Behind the Mask:

Fundamentals of Standard and Transmission-Based Precautions

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Meet our Subject Matter Experts

Alisha Sheffield MSN, RN CIC

Alisha is an Infection Preventionist and Registered Nurse with 21 years of experience in a variety of healthcare settings including ambulatory, acute care, and surgical areas. Over the past 13 years, she has worked as an Infection Preventionist in outpatient surgery as well as at a large academic medical center. Her recent work has focused on utilizing her IPC expertise to develop infection control tools and resources to assist Infection Preventionists in under-resourced settings.

Miranda Neumann, MSN, RN, CMSRN

Dedicated and highly skilled Registered Nurse with over 6 years of experience with a proven track record of providing exceptional patient care, supervision, and mentorship of nursing staff, and driving quality improvement initiatives. Demonstrated leadership abilities in prioritizing patient-centered care while adhering to policies and procedures that result in positive outcomes and operational excellence.

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Disclosure Declaration

- We have no financial disclosures or conflicts related to this presentation.
- The views and opinions expressed during this webinar are those of the presenters and do not necessarily reflect those of the University of Nebraska Medical Center or The Nebraska Medical Center.

IPC Program Objectives

- Review the critical components of standard and transmission-based precautions.
- Interpret evidence-base guidelines, regulatory requirements, and industry standards to ensure compliance, preparedness, and best practices.
- Implement practical strategies to monitor, audit, and enhance compliance with standard and transmission-based precautions
- Discuss strategies for healthcare worker education, practice observation, and compliance challenges
- Synthesize knowledge of Standard and Transmission-Based Precautions to develop a foundational understanding that enhances readiness for progressive learning in infection prevention and special pathogen preparedness.

3-Part Webinar Series

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Foundations of Isolation:

Precautions, Protection, Preparedness

Today
Standard & Transmission-Based Precautions

February
Personal Protective Equipment

April
Identify, Isolate, Inform

Back to Basics

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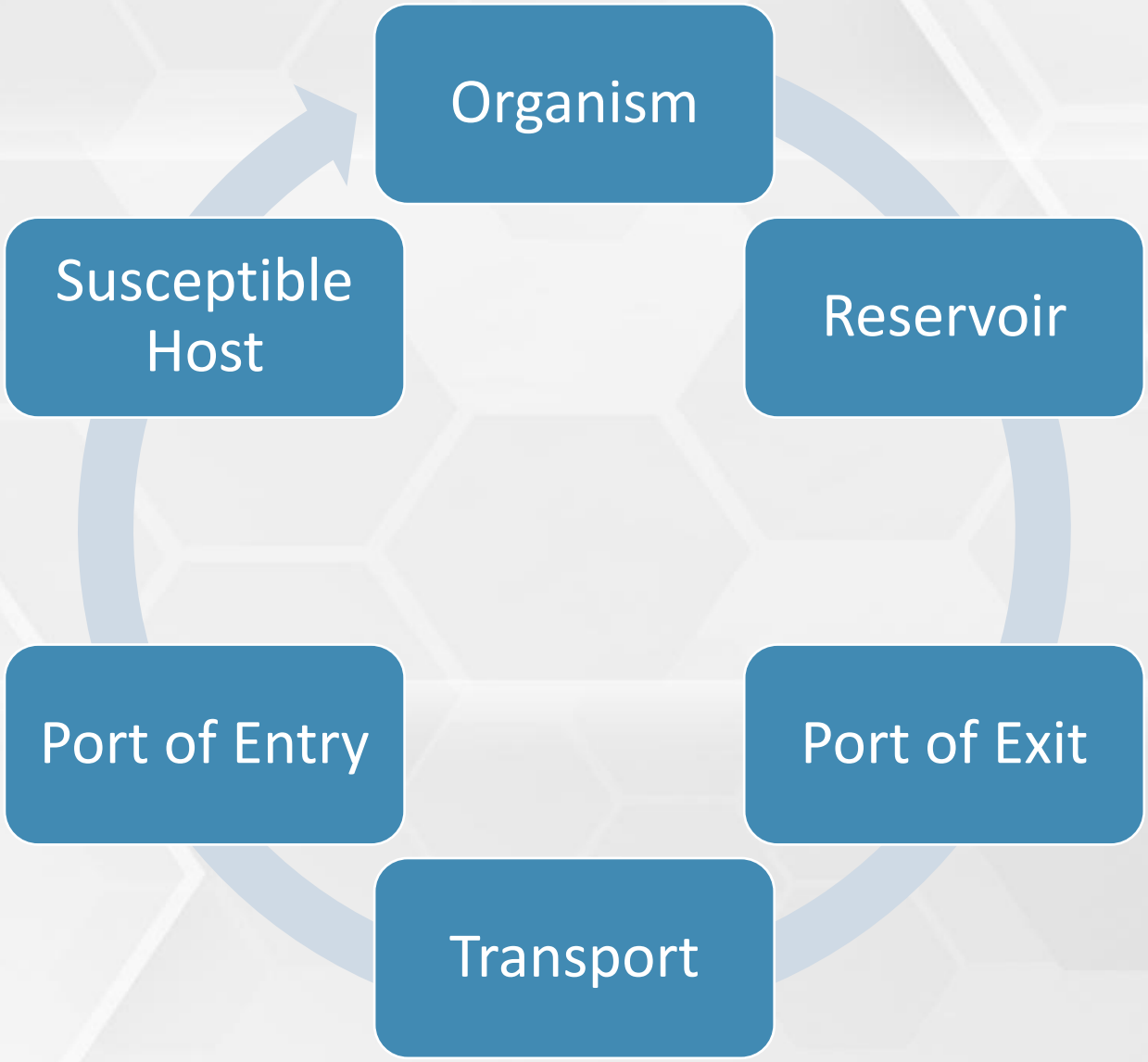
Personal Protective Equipment

Standard & Transmission-Based Precautions through the Infection Prevention Lens

Reinforcing the Fundamentals of Safe Care

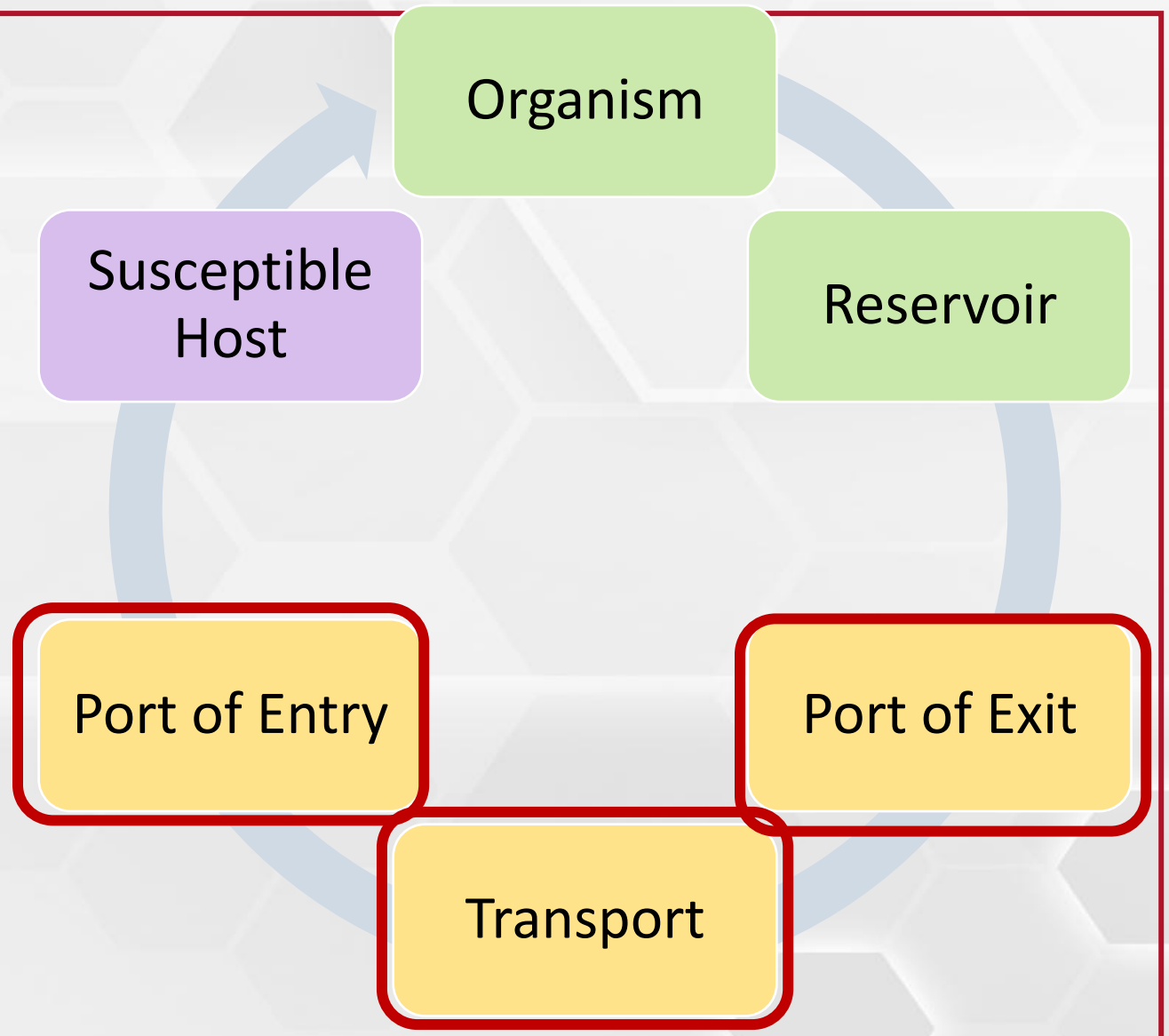
Elements of Transmission



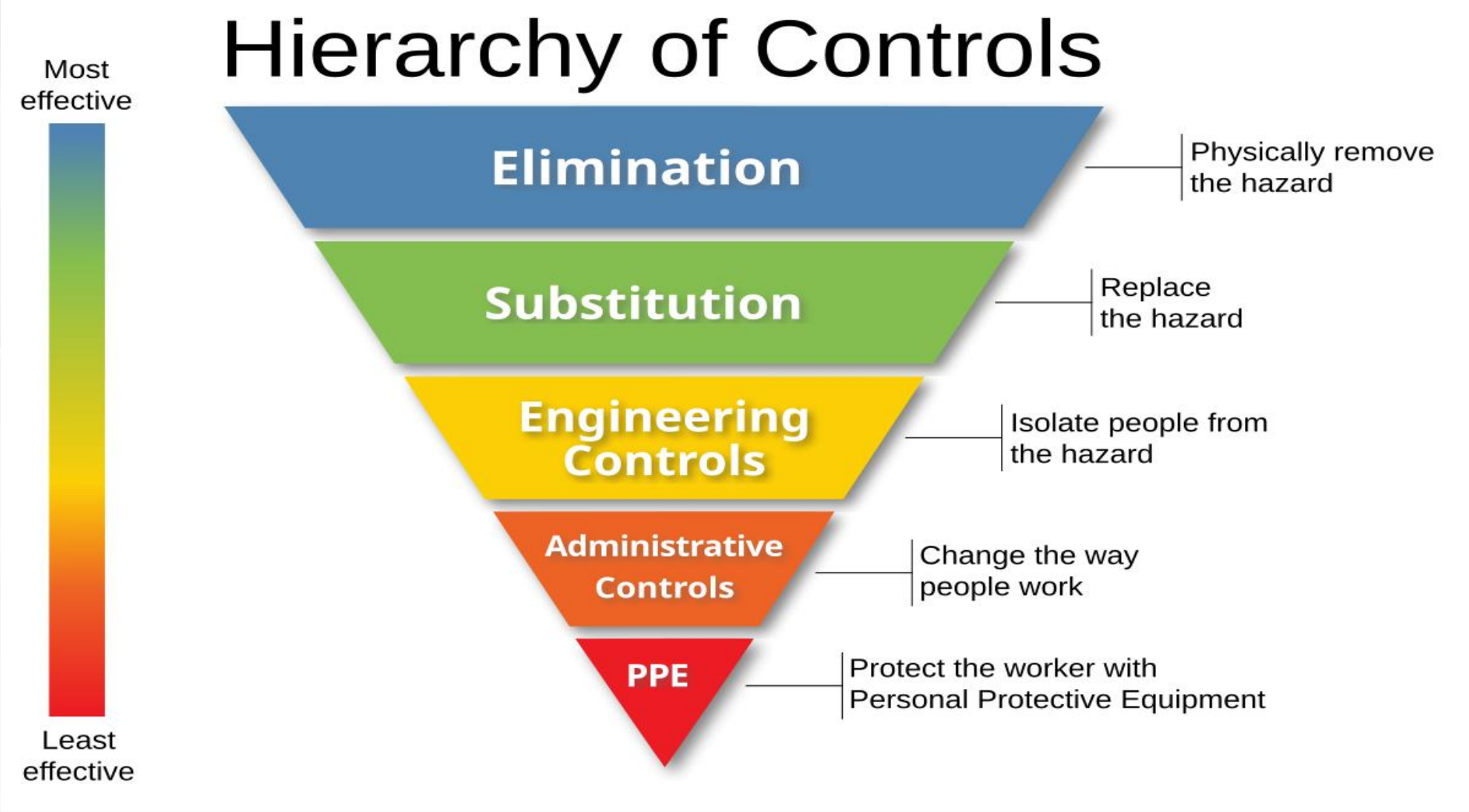
Elements of Transmission

5 Elements of Transmission

- Reservoirs
- Pathways
- Person to Infect
- Body's Defenses
- Pathogen Survival

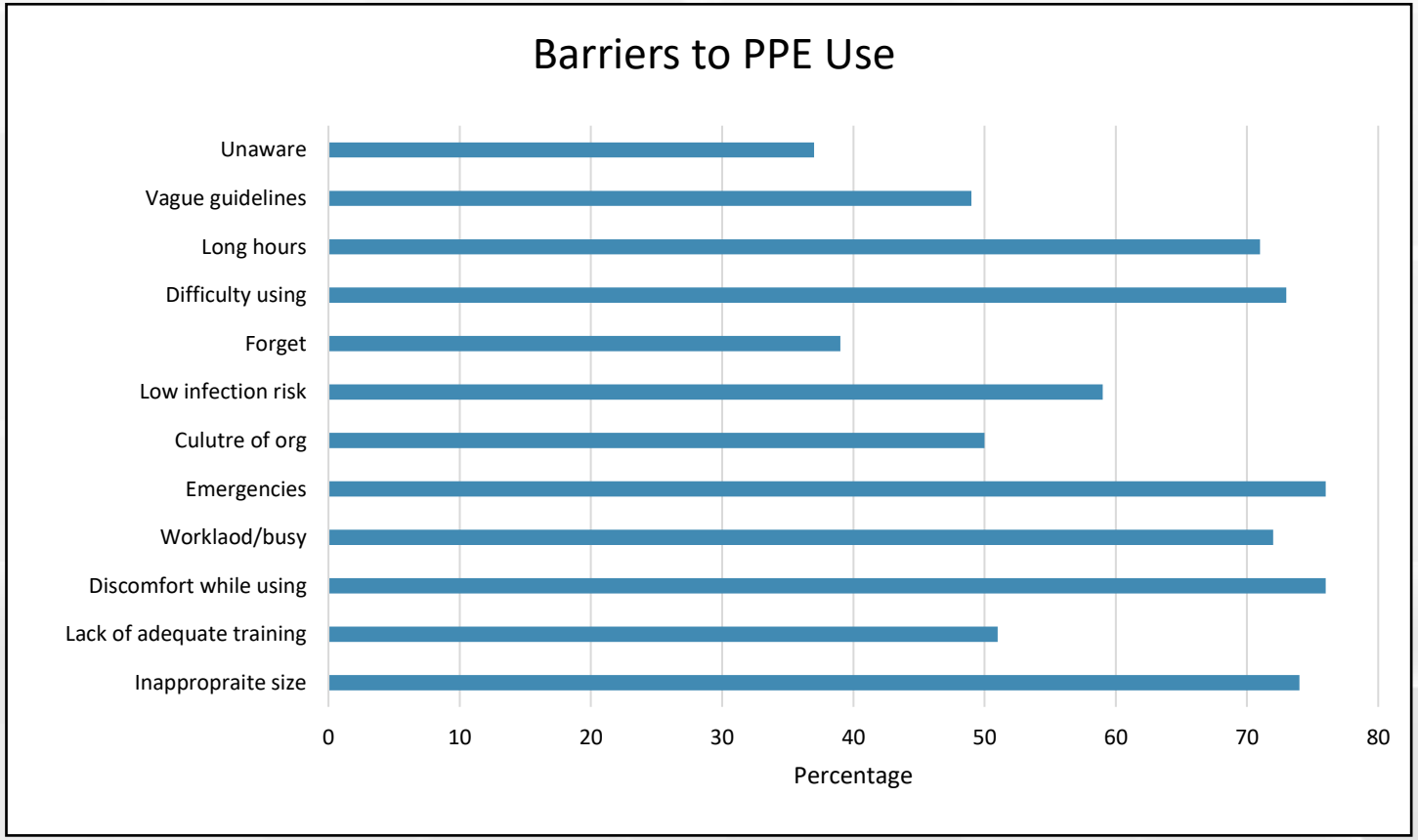


Why We Care


Hierarchy of Controls
Most effective
Least effective
Elimination
Physically remove the hazard
Substitution
Replace the hazard
Engineering Controls
Isolate people from the hazard
Administrative Controls
Change the way people work
PPE
Protect the worker with Personal Protective Equipment

Why We Care

- Non-compliance = preventable risk
- Emerging pathogens (e.g., Candida auris, COVID) require us to reinforce basics
- Even experienced staff show “practice drift”



72.8% feels PPE interferes with patient care

Prompt: “What’s one area of SP you see drift the most?”

Standard Precautions

Treat all blood, body fluids, secretions and excretions as infectious-except sweat

- All patients
- All the time

Core Elements of Standard Precautions

- Hand Hygiene
- PPE Selection and use
- Respiratory hygiene cough etiquette
- Safe Injection Practices
- Patient Placement
- Cleaning and disinfection
- Handling of laundry and waste







Hand Hygiene

MMWR- Guideline for Hand Hygiene in Health-Care Settings

Prevent transmission	• Hand hygiene is the single most important measure for preventing transmission of pathogens in health care.
Alcohol-based hand rubs vs soap	• ABHR is preferred in many clinical settings over soap and water.
5 moments	• Use indications (“moments”) and proper technique matter.
Compliance	• Behavior change and multifaceted strategies are necessary to improve compliance.
Product	• Selecting and maintaining hand hygiene products and systems is critical to sustainability.

PPE Selection & Use

PPE and Standard Precautions

- Based on the nature of anticipated exposure

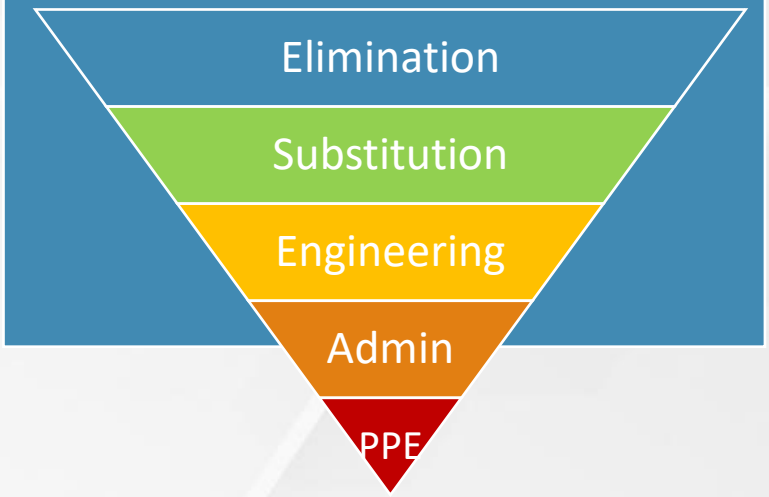
Use of Transmission-Based Precautions

- Pathogen suspected or confirmed

Donning and Doffing

- Sequence
- Hand Hygiene

Hierarchy of Controls

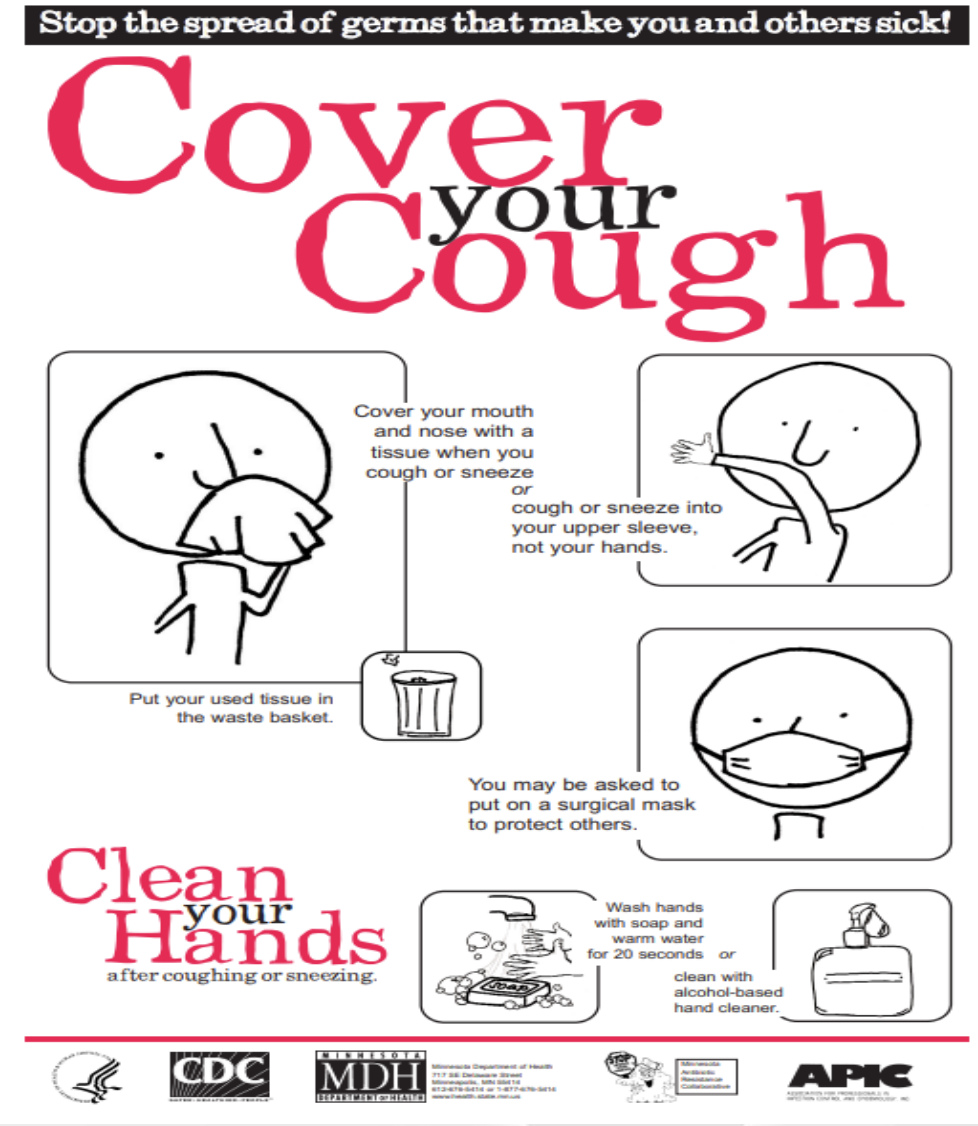


Product Selection

- Comfort
- Accessibility
- Supply chain

Respiratory Hygiene

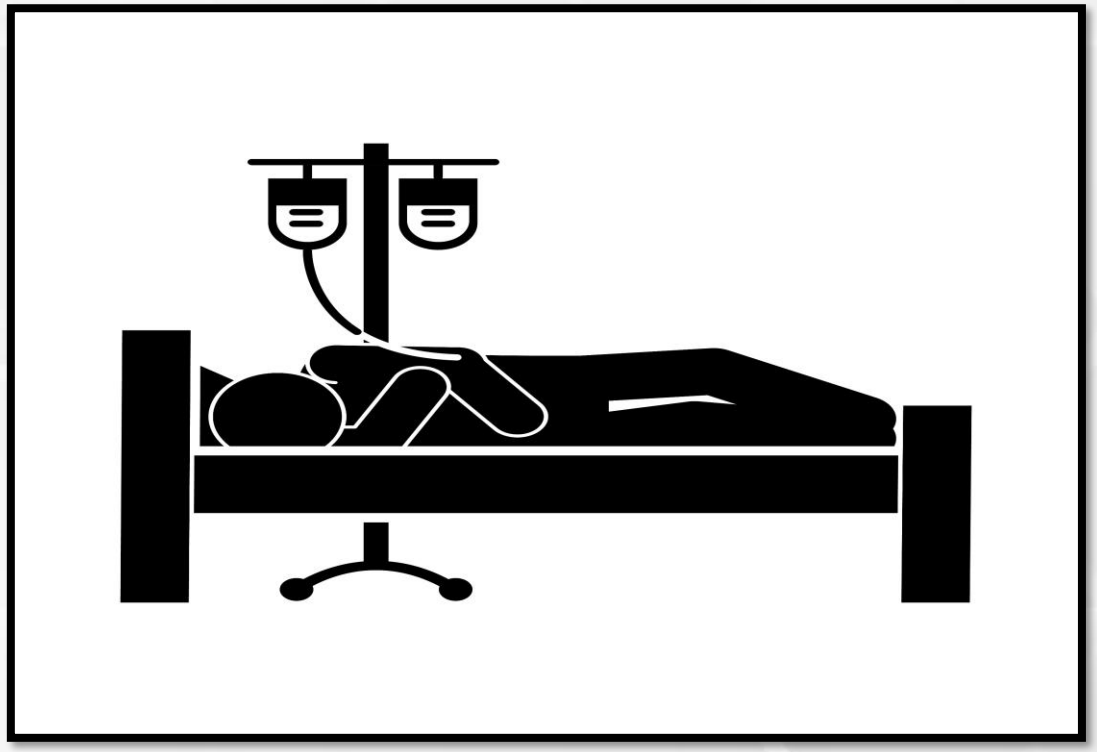
1. Contain respiratory secretions at the source
2. Facilities must supply resources to support etiquette
3. Masking and spatial separation for symptomatic individuals
4. Use of visual prompts and communication to reinforce behavior



Safe Injection

- Prepare and administer aseptically
- Use ONE Needle, ONE Syringe ONE time
- No common source solutions (flush)
- Single-dose meds for single-patient use
- Multi-dose vials dedicated to ONE patient when possible
- Proper disposal and containers
- Mask for epidurals
- Blood Glucose monitoring
- Evaluation- Sharps injury prevention program

Patient Placement



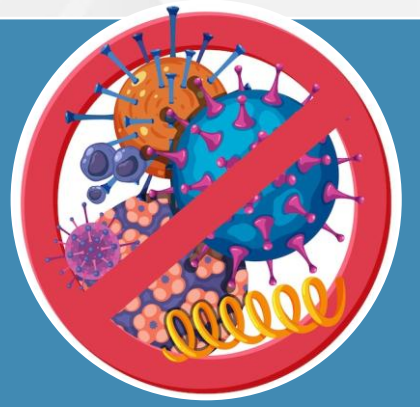
- Single-Patient Rooms
- Cohorting When Single Rooms Aren't Available
  - Requires framework and coordination
- Patient Placement in Ambulatory Settings Emphasizes Source Control
- Special Considerations for Vulnerable Patients

Cleaning and Disinfection

- Properly handle, clean, and disinfect patient care equipment and instruments/devices
- Clean and disinfect the environment appropriately

Cleaning

- Removal of soil and organic material from surfaces
- Required before disinfection and sterilization can occur



Disinfection

- Destroy microorganisms on surfaces
- Failure to properly disinfect surfaces after cleaning may lead to microbial transmission

Linen and Waste

- Laundry rarely causes transmission
- Proper handling and transport prevents contamination
- The laundry process must ensure hygienically clean textiles
- Facilities should maintain safe laundry operations
- Special items require additional considerations (e.g., sterile items)

Standard Precautions- Common Gaps

"Where does your facility see the biggest compliance gap?"

Standard Precautions- Common Gaps

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IP's role in Standard Precautions

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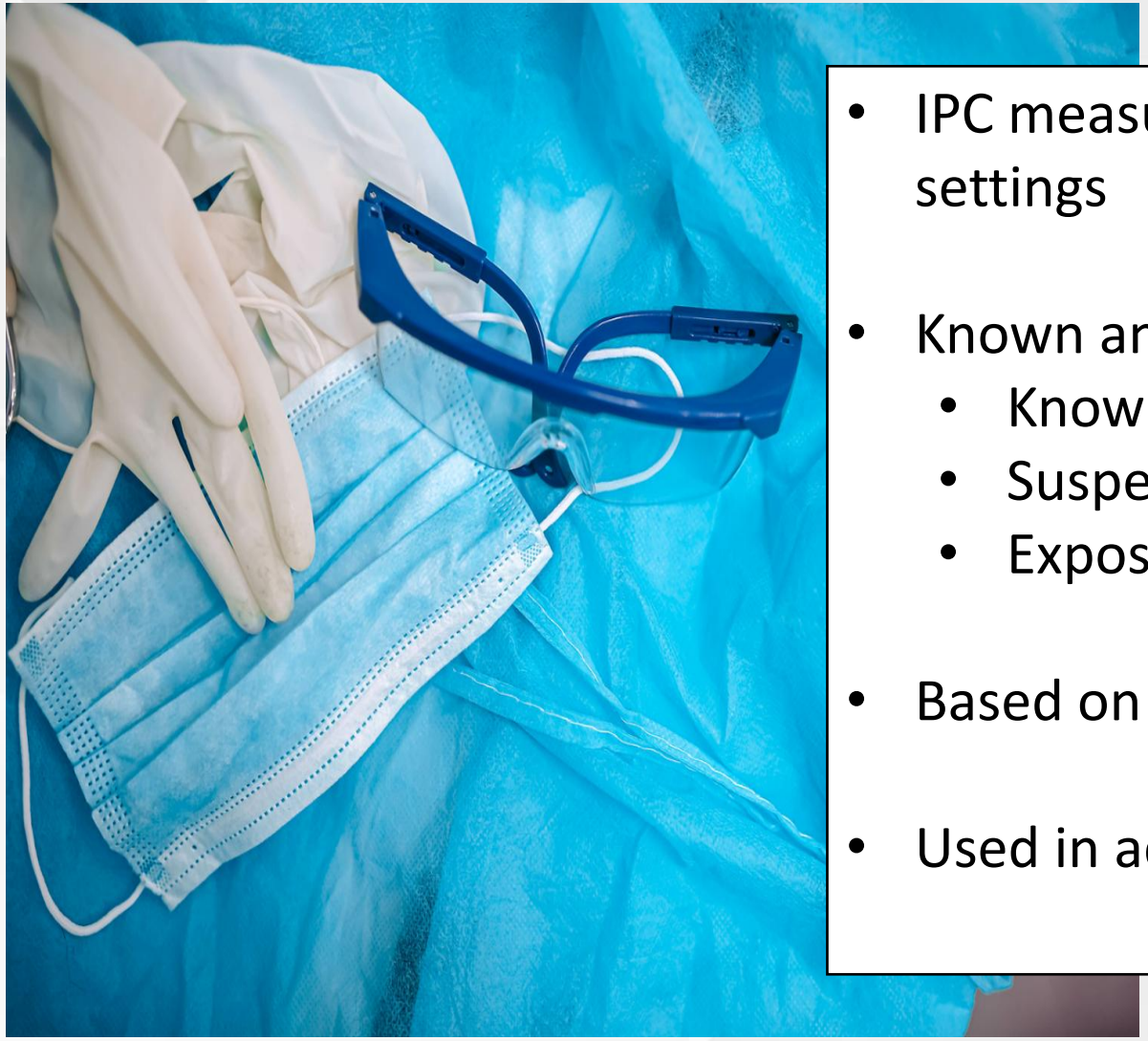
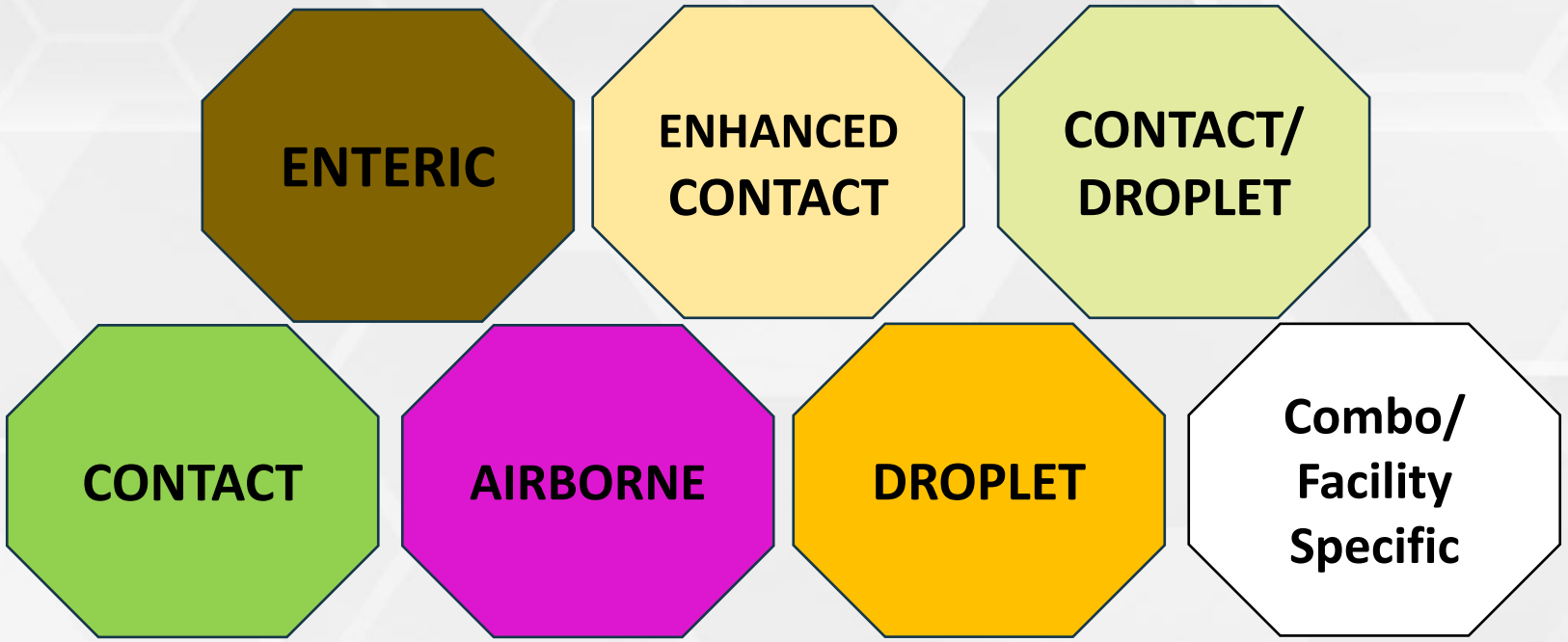
Policy & Procedure	• Develop, review and update Standard Precautions related policies and implement procedures based on the latest guidelines and evidence-based practice
Education & Training	• Ensure education and training on Standard Precautions is sufficient • *e.g., hand hygiene, use of PPE, and safe injection practices* • Partner with education teams to address gaps in training and education
Performance Monitoring & Evaluation	• Regularly monitor and audit compliance with standard precautions • Collect, analyze and report data on adherence to standard precautions • Utilize data to identify and recommend areas for improvement • Ensure IPC practices are in place to appropriately address gaps and risks related to Standard Precautions
Communication & Collaboration	• Work closely with other healthcare professionals to ensure a coordinated approach to standard precautions • Communicate effectively with all staff levels to reinforce the importance of standard precautions and address any barriers to compliance
Innovation & Improvement	• Continuously seek out and implement new strategies, technologies, and practices that can enhance the effectiveness of standard precautions • Stay updated on the latest research and incorporate evidence-based practices into infection prevention programs • Develop and implement strategies to mitigate identified risks and ensure the consistent application of standard precautions

Transmission Based Precautions



- IPC measures to prevent transmission in healthcare settings
- Known and suspected disease processes
  - Known pathogens (infection and colonization)
  - Suspected syndromes and symptoms
  - Exposure history
- Based on the mode of transmission
- Used in addition to Standard Precautions

Transmission Based Precautions



Transmission-Based Precautions

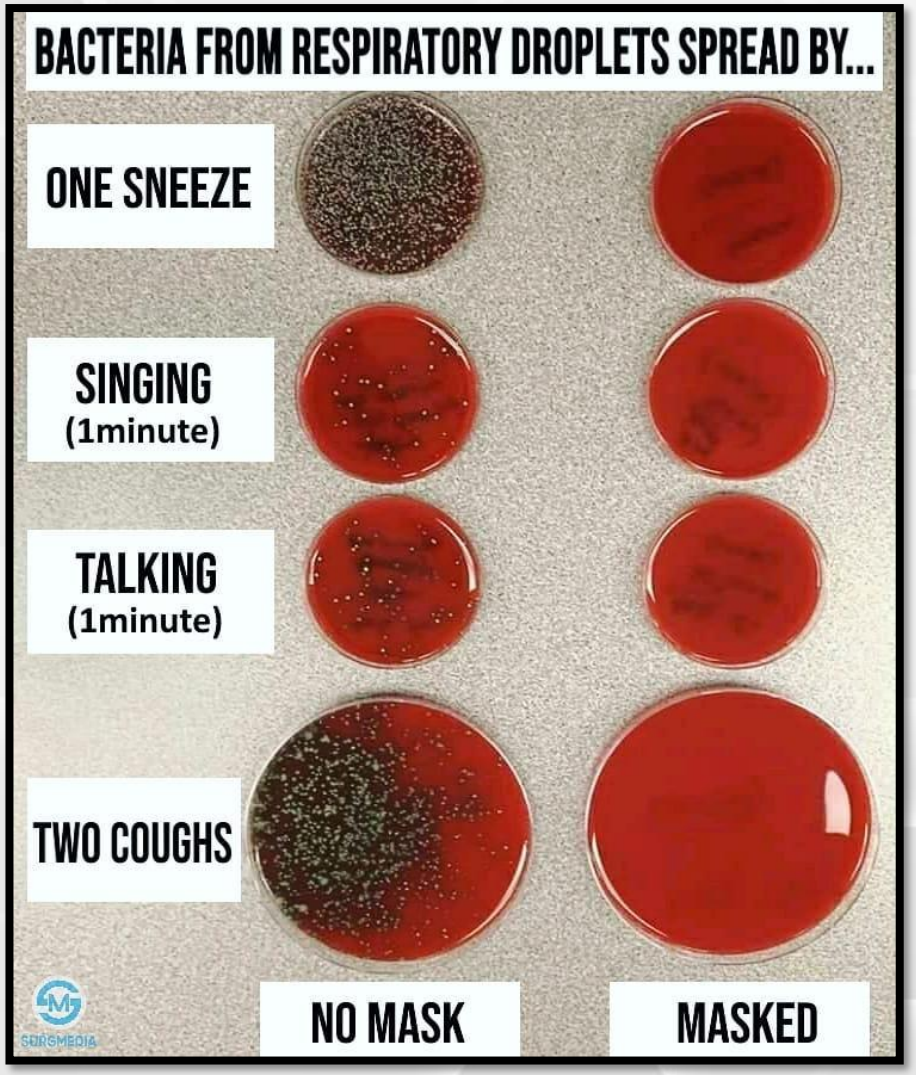
- Hand Hygiene
- PPE Selection and use
- Respiratory hygiene cough etiquette
- Safe Injection Practices
- Patient Placement
- Cleaning and disinfection
- Handling of laundry and waste

Contact Precautions

PPE	• Gloves • Gown
Patient Placement	• Single room • Cohorting
Hand Hygiene	• Before entering and exiting • ABHR or Soap and Water (unless during outbreaks)
Patient Movement	• Limited to medically necessary purposes • Cover infected areas
Cleaning and Disinfection	• High touch surfaces • At least daily or before use by another patient

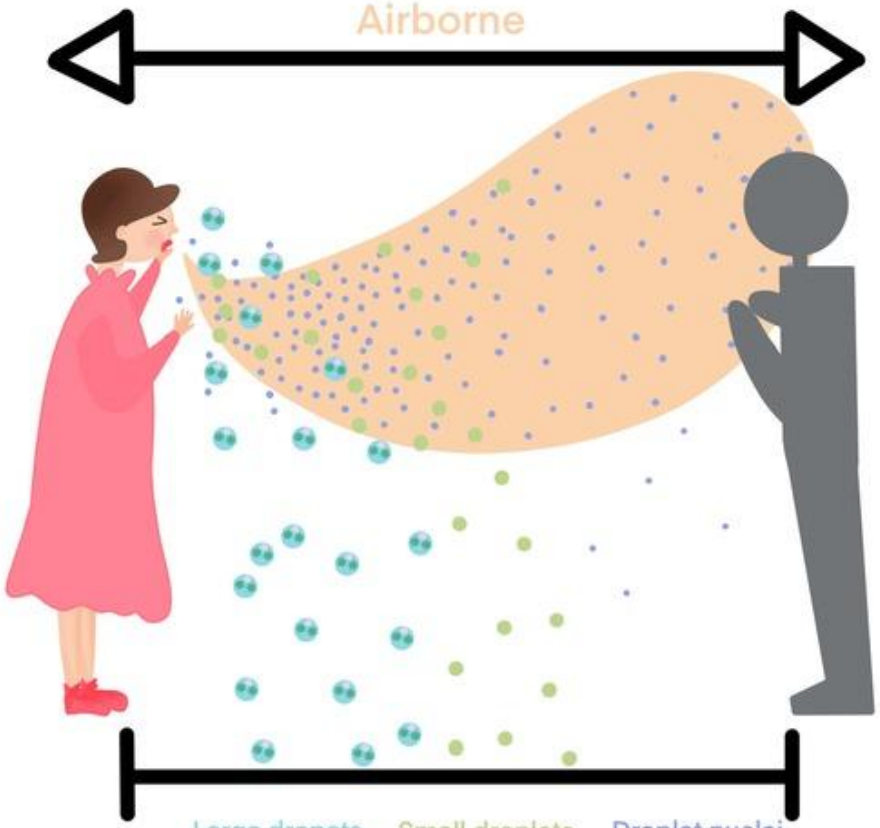
Droplet Precautions

PPE	• Mask • Eye protection
Patient Placement	• Single room • Cohorting
Hand Hygiene	• Before entering and exiting • Soap and Water or ABHR
Patient Movement	• Limited to medically necessary purposes • Patient wears a mask
Cleaning and Disinfection	• High touch surfaces • At least daily or before use by another patient
Respiratory Hygiene	• Instruct patients to cover their cough



TBP- Airborne Precautions

PPE	• Particulate Filter Respirator (N95, PAPR, CAPR, etc.)
Patient Placement	• Single room • Airborne Infection Isolation Room (AIIR) • Restrict susceptible HCW
Hand Hygiene	• Before entering and exiting • Soap and Water or ABHR
Patient Movement	• Limited to medically necessary purposes • Patient wears a mask/Respiratory etiquette • Door Remains Closed
Cleaning and Disinfection	• High touch surfaces • At least daily or before use by another patient



Combination and facility-specific

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Contact-Droplet

- Pneumonia Adenovirus
- Streptococcal disease (group A strep)
- Some Respiratory Viruses

Airborne-Droplet

- Varicella Zoster
- Shingles
- Extrapulmonary Tuberculosis
- Smallpox

Enhanced

- Candida auris
- Pan resistant organisms
- Carbapenem resistant organisms

Enteric

- *Clostridioides difficile*
- *Norovirus*

IP Role in TBP

Prepare	• Monitor trends • Training and education
Identify, Isolate Isolate	• Rapid identification and isolation • Surveillance and prompt initiation of TBP • Collaboration with lab, EVS, nursing, and facilities
Ensure availability & accessibility	• At the point of care
Monitoring adherence	• Monitor and audit adherence

IP Role in TBP

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Policy & Procedure	• Develop and update policies and implement procedures for TBPs based on the latest guidelines and evidence-based practice
Education & Training	• Ensure training is sufficient for healthcare workers on TBPs • Partner with education teams to address gaps in training and education • Partner with education teams to ensure “Just In Time Training” takes place when emerging pathogens occur

Performance Monitoring & Evaluation	• Monitor and audit compliance with TBP
	  • *Ensure unrestricted access to PPE (easily accessible at point of use)*
	  • *Ensure proper isolation and PPE use while TBPs are active*
	  • *Verify appropriate discontinuation of TBPs*
	  • *Validate proper room and device cleaning and disinfection*
	• Review the incidence of infections and organisms requiring TBPs in the facility
	• Utilize audit data to identify and recommend areas for improvement
	• Ensure IPC practices are in place to appropriately address TPBs gaps and risks

Communication & Collaboration	• Work closely with other departments to ensure a coordinated approach to TBPs • Ensure processes for communicating isolation needs to healthcare workers, EVS etc. • Help specialty departments and services to implement TBPs in their unique settings
Innovation & Improvement	• Identify and implement new strategies, technologies and practices that can enhance the utilization of TBPs • Stay up to date on circulating pathogens in the local and global scale • Develop and implement strategies to mitigate identified risk and ensure the consistent application of TBPs

Audit and Feedback

UNC Statewide Program For Infection Control and Epidemiology

Date/Shift/Unit	Role Key: **P**/Provider = Physician, resident, PA, NP, or student of role **N**/Nursing = RN, LPN, CNA, NA, CMT, MT, or student of role **AH**/Allied Health = PT/OT, Resp. Tech, Rad Tech, Lab Tech, or student **SS**/Support Staff (ancillary staff) =Dietary, Front Desk, House Keeping/ EVS	Compliant	Missed Opportunity	Observation Type Observation/Encounter type examples: Glove use prior to contact or potential contact with blood & body fluids, gown and glove use with contact isolation precautions, mask use with droplet precautions or potential exposure to infectious droplets, high level respirator with airborne precautions or potential exposure such as aerosolized generating.
	P N AH SS	○	○	
	P N AH SS	○	○	
	P N AH SS	○	○	

Minnesota Department of Health PPE Audit Tool

Role	Action	Hand Hygiene Observed	Transmission Based Precautions and PPE Donned
☐ RN ☐ LPN ☐ CNA ☐ EVS ☐ PCA ☐ TMA ☐ DSP ☐ RT ☐ REHAB ☐ PROVIDER ☐ DIETARY ☐ LAUNDRY ☐ ACTIVITIES ☐ FACILITIES ☐ CONTRACTOR ☐ OTHER: _____	☐ ENTER ☐ EXIT	☐ WASH ☐ RUB ☐ MISSED	☐ STANDARD ☐ CONTACT **Gloves:** ☐ Yes ☐ No **Gown:** ☐ Yes ☐ No ☐ CONTACT/DROPLET **Gloves:** ☐ Yes ☐ No **Gown:** ☐ Yes ☐ No **Mask:** ☐ Yes ☐ No ☐ DROPLET **Mask:** ☐ Yes ☐ No ☐ ENHANCED BARRIER **Gloves:** ☐ Yes ☐ No **Gown:** ☐ Yes ☐ No ☐ ENHANCED RESPIRATORY **Gloves:** ☐ Yes ☐ No **Gown:** ☐ Yes ☐ No **N95 or PAPR:** ☐ Yes ☐ No **Eye Protection:** ☐ Yes ☐ No

Integrating SP/TBP into practice

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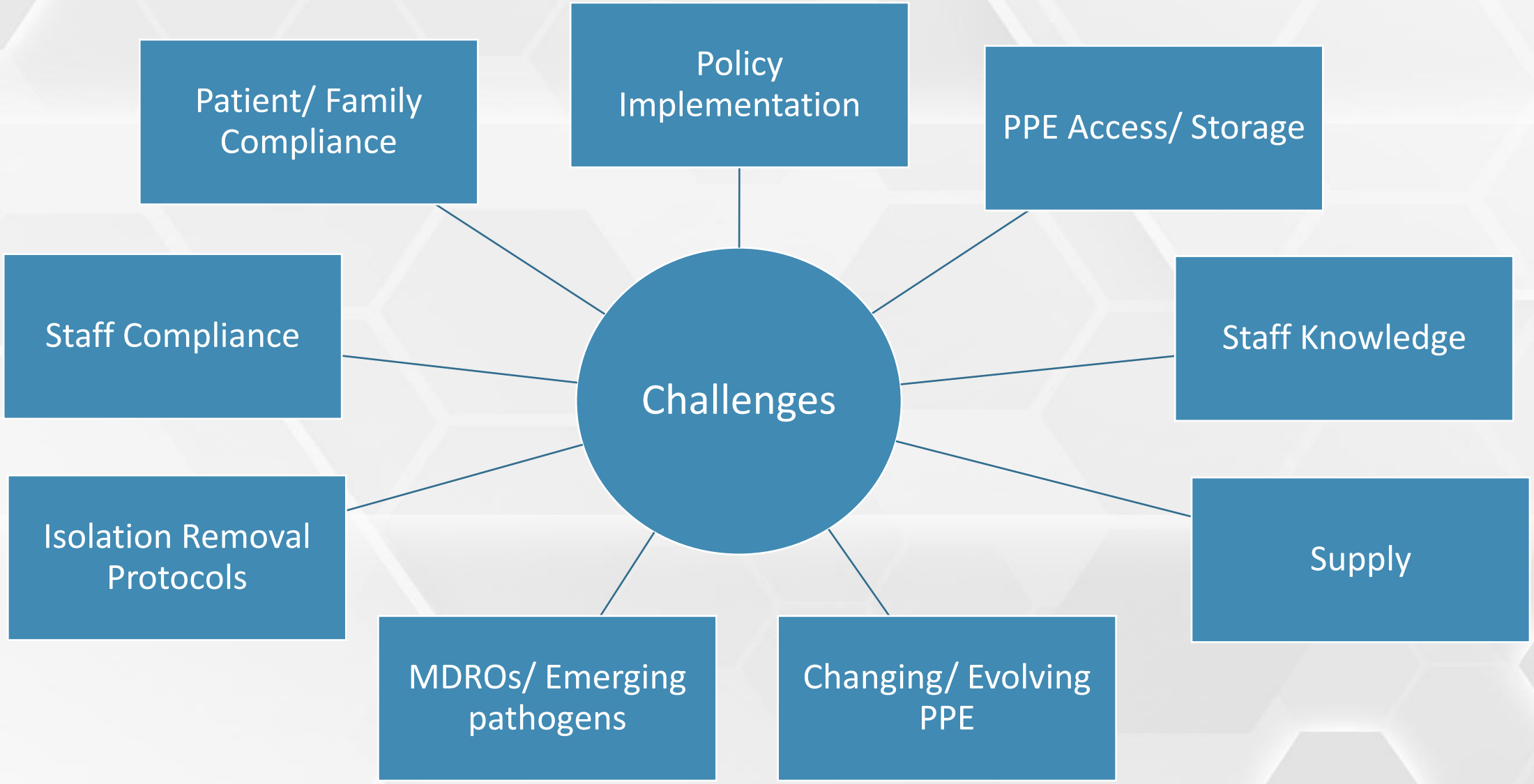
Communication and Collaboration

- Clear, timely communication
- Collaboration across departments
- Approach non-compliance as risk awareness, not blame
- Partner with leaders to sustain compliance

Common Challenges



Case Studies

Case Study 1

- Male patient
- Admitted two days ago for pneumonia
- Started on antibiotics
- 3 loose stools in the past 24 hours
- Semi-private room

Case Studies

PPE	• Gloves • Gown
Patient Placement	• Single room • Cohorting
Hand Hygiene	• Before entering and exiting • ABHR or Soap and Water
Patient Movement	• Medically necessary purposes • Cover infected areas
Cleaning and Disinfection	• High touch surfaces • At least daily or before use by another patient

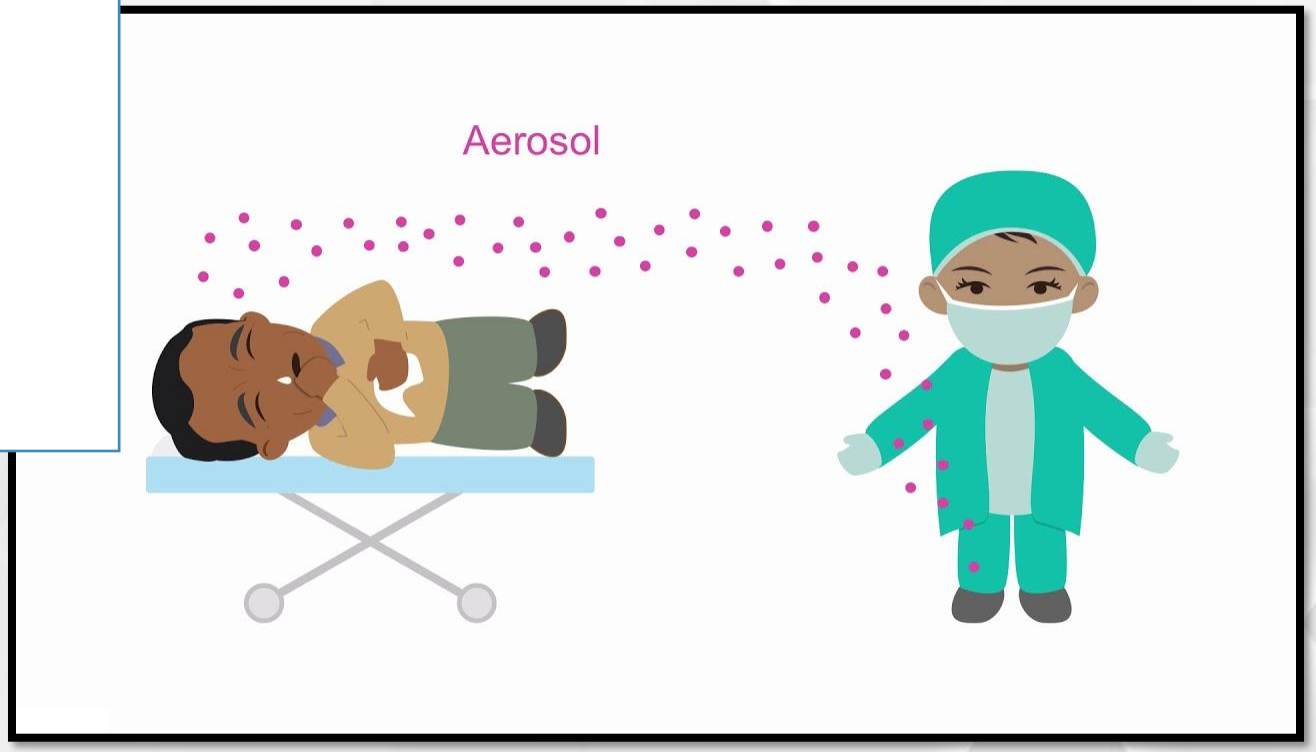
What is the IP's role?

1. Initiation of Contact Precautions
2. Isolate based on symptoms
3. Education
4. Communicate
5. Educate
6. Reassess
7. Review testing

Case Studies

Case Study 2

- Patient going for a procedure
- Pt coughing productive sputum
- Facility policy for AGP
- AIIR rooms unavailable



Case Studies

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IP Role

- Upgrade to airborne
- Educate staff
- Communicate with teams
- Review for gaps

PPE	• Particulate Filter Respirator (N95, PAPR, CAPR, etc.)
Patient Placement	• Single room • Airborne Infection Isolation Room (AIIR) • Restrict susceptible HCW
Hand Hygiene	• Before entering and exiting • Soap and Water or ABHR
Patient Movement	• Limited to medically necessary purposes • Patient wears a mask/Respiratory etiquette • Door Remains Closed
Cleaning and Disinfection	• High touch surfaces • At least daily or before use by another patient

Case Studies

Case Study 3

- HCW not wearing PPE appropriately
- PPE data shows low compliance
- Minimal leadership support

Case Studies

IP Role

- Assess/audit
- Educate staff
- Communicate with teams
- Assess barriers

Key Takeaways

Standard Precautions: Non-negotiable foundation

Transmission-Based Precautions: Dynamic, pathogen-specific layer

IPs drive compliance through observation, education, and leadership

Join Us Next Time:

UNMC Nebraska Medicine

No session in December

Next Webinar: Personal Protective Equipment Part 2

January 15, 2026
12-1 CST

One Last Item:

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Self-Led Infection Control Evaluation SLICE

SLICE Domains	
Infection Prevention & Control Program	Transmission-based & Standard Precautions
Hand Hygiene	PPE
Surveillance	CAUTI
Injection Safety	CLABSI
Environment of Care	VAE
Environmental Cleaning	Non-Ventilator Associated Pneumonia
Non-Critical Device Reprocessing	SSI
Semi-Critical Device Reprocessing	Clostridioides difficile
Critical Device Reprocessing	

Questions

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Resources

PPE Audit Tools	PPE-audit-tool-version-2.docx.pdf Personal Protective Equipment (PPE) Observational Tool
Duration of Isolation	Appendix A: Type and Duration of Precautions Recommended for Selected Infections and Conditions | Infection Control | CDC
Cover your Cough Poster	https://www.cdc.gov/flu-resources/php/resources/cover-your-cough-health-care-poster.html
Fundamentals of Injection Safety Webinar	Webinars | innovateIPC.org
Environmental Cleaning & Non-Critical Device Reprocessing	Webinars | innovateIPC.org
Respiratory Protection Program	Hospital Respiratory Protection Program Toolkit | NIOSH | CDC

Office Hours

- If you have a questions
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    OR
  - Enter your question into the chat

- If you have additional questions that are not answered, you can email us at ***infoforipslice@nebraskamed.com***

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