



HEALTH QUALITY INNOVATORS

Affinity Group: Practical Personal Protective Equipment (PPE) Solutions

4/9/24

Polling Questions

Have you attended or watched both Affinity sessions on auditing, and cleaning and disinfection?

1. Yes
2. No

Were you able to use any of the resources to help reinforce diligent cleaning and disinfection practices with your staff?

1. Yes
2. No



Objectives

- Engage assisting living and adult day care center facilities in common issue discussion and problem solving by peers
- Evaluate unique facility risks and Personal Protective Equipment (PPE) availability
- Identify opportunities to increase compliance
- Develop access solutions utilizing staff engagement



Hierarchy of Safety and Health Controls - Close to Home



Hierarchy of Safety and Health Controls

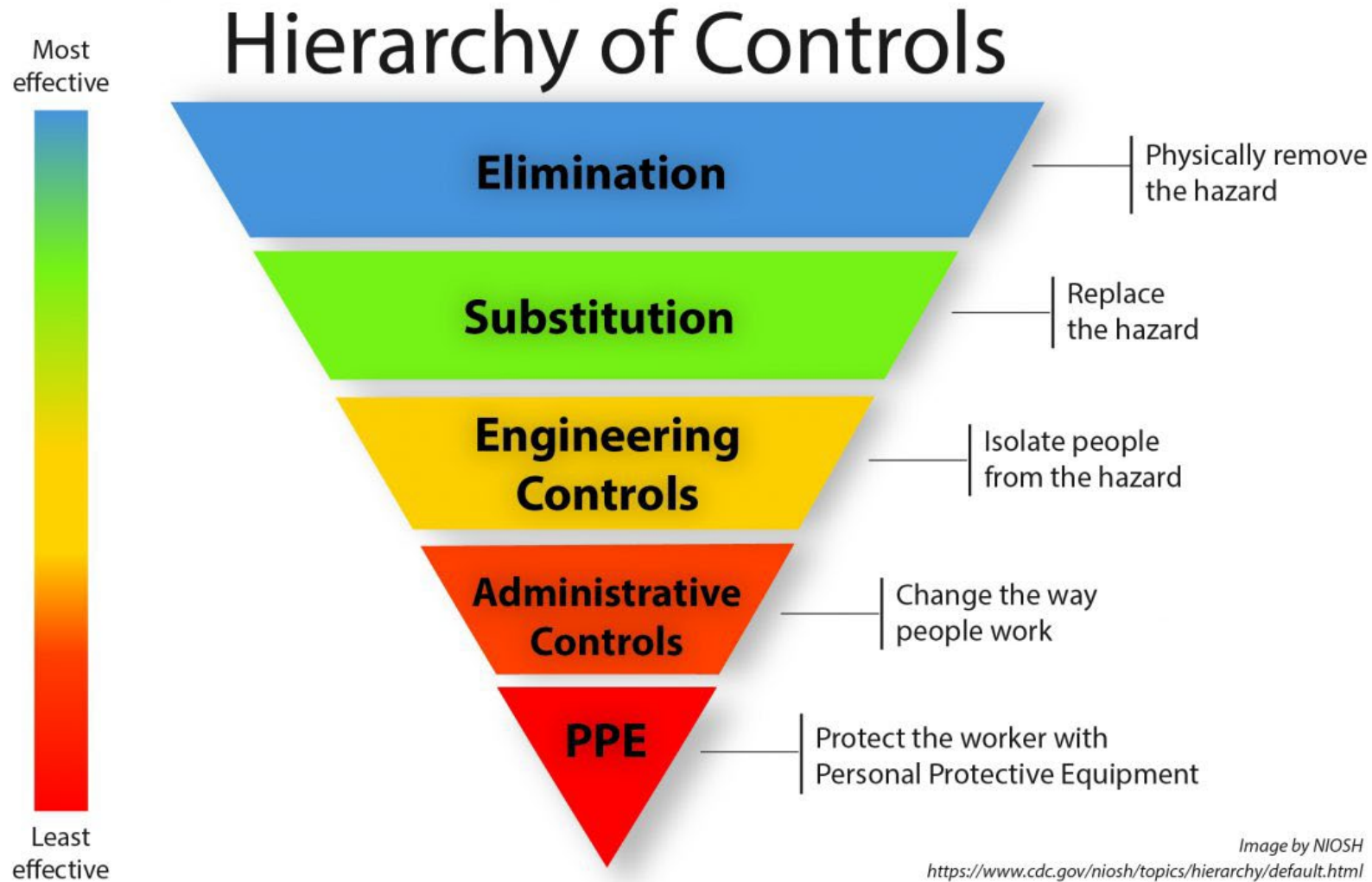
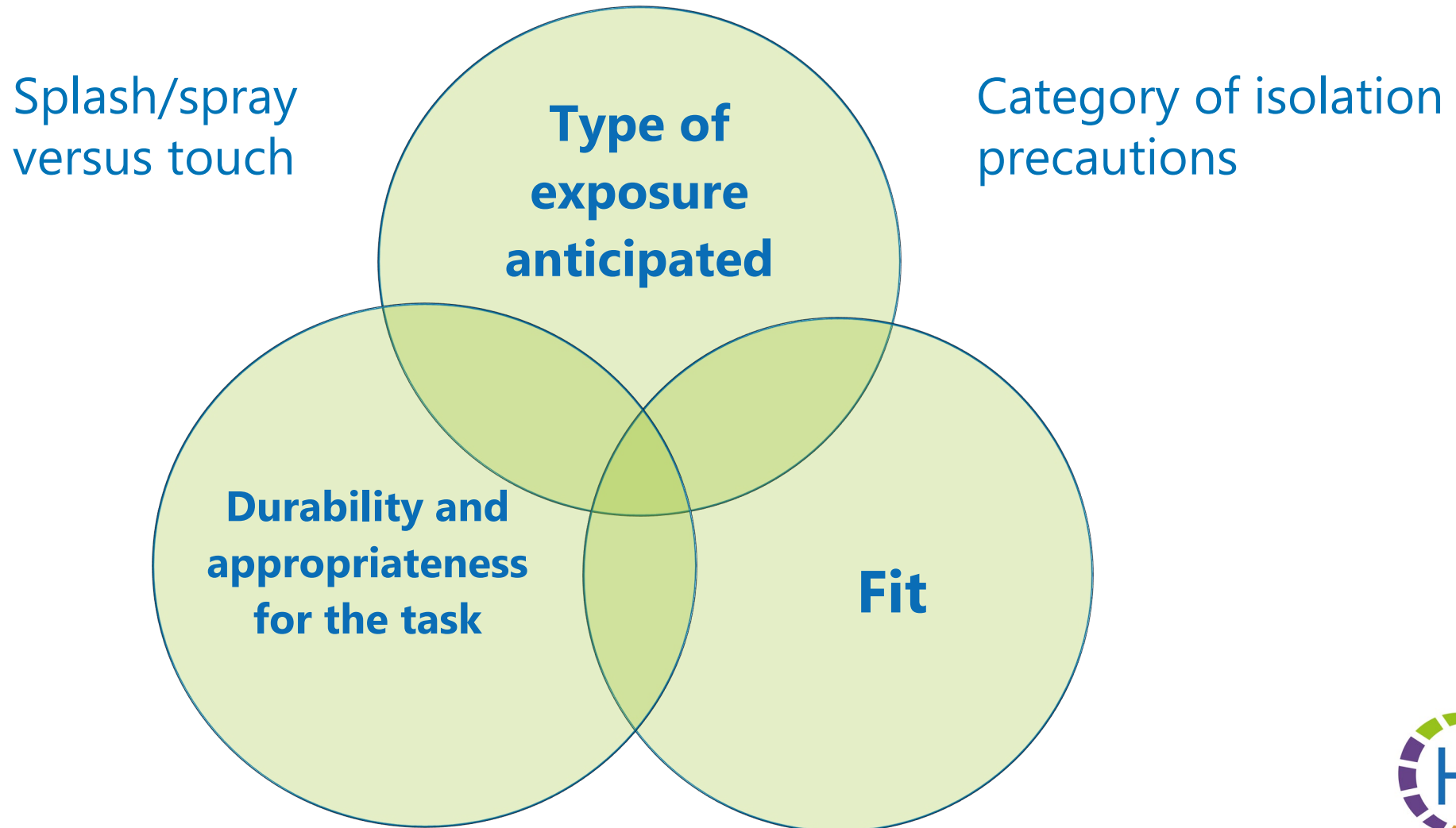


Image by NIOSH
<https://www.cdc.gov/niosh/topics/hierarchy/default.html>



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Factors Influencing PPE Selection



When to Use PPE

**Standard
Precautions**

**Transmission-
based
Precautions**

When Not to Use PPE – the "Don'ts"

- Wearing in public areas
- Failure to discard after use
- Wearing too many
- Failure to remove gloves after each task



Types of PPE Used in Healthcare

Gloves

Masks

Gowns

Eye
protection

Face shields

Shoe covers
(acute care)

Head covers

Face Protection - Masks

- Masks
 - Purpose: limits the likelihood of transmission of infectious particles by covering the nose and mouth when speaking, sneezing or coughing
 - Protect nose and mouth
 - Should fully cover nose and mouth and prevent fluid penetration
 - Types: cloth (not for healthcare providers), surgical (may be called procedural), KN95, N95




Why Getting it Right is So Important

Masking Matters!


Wear a mask when:

- **Source control** is needed to protect from the flu, and when COVID-19 community transmission is moderate or high
- Providing care to persons with suspected/known respiratory infections, like the flu










Wear a NIOSH-approved respirator when:

- Caring for a person with suspected or confirmed COVID-19
- Caring for a person with suspected or confirmed tuberculosis (TB)




Source control is using masks or respirators to cover a person's mouth and nose to prevent the spread of infections when they are breathing, talking, sneezing or coughing.

Additional Resources

Weekly US Map: Influenza Summary Update CDC 	COVID Data Tracker CDC 	Masks and Respirators CDC 	Isolation Precautions CDC 
Protecting Healthcare Personnel CDC 	Masks are a Critical Public Health Tool APIC 	Learning Module: The Right View for Nursing Homes HQIN 	

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Teaching About Masking



Gloves

- Gloves
 - Purpose – patient care, environmental services, other
 - Glove material – vinyl, latex or nitrile
 - Glove fit
 - Sterile or nonsterile
 - One or two pairs
 - Single use or reusable



Do's and Don'ts of Glove Use

- Work from “clean to dirty”
- Limit opportunities for “touch contamination” - protect yourself, others and the environment
 - Don't touch your face or adjust PPE with contaminated gloves
 - Don't touch environmental surfaces except as necessary during patient care
- Change gloves
 - During use if torn and when heavily soiled (even during use on the same patient)
 - After use on each patient
 - Discard in appropriate receptacle
 - Never wash or reuse disposable gloves

Gowns or Aprons

- Purpose of use
- Material
 - Natural or man-made
 - Reusable or disposable
 - Resistance to fluid penetration
- Clean or sterile



Gown Use in Standard Precautions

Wear when contact between clothing or skin with patient blood or body substances is expected.

For example:

- Contact with patient's non-intact skin (e.g., wounds)
- During procedures likely to generate a splash or spray of blood or body fluid
- Handling containers or patient fluids likely to leak, splash or spill

Respiratory Protection

- Purpose – protect from inhalation of infectious aerosols (example: Mycobacterium tuberculosis, COVID-19)
- PPE types for respiratory protection
 - Particulate respirators, N95
 - Half- or full-face elastomeric respirators (reuseable air-purifying respirators)
 - Powered air purifying respirators (PAPR)



Eye Protection

- Eye goggles/safety glasses – protect eyes
 - Should fit snugly over and around eyes
 - Personal glasses not a substitute for goggles
 - Antifog feature improves clarity
- Face shields – protect face, nose, mouth and eyes
 - Should cover forehead, extend below chin and wrap around sides of face



Donning and Doffing



CDC Donning and Doffing Sequence

Pause for Prevention

Module 3: Personal Protective Equipment (PPE)

Donning (putting on) personal protective equipment:

Follow the QR Code to see CDC demonstration for donning personal protective equipment. Put on PPE before contact with the resident.



Perform Hand Hygiene



Put on Gown



Put on Mask or Respirator



Put on Goggles or Faceshield



Put on Gloves

Doffing (removing) personal protective equipment:

Follow the QR Code to see CDC demonstration for doffing personal protective equipment.



Remove Gloves



Perform Hand Hygiene



Remove Goggles or Faceshield



Remove Gown



Remove Mask or Respirator



Perform Hand Hygiene

Staff Skill Check

Scenario 1:

You walk into a resident's room and find that they have fallen; there is a 2-inch laceration to their arm that is oozing blood.

- Before cleaning the wound, what PPE should you don?

Scenario 2:

You are about to assist with ADLs for someone who has Norovirus.

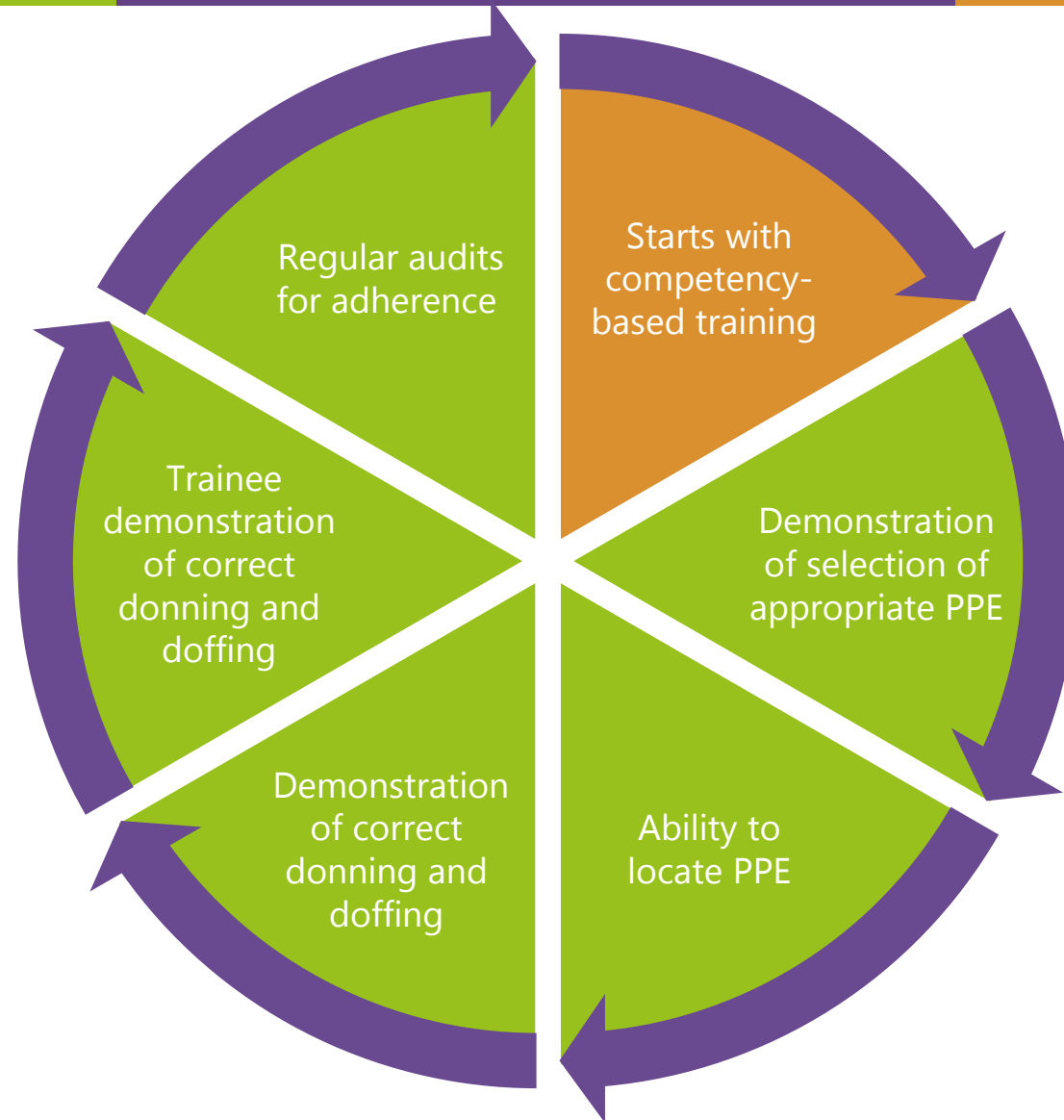
- What PPE would you anticipate using?
- What is the sequence for donning these items?
- What is the sequence for doffing?
- What is the possible consequence of improper donning or doffing?

Making it Real – Great Practice for Staff

[Diarrhea Dilemma | CDC](#)



Competency-Based Training



Auditing – What's the Bottom Line?

- Regular audits to monitor adherence to PPE should include:
 - Appropriate selection
 - Donning
 - Doffing
 - Hand hygiene
 - Environmental contamination
 - Evaluation of appropriate supplies and equipment
 - Proximity of supplies to point of use



Feedback



Timely

Individualized

Non-punitive



Effect on Performance



Optimal
Effect

Training and Competency Verification

Personal Protective Equipment (PPE) Competency Validation			
Donning and Doffing Standard Precautions and Transmission Based Precautions			
Type of validation: Return demonstration		<input type="checkbox"/> Orientation <input type="checkbox"/> Annual <input type="checkbox"/> Other	
Employee Name: _____		Job Title: _____	
Donning PPE			Competent
			YES
			NO
1. Perform Hand Hygiene			
2. Don Gown: Fully covering torso from neck to knees, arms to end of wrists			
3. Tie/fasten in back of neck and waist			
4. Don Mask/Respirator: Secure ties/elastic bands at middle of head & neck			
5. Fit flexible band to nose bridge			
6. Fit snug to face and below chin (Fit-check respirator if applicable)			
7. Don Goggles or Face Shield: Place over face and eyes; adjust to fit			
8. Don Gloves: Extend to cover wrist of gown			
Doffing PPE			
9. Remove Gloves: Grasp outside of glove with opposite gloved hand; peel off			
10. Hold removed glove in gloved hand			
11. Slide fingers of ungloved hand under remaining glove at wrist			
12. Peel glove off over first glove			
13. Discard gloves in waste container			
14. Remove Goggles or Face Shield: Handle by head band or ear pieces			
15. Discard in designated receptacle if re-processed or in waste container			
16. Remove Gown: Unfasten ties/fastener			
17. Pull away from neck and shoulders, touching inside of gown only			
18. Turn gown inside out			
19. Fold or roll into bundle and discard			
20. Remove Mask/Respirator (respirator removed after exit room/closed door): Grasp bottom, then top ties or elastics and remove			
21. Discard in waste container			
22. Perform Hand Hygiene			

Standard Precautions & Transmission Based Precautions	Competent	
	YES	NO
23. Staff correctly identifies the appropriate PPE for the following scenarios:		
a. Standard Precautions (PPE to be worn based on anticipated level of exposure)*		
b. Contact/Contact Enteric Precautions (gown & gloves)		
c. Droplet Precautions (surgical mask)		
d. Airborne Precautions (fit-tested respirator if applicable)		

*NOTE: Examples include: mask for coughing/vomiting patient, goggles/face shield for irrigating draining wound, gown for dressing change if scrubs may touch patient, etc.

Comments or follow up actions:

Employee Signature

Validator Signature

Date

VDH PPE Competency Validation Tool



Competency: Personal Protective Equipment

Competency Statement	Method of Validation
Demonstrates proper technique for putting on (donning) and taking off (doffing) personal protective equipment (PPE). Verbalizes knowledge of how PPE helps prevent healthcare-associated infections. Verbalizes knowledge of how to select appropriate PPE based on Standard Precautions and Transmission-Based Precautions.	D = Demonstrate V = Verbalize

Critical Behaviors for Competency
<ul style="list-style-type: none"> Verbalize knowledge of the importance of appropriate use of personal protective equipment in preventing healthcare-associated infections. Verbalize knowledge of how to select appropriate PPE based on Standard Precautions and Transmission-Based Precautions. Demonstrate proper donning and doffing technique using the Personal Protective Equipment Competency Validation/Audit Tool. Frequency: <i>Suggested on hire, as an ongoing yearly competency, as needed if unit compliance is below % , and if lapses in PPE use contributed to a serious safety event.</i>
Competency Resource: <ul style="list-style-type: none"> VDH: Personal Protective Equipment Competency Validation/Audit Tool

Employee's Name: _____ Date: _____
(Print full name and include credentials)

Validator's Name: _____ Date: _____
(Print full name and include credentials)



Personal Protective Equipment (PPE) Competency Validation/Audit Tool

Employee Name: _____ Orientation
 Annual
 Other

Job Title: _____

Putting On (Donning) PPE	Type of Validation D=Demonstrate V=Verbalize	Meets Criteria (Y or N)	Comments/ Recommendations	Recommendations Implemented (Date & Initials)
1. Performs appropriate hand hygiene	D			
2. Puts gown on: Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back	D			
3. Ties/fastens in back of neck and waist	D			
4. Puts mask/respirator on: Secures ties/elastic bands at middle of head and neck	D			
5. Fits flexible band to nose bridge	D			
6. Fits snug to face and below chin. If respirator, performs fit check.	D			
7. Puts goggles or face shield on: Places over face and eyes; adjusts to fit	D			
8. Puts gloves on: Extends to cover wrist of gown	D			

Taking Off (Doffing) PPE	Type of Validation D=Demonstrate V=Verbalize	Meets Criteria (Y or N)	Comments/ Recommendations	Recommendations Implemented (Date & Initials)
1. Removes gown and gloves: Grasps the gown in the front and pulls away from the body so that the ties break, touching outside of gown only with gloved hands	D			

One-Step vs Two-Step audit

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Personal Protective Equipment (PPE) Competency Validation/Audit Tool

Employee Name: Orientation
 Annual
 Other

Job Title:

Putting On (Donning) PPE	Type of Validation D=Demonstrate V=Verbalize	Meets Criteria (Y or N)	Comments/ Recommendations	Recommendations Implemented (Date & Initials)
1. Performs appropriate hand hygiene	D			
2. Puts gown on: Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back	D			
3. Ties/fastens in back of neck and waist	D			
4. Puts mask/respirator on: Secures ties/elastic bands at middle of head and neck	D			
5. Fits flexible band to nose bridge	D			
6. Fits snug to face and below chin. If respirator, performs fit check.	D			
7. Puts goggles or face shield on: Places over face and eyes; adjusts to fit	D			
8. Puts gloves on: Extends to cover wrist of gown	D			

Taking Off (Doffing) PPE	Type of Validation D=Demonstrate V=Verbalize	Meets Criteria (Y or N)	Comments/ Recommendations	Recommendations Implemented (Date & Initials)
1. Removes gloves: Using one gloved hand, pinches palm area of other gloved hand and peels off first glove	D			

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2. Holds removed glove in gloved hand	D			
3. Using ungloved hand, slides fingers under glove of other hand	D			

Resources

- Farin A. Compliance with routine use of gowns by healthcare workers (HCWs) and non-HCW visitors on entry into the rooms of patients under contact precautions. ICHE. 2007; 28(3): 337-40.
- Kilinc B. Isolation gowns in health care settings: Laboratory studies, regulations and standards, and potential barriers of gown selection and use. AJIC. 2016; 44;1: 104-111.
- [PPE use in Healthcare Settings | CDC](#)
- [Sequence for Donning and Removing Personal Protective Equipment | CDC](#)
- [Hierarchy of Controls | CDC](#)
- [Donning and Doffing PPE: Proper Wearing, Removal, and Disposal | CDC](#)

Resources

- [Transmission-Based Precautions | CDC](#)
- [National Institute for Occupational Safety & Health | CDC](#)
- [Personal Protective Equipment \(PPE\): Protect the Worker with PPE | CDC](#)
- [Leadership and Safe Work Environments: Module 4 | CDC](#)
- [Pause for Prevention Module 4: Masking \(Still\) Matters! | HQIN](#)
- [Pause for Prevention | HQIN](#)
- [The Basics of Standard Precautions | CDC](#)

There is Still Time for Participation in Onsite Assessments!



Benefits:

- Establish relationship with personable and knowledgeable infection preventionist
- Obtain resources to assist with building a robust infection prevention program
- Glo-germ demonstration to elevate hand hygiene campaign
- Fit testing (on-site)

For more information, contact:

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Looking Ahead

Next Affinity Session: Education is Extremely Important

May 14 10:00 am

[Register](#)

