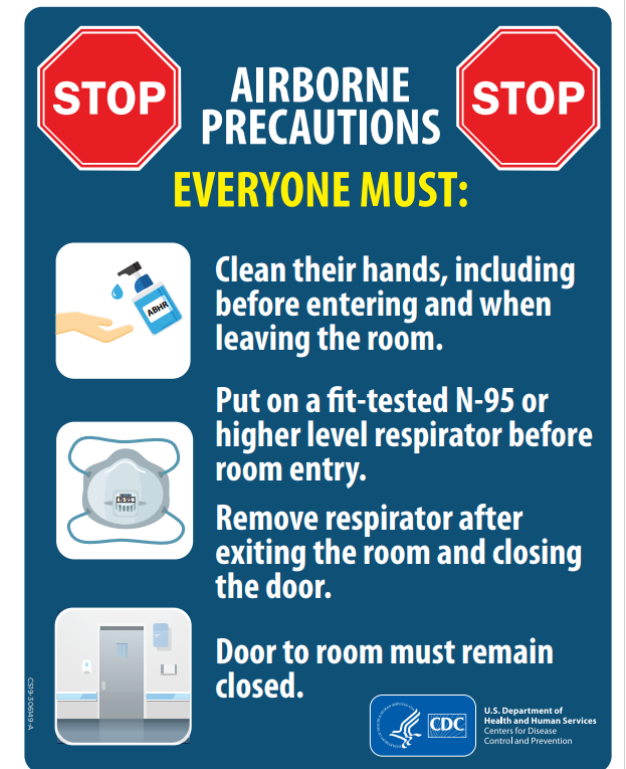
-  Clean their hands, including before entering and when leaving the room.

-  Make sure their eyes, nose and mouth are fully covered before room entry.





or

-  Remove face protection before room exit.

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**STOP AIRBORNE PRECAUTIONS STOP**  
**EVERYONE MUST:**

-  Clean their hands, including before entering and when leaving the room.
-  Put on a fit-tested N-95 or higher level respirator before room entry.
-  Remove respirator after exiting the room and closing the door.
-  Door to room must remain closed.

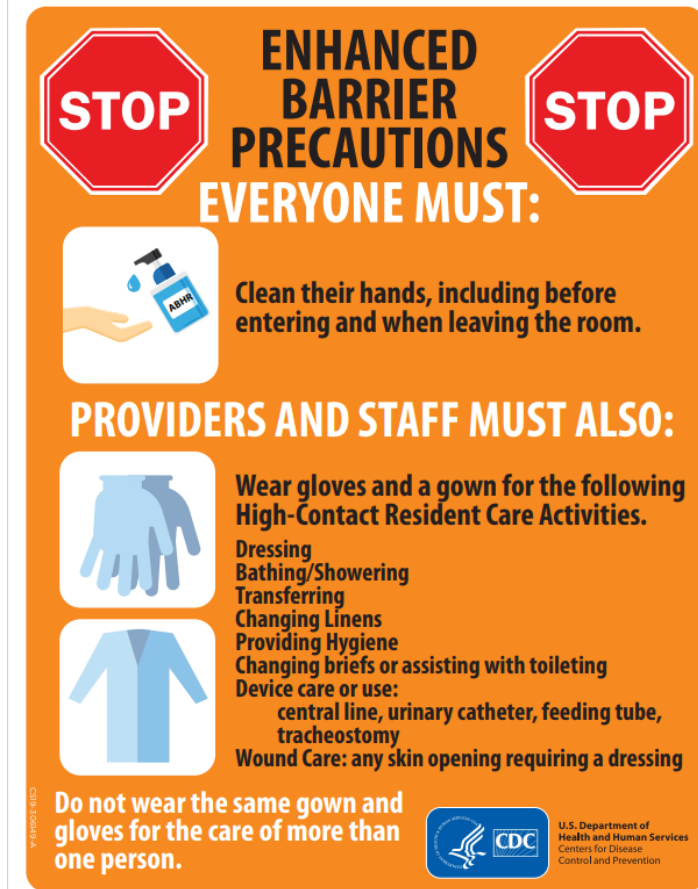
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Signage should alert which PPE is required prior to entry.


# Enhanced Barrier Precautions

## What it is and why is it used?


- Expansion of standard precautions beyond blood and body fluids
- More specific than standard precautions, less restrictive than contact precautions
- High-contact care activities




**STOP** **ENHANCED BARRIER PRECAUTIONS** **STOP**  
**EVERYONE MUST:**

 Clean their hands, including before entering and when leaving the room.


**PROVIDERS AND STAFF MUST ALSO:**

 **Wear gloves and a gown for the following High-Contact Resident Care Activities.**

 **Wear gloves and a gown for the following High-Contact Resident Care Activities.**

Dressing  
Bathing/Showering  
Transferring  
Changing Linens  
Providing Hygiene  
Changing briefs or assisting with toileting  
Device care or use:  
central line, urinary catheter, feeding tube, tracheostomy  
Wound Care: any skin opening requiring a dressing

**Do not wear the same gown and gloves for the care of more than one person.**

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# Proper Use of PPE

- Hand hygiene prior to donning
- Donning prior to entering the environment
- Donning in proper sequence
- Doffing prior to exiting the environment
- Doffing in proper sequence
- Hand hygiene after doffing PPE

**SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

- 1. GOWN**
  - Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
  - Fasten in back of neck and waist
- 2. MASK OR RESPIRATOR**
  - Secure ties or elastic bands at middle of head and neck
  - Fit flexible band to nose bridge
  - Fit snug to face and below chin
  - Fit-check respirator
- 3. GOGGLES OR FACE SHIELD**
  - Place over face and eyes and adjust to fit
- 4. GLOVES**
  - Extend to cover wrist of isolation gown

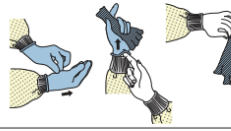



**USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION**

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene




**HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1**

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

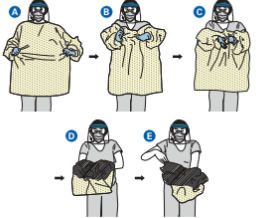


- 1. GLOVES**
  - Outside of gloves are contaminated!
  - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
  - Hold removed glove in gloved hand
  - Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
  - Discard gloves in a waste container
- 2. GOGGLES OR FACE SHIELD**
  - Outside of goggles or face shield are contaminated!
  - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Remove goggles or face shield from the back by lifting head band or ear pieces
  - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container
- 3. GOWN**
  - Gown front and sleeves are contaminated!
  - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
  - Pull gown away from neck and shoulders, touching inside of gown only
  - Turn gown inside out
  - Fold or roll into a bundle and discard in a waste container
- 4. MASK OR RESPIRATOR**
  - Front of mask/respirator is contaminated — DO NOT TOUCH!
  - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
  - Discard in a waste container
- 5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**

**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**




**HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2**

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

- 1. GOWN AND GLOVES**
  - Gown front and sleeves and the outside of gloves are contaminated!
  - If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - 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
- 2. GOGGLES OR FACE SHIELD**
  - Outside of goggles or face shield are contaminated!
  - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
  - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container
- 3. MASK OR RESPIRATOR**
  - Front of mask/respirator is contaminated — DO NOT TOUCH!
  - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
  - Discard in a waste container
- 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**

**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**



# Injection Safety

- Preparation
- Technique
- Medication containers
- Expiration
- Storage
- Disinfection



**BE AWARE**  
**DON'T SHARE**

Insulin pens that contain more than one dose of insulin are only meant for one person.

*Insulin pens should never be used for more than one person.*

They are only approved for use on individual patients, even when the needle is changed or when there is leftover medicine. **No exceptions.**

**ONE INSULIN PEN,  
ONLY ONE PERSON**

The *One & Only Campaign* is a public health effort to eliminate unsafe medical injections. To learn more about safe injection practices, please visit [www.cdc.gov/injectionsafety/1anonly.html](http://www.cdc.gov/injectionsafety/1anonly.html).



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# Sharps Disposal

- Biohazard label
- Closeable
- Puncture-resistant
- Leak-proof
- Secured
- Emptied when 2/3 full
- Proper disposal of full containers

The infographic is divided into two columns. The left column is titled "NOW YOU SEE IT." and shows seven standard sharps: a syringe, a penicillin injector, a scalpel, a suture, a large syringe, a tuberculin syringe, and a needle. The right column is titled "NOW YOU DON'T." and shows the same seven sharps with safety features: a syringe with a retractable needle, a penicillin injector with a retractable needle, a scalpel with a retractable blade, a suture with a retractable needle, a large syringe with a retractable needle, a tuberculin syringe with a retractable needle, and a needle with a retractable needle. Below the images is the text "PROTECT YOURSELF AND OTHERS- USE SHARPS WITH SAFETY FEATURES". At the bottom, there are three sections: "BE PREPARED. Anticipate injury risks and prepare the patient and work area with prevention in mind. Use a sharps device with safety features whenever it is available." "BE AWARE. Learn how to use the safety features on sharps devices." "DISPOSE WITH CARE. Engage safety features immediately after use and dispose in sharps safety containers." Logos for CDC and sharps are also present.

**NOW YOU SEE IT.**

**NOW YOU DON'T.**

**PROTECT YOURSELF AND OTHERS- USE SHARPS WITH SAFETY FEATURES**

**BE PREPARED.** Anticipate injury risks and prepare the patient and work area with prevention in mind. Use a sharps device with safety features whenever it is available.

**BE AWARE.** Learn how to use the safety features on sharps devices.

**DISPOSE WITH CARE.** Engage safety features immediately after use and dispose in sharps safety containers.

**CDC**

**sharps**



# Environmental Rounding

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A clean physical environment is imperative to keeping residents safe as well as staff, visitors and vendors.

Everyone has a role in ensuring this happens.

One top priority is education to all employees on three "Rs":

- Right cleaner/disinfectant
- Right method
- Right amount of contact time/dwell time

# Environmental Rounding

Routine rounding is important for several reasons:

- Ensures proper cleaning techniques are being utilized.
- Allows physical observation of staff and ability to provide real-time feedback.
- Enables evaluation of needs in all departments, such as laundry services, physical therapy and food services.
- Provides opportunity to monitor staff adherence to policies and procedures.

**CDC Environmental Checklist for Monitoring Terminal Cleaning<sup>1</sup>**

<b>Date:</b>			
<b>Unit:</b>			
<b>Room Number:</b>			
<b>Initials of ES staff (optional):<sup>2</sup></b>			

**Evaluate the following priority sites for each patient room:**

High-touch Room Surfaces <sup>3</sup>	Cleaned	Not Cleaned	Not Present in Room
Bed rails / controls			
Tray table			
IV pole (grab area)			
Call box / button			
Telephone			
Bedside table handle			
Chair			
Room sink			
Room light switch			
Room inner door knob			
Bathroom inner door knob / plate			
Bathroom light switch			
Bathroom handrails by toilet			
Bathroom sink			
Toilet seat			
Toilet flush handle			
Toilet bedpan cleaner			

**Evaluate the following additional sites if these equipment are present in the room:**


High-touch Room Surfaces <sup>3</sup>	Cleaned	Not Cleaned	Not Present in Room
IV pump control			
Multi-module monitor controls			
Multi-module monitor touch screen			
Multi-module monitor cables			
Ventilator control panel			

**Mark the monitoring method used:**

Direct observation       Fluorescent gel  
 Swab cultures             ATP system             Agar slide cultures

<sup>1</sup>Selection of detergents and disinfectants should be according to institutional policies and procedures  
<sup>2</sup>Hospitals may choose to include identifiers of individual environmental services staff for feedback purposes.  
<sup>3</sup>Sites most frequently contaminated and touched by patients and/or healthcare workers

National Center for Emerging and Zoonotic Infectious Diseases  
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# Environmental Rounding (cont.)

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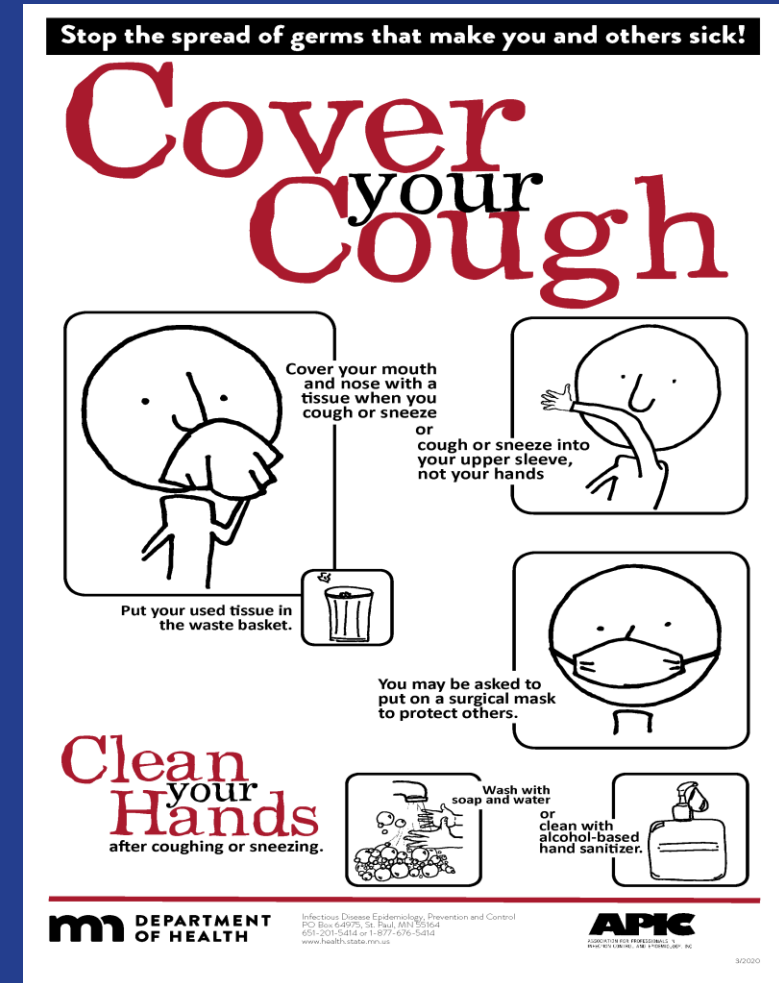
Important areas to watch in routine rounding:

- Ensure process in place for cleaning shared equipment and how to identify clean/dirty equipment
- Ensure proper cleaners/disinfectants are available for use
- How often top and drawers of medicine carts are cleaned
- How and when is physical therapy equipment cleaned; ensure access to PPE
- Fan use in laundry services and what direction they are pointed toward; should be clean to dirty; NO FOOD or DRINKS should be present; PPE should be readily available



# Respiratory Hygiene and Cough Etiquette

- What is it? Infection prevention tools to decrease the spread of respiratory germs/infections.
- What are the tools?
  - Signage
  - PPE
  - Hand sanitizer
  - Tissue
  - Education



# Respiratory Hygiene and Cough Etiquette Tool Recommendations

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- **Signage:** Display cough etiquette signage at all entrances, breakrooms, bathrooms, hallways, elevators and common areas.
- **PPE:** Provide proper PPE, as needed, to residents, staff and families. Masks should be readily available at entrances to facility. Develop procedure to stock and replenish PPE on regular basis.
- **Hand sanitizer:** Promote hand sanitization by providing hand sanitizer in direct sight lines. Recommend having it available at all entrances to facility, by elevators, common areas, outside patient rooms, close to soiled utility rooms, nurses' stations, breakrooms, etc.

# Respiratory Hygiene and Cough Etiquette Tool Recommendations (cont.)

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- **Tissues:** Continue to evaluate all areas of facility, such as libraries, beauty shops and communal laundry spaces to ensure hand sanitizer and tissues are readily available.
- **Education:** Continue providing reminders to residents, families and all visitors on respiratory hygiene and cough etiquette.
  - Collaborate with activities department to provide education.
  - Sustain communication with families via email, newsletters and signage within facility to promote respiratory hygiene.

# Monitoring Adherence to Infection Control Practices

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## Auditing

- Rounding
- Documentation
- Frequency
- Enlisting auditors

## What to do with the data

- Real-time feedback
- Communicate results
- Develop plans to improve gaps

# Questions?

## CONTACT:

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