IPC Education in Action

Project Firstline is a national collaborative led by the U.S. Centers for Disease Control and Prevention (CDC) to provide infection control training and education to frontline healthcare workers and public health personnel. National Association of County and City Health Officials (NACCHO) is proud to partner with Project Firstline to host the NACCHO Healthcare Infection Prevention and Control Summit (Summit), as supported through CDC Grant # 6NU38OT000306-03-05. CDC is an agency within the Department of Health and Human Services (HHS). This presentation is being hosted as part of the Summit; the contents of this presentation and Summit do not necessarily represent the policies of CDC or HHS and should not be considered an endorsement by the Federal Government.
OBJECTIVES

By the end of this session, you will be able to:

• Describe factors involved in assessing risk while triaging patients
• Discuss actions that can mitigate the risk of spreading infections in healthcare settings
• Choose the appropriate PPE for various tasks in healthcare settings using principles of standard precautions
• Describe the educational benefits of simulation and gamification
PRE-SESSION ASSESSMENT

bit.ly/3WmOeUc
“We believe that everyone participating... is intelligent, capable, cares about doing their best and wants to improve.”

Invest in making the simulation safe
Overview:
Several patients will check-in to a clinic with symptoms that may be from an infectious disease. There is one open clinic room, and the participants will have to determine how to manage the waiting room.

Objectives:
After this activity, participants will be able to:

1. Describe factors included in assessing risk while triaging patients, including symptoms, environmental factors, and system constraints.
2. Discuss actions that can mitigate the risk of spreading infections in the waiting room setting, including masking, distancing, and isolation.
SIMULATION
HOW WOULD YOU MANAGE THIS WAITING ROOM?
WHO WOULD YOU ROOM FIRST?
WHAT IS SIMULATION?

Any process that **recreates a contextual background**

*Simulation does not always require technology*
WHAT IS SIMULATION?
WHAT IS SIMULATION?
SIMULATION: WHAT'S THE BIG DEAL?

Knowledge ≠ Behavior change
EDUCATIONAL THEORY #1: DELIBERATE PRACTICE

- Well defined goal
- Motivated to improve
- Feedback
- Repetition with opportunities to improve and refine performance

Ericsson, 2008
EDUCATIONAL THEORY #2: EXPERIENTIAL LEARNING

Kolb’s Cycle of Experiential Learning

Concrete Experience

Active Experimentation

Reflective Observation

Abstract Conceptualization

Kolb, 1984
EDUCATIONAL THEORY #3: ADULT LEARNING

• Pull from experience

• Driven by internal motivation

• Crave applicability

• Need to know the reason for learning something

Knowles, 1978
SIMULATION: WHAT'S THE BIG DEAL?

- HANDS-ON APPLICATION
- INTERACTIVE DESIGN
- SAFE LEARNING INVOLVEMENT
- REPETITION
- IMMEDIATE FEEDBACK
Gamification Basics
WHAT IS GAMIFICATION?

The addition of game elements to an activity to increase learner engagement

Examples: “leaderboards”, escape rooms, Oregon Trail
HOW TO CREATE A GAMIFIED TRAINING

1. Start with your learning objectives

Use a framework like “Performance, criteria, conditions”:

Performance
• What you want to be able to do
• Something seen or heard
• Active verbs

Criteria
• Measures of success
• Timeline

Conditions
• Parameters under which performance occurs
• “Given statement” (given x, then y)
HOW TO CREATE A GAMIFIED TRAINING

1. Start with your learning objectives

2. Consider game objectives

- Teamwork/networking
- Demonstrate a concept
- Promote peer-to-peer learning
- Encourage creativity
- Creating competition
- Get people up and moving
HOW TO CREATE A GAMIFIED TRAINING

1. Start with your learning objectives
2. Consider game objectives
3. Try out your game!

Try your game
Get feedback
Revise game

Debriefing games reinforces learned concepts!
### LET’S PLAY A GAME!

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>DON’T</strong></th>
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<tbody>
<tr>
<td>Ask questions about whether it would be safe to do a specific procedure in your PPE</td>
<td>Ask specific questions about the PPE you’re wearing</td>
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<td>Examples:</td>
<td>E.g., “Am I wearing gloves?”</td>
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<td>“Could I safely give an intramuscular injection?”</td>
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<td>“Could I safely check a patient for MRSA with a nasal swab?”</td>
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<td>“Could I safely clean up a large amount of diarrhea in a patient bed?”</td>
<td></td>
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<tr>
<td>“Could I safely clean a used endoscope?”</td>
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DEBRIEF
# DEBRIEF

<table>
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<tr>
<th>PPE</th>
<th>Rule</th>
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<tr>
<td>Gloves</td>
<td>• Anticipated exposure of HCWs hands to body fluids (e.g., blood, secretions), mucous membranes, nonintact skin, or contaminated intact skin (e.g., stool/urine incontinence)</td>
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</table>
| Gloves and gown                    | • Anticipated exposure of HCWs clothing or extremities to blood, body fluids, secretions, or excretions  
• Direct patient contact if the patient has uncontained secretions/excretions |
| Gloves, mask, and eye protection   | • Activities that are likely to generate splashes/sprays of contaminated fluids into or near the HCW’s face |
| Gloves, gown, mask, and eye protection | • Aerosol generating procedures  
• Very splashy procedures |
QUESTIONS?
SIMULATION AND IPC
ASSESSING A DEVICE
TRAINING AN INDIVIDUAL
TRAINING A TEAM
ASSESSING A SYSTEM
TRAINING A SYSTEM AND ASSESSING A DEVICE
REFERENCES

ERICSSON K. DELIBERATE PRACTICE AND ACQUISITION OF EXPERT PERFORMANCE: A GENERAL OVERVIEW. ACAD MED. 2008


ASSESSMENT

bit.ly/3wi55gh

SUMMIT PROVIDED SESSION EVALUATION