Isolation Precautions Guideline Workgroup

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Disclaimer

 The findings and conclusions herein are draft and have not been formally disseminated by the Centers for Disease Control and Prevention and should not be construed to represent any agency determination or policy.

Acknowledgments

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Agenda

- Recap of June 2023 presentation
- Updated timeline
- Topics
 - Enhanced Barrier Precautions
 - Standard Precautions
- Discussion

Recap: Isolation Precautions Workgroup Presentation, June 8-9, 2023

- Day 1: Presented workgroup recommendations for guideline framework
 - Section A: Overview of Transmission of Pathogens in Healthcare Settings
 - Section B: Fundamental Elements Needed to Prevent Transmission of Pathogens in Healthcare Settings
 - Section C: Precautions to Prevent Transmission of Pathogens in Healthcare Settings, with Evidence Review
 - Proposed transmission-based precautions framework for (1) Transmission by Air; (2) Transmission by Touch, healthcare facilities other than skilled nursing facilities (SNFs); (3) Transmission by Touch, SNFs
- Day 2: Enhanced Barrier Precautions discussed criteria considerations

Updated Timeline for Guideline Development / HICPAC Discussion and Vote

- Rationale: Opportunity to review feedback; address unresolved issues
- Timeline
 - HICPAC virtual meeting (Aug 22, 2023): Discuss issues around Enhanced Barrier Precautions and Standard Precautions
 - HICPAC in-person meeting (Nov 2-3, 2023): Tentative target for HICPAC review of draft guideline and vote; if approved, the committee's recommendations would be sent to CDC for review prior to public comment period

Enhanced Barrier Precautions (EBP)

Enhanced Barrier Precautions Considerations

- In the June 2023 HICPAC meeting, the workgroup presented a draft framework for Enhanced Barrier Precautions implementation in skilled nursing facilities for discussion
 - Today, we present updated language for the Enhanced Barrier
 Precautions criteria

Enhanced Barrier Precautions Background

- Enhanced Barrier Precautions refers to the use of gown and gloves by healthcare personnel in skilled nursing facilities during high-contact resident care activities that provide opportunities for transfer of multidrug-resistant organisms (MDROs) to staff hands and clothing
 - Examples of high-contact activities: Dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, wound care
 - It takes into account the special circumstances of care in a nursing home (e.g., home-like environment) and barriers to implementing Contact Precautions (restriction to the resident's room)

Background (cont.)

- 2019: CDC introduced Enhanced Barrier Precautions as a personal protective equipment (PPE) approach to apply to residents with infection or colonization with novel/targeted MDROs, when Contact Precautions do not otherwise apply
- 2021: HICPAC White paper¹ added consideration of applying Enhanced Barrier Precautions to residents with "Wounds or indwelling medical devices, regardless of MDRO colonization status"

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 [&]quot;Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities" June 2021. https://www.cdc.gov/hicpac/workgroup/EnhancedBarrierPrecautions.html

Enhanced Barrier Precautions: Evidence

- High-contact activities were associated with gown or glove contamination of healthcare personnel¹⁻⁴
- A pilot study of targeted gown and glove use for residents with wounds and devices in two nursing homes demonstrated a significant decrease of S. aureus acquisition among residents⁵

Roghmann MC, et al. "Transmission of methicillin-resistant Staphylococcus aureus (MRSA) to healthcare worker gowns and gloves during care of nursing home residents." Infect Control & Hosp Epidemiol 36.9 (2015): 1050-1057.

^{2.} Pineles, L., D. J. Morgan, and A. Lydecker. "Transmission of MRSA to healthcare worker gowns and gloves during care of nursing home residents in VA community living centers." *Am J Infect Control* 45 (2017): 947-953.

^{3.} Blanco, Natalia, et al. "Transmission of resistant gram-negative bacteria to health care worker gowns and gloves during care of nursing home residents in Veterans Affairs community living centers." *Antimicrob Agents Chemother* 61.10 (2017): 10-1128.

^{4.} Blanco, Natalia, et al. "Transmission of resistant Gram-negative bacteria to healthcare personnel gowns and gloves during care of residents in community-based nursing facilities." *Infect Control & Hosp Epidemiol* 39.12 (2018): 1425-1430.

^{5.} Lydecker, Alison D., et al. "Targeted gown and glove use to prevent Staphylococcus aureus acquisition in community-based nursing homes: A pilot study." *Infect Control & Hosp Epidemiol* 42.4 (2021): 448-454.

DRAFT: Use of Transmission-Based Precautions to Prevent Transmission by Touch for Skilled Nursing Facilities

Label	PPE	Situation	Dedicated Medical Equipment	Single Occupancy	Example Applications
Contact Precautions	Gown/Glove for all activities	Any entry into <mark>designated patient space</mark>	Yes	Preferred; if not available, then cohort	Organisms specified in Appendix A
					During MDRO outbreaks (time-limited)
Enhanced Barrier Precautions	Gown/glove during high contact patient care activities	When Contact Precautions do not otherwise apply): Indicated for • Residents with infection or colonization with an MDRO Consider for • Residents at high risk for MDRO colonization, regardless of known MDRO status (e.g., residents with wounds or indwelling medical devices)	Not required. Clean and disinfect equipment between residents (per Standard Precautions)	Not required	MDROs targeted by CDC

Standard Precautions applies to all situations regardless of Transmission-Based Precautions used

HICPAC Discussion

- Topic 1: Feedback on Enhanced Barrier Precautions indications
- <u>Topic 2</u>: For Contact Precautions in healthcare facilities (both SNF and non-SNF), feedback on use of term "designated patient space"
 - Most commonly, "designated patient space" would represent a patient/resident's room, but would allow application to a broader range of patient care areas in healthcare facilities (e.g., post-procedure recovery area, infusion center)

Standard Precautions

Goal of Discussion

 To discuss whether aspects of Standard Precautions should be updated for the 2024 Guideline

Standard Precautions: Key Concepts

- Standard Precautions are the basic practices that apply to all patient care, regardless of the patient's suspected or confirmed infectious state, and apply to all settings where care is delivered
- Standard Precautions have multi-directional benefits protect HCP from acquiring infection from patients and prevent HCP or the healthcare environment from transmitting pathogens to patients

Evolution of Standard Precautions

- 1983: Blood and Body Fluid Precautions
- 1985-88: Universal Precautions
- 1987: Body Substance Isolation
- 1996: Standard Precautions introduced to combine major features of Universal Precautions and Body Substance Isolation
- 2007: Standard Precautions updated to add additional components (Isolation Precautions guideline)
- 2017: Standard Precautions included as a key component in Core Infection Prevention Practices for Safe Healthcare Delivery (HICPAC white paper)
- 2022: Core Practices updated and moved to CDC guideline

Not All Components of Standard Precautions are Emphasized in Core Practices Guideline

Core Practices

Standard Precautions

- Handle textiles
 & laundry
 carefully
- Proper handling of needles/ sharps
- Patient placement

- Hand hygiene
- Environmental cleaning and disinfection
- Injection and medication safety
- Risk assessment with use of appropriate PPE
- Minimizing potential exposures (e.g., respiratory hygiene & cough etiquette)
- Reprocessing reusable medical equipment between patients or when soiled

- Leadership
- HCP education & training on Inf Prevention
- Patient, Family & Caregiver education
- Performance monitoring & feedback
- Transmission-based precautions
- Temporary invasive devices for clinical management
- Occupational Health

Note: All Standard Precautions elements are contained in the 2007 Isolation Guideline

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Standard Precautions: Component Detail (2007)

Component	Description		
Hand Hygiene	Emphasized in Core Practices and in 2002 Hand Hygiene guidance		
Personal Protective Equipment (PPE)	Risk assessment with use of appropriate PPE (e.g., gloves, gowns, face masks) based on activities being performed		
Patient Care Equipment	Reprocessing of reusable medical equipment between each patient or when soiled		
Care of the Environment	Environmental cleaning and disinfection		
Textiles and Laundry	Referenced in Environmental Infection Control Guideline		
Needles and Other Sharps	Proper handling of needles and other sharps (e.g., avoid recapping)		
Patient Placement	Patient Placement		
Respiratory Hygiene/ Cough Etiquette	Minimizing Potential Exposures (e.g., respiratory hygiene and cough etiquette)		
Safe Injection Practices	Single-use, disposable needle per injection. Use of single-dose vials preferred.		
Use of Masks for Insertion of Catheters or Lumbar Injection Procedures	Now combined with Safe Injection Practices		

HICPAC Discussion (2)

- Three components were added to Standard Precautions in the 2007 Isolation Guideline
 - Are there components that should be added or removed from Standard Precautions?
 - Are there other modifications to Standard Precautions, including the name, that should be considered?

Crosswalk for Standard Precautions Components

2007 Isolation Precautions Guideline	CDC Core Practices Standard Precautions	Additional Notes for 2024/Links
Hand Hygiene	Hand Hygiene	Guidelines for Hand Hygiene (2002)
Personal Protective Equipment (PPE)	Risk assessment with use of appropriate PPE (e.g., gloves, gowns, face masks) based on activities being performed	Detail in Core Practices may be sufficient
Patient-care Equipment	Reprocessing of reusable medical equipment between each patient or when soiled	CDC Guideline for Disinfection and Sterilization in Healthcare Facilities
Care of the Environment	Environmental cleaning and disinfection	CDC Guidelines for Environmental Infection Control in Health-Care Facilities CDC Guideline for Disinfection and Sterilization in Healthcare Facilities
Textiles and Laundry	not included.	Link to Environmental Infection Control Guideline
Needles and other sharps	not included.	In Core Practices, Occupational Health section
Patient Placement	not included.	Potential expansion of proposed 2024 guideline and pathogen-specific sections (Part 2/Appendix A)
Respiratory Hygiene / Cough Etiquette	Minimizing Potential Exposures (e.g., respiratory hygiene and cough etiquette)	Detail in Core Practices may be sufficient
Safe Injection Practices (e.g., single-use, disposable needle per injection; use of single-dose vials preferred)	Injection and medication safety	Detail in Core Practices may be sufficient
Use of masks for insertion of catheters or lumbar injection procedures	Injection and medication safety	Detail in Core Practices may be sufficient

Next Steps

 Goal is to have a draft Precautions document to present to HICPAC for review, discussion, and vote during November 2023 meeting

Thank you