



Simulation: Glove removal Time: 20 min including debrief

Max number of people per station: 6 Number of facilitators per station: 1

Supplies Needed:

- Video- Removing Gloves and Hand Contamination: A Simulated Training
- Equipment to show video in-person or virtually
- Live or virtual connection with learners
- Mechanism for learners to take notes
- Debriefing Tool for Simulation leader

Additional supplies for in- person simulation set up: (if applicable): gloves, fluorescent powder or oil, a varying amount may be used based on individual needs for demonstration. Black light and the ability to darken the room.

Steps to Perform Simulation

- 1. If the simulation learning environment allows in-person interactive sessions, show video then consider performing this exercise with live role playing with learners.
- 2. Role playing will involve a variety of types of gloves by volunteers. The emphasis will be on examination gloves and hand contamination following their removal.
- 3. Each volunteer will put on a pair of exam gloves in the size they normally select.
- 4. Simulation will involve demonstration of the impact on hand contamination that occurs when each volunteer removes their gloves in the manner that reflects their usual practice.
- 5. All participants will perform hand hygiene, and then don gloves.
- 6. Once gloves are donned, a small amount of fluorescent powder will be shaken into the palm of each volunteer.
- 7. Ask the participants to rub their hands together mimicking contamination that may occur on the gloved hands during routine patient care when gloves are likely to be worn.
- 8. Each volunteer will then remove their gloves in the manner that reflects their usual practice and a black light will be shown on their hands in order to identify "contamination" by the fluorescent powder.
- 9. Carefully check the hands and wrists for any "glow" from the florescent powder, which would indicate unintentional contamination.

Debriefing Script*:

The session leader will begin a brief discussion outlining the critical importance of hand hygiene following removal of gloves as part of consistent and safe practice.

As facilitators use this video, stop and point out visual evidence of contamination during the black light reveal, even after the most careful glove removal techniques.

Ask for responses to the video. Use this opportunity to make it applicable to the learners' setting. For example, learners may work in long term care facilities so make the setting relevant to their work. You may also use this during educational opportunities for support personnel such as environmental services or other healthcare workers such as respiratory therapists. Make sure to include information specific to those learners to they can better understand and apply the important teaching points.

- 1. Set the scene by reviewing the simulation. Use the Debriefing Tool to open the discussion.
- 2. Ask for reactions and use learner responses gathered during the Simulation discussion to probe further.
- 3. Describe situations in the scenario that seem to be points of confusion or discussion.
- 4. Analyze the simulation by asking some discussion questions:
 - a. What went well and what would you change?
 - b. Advocacy and Inquiry
 - i. State your observation and opinion
 - ii. Ask how the learner saw it
 - c. Provide constructive feedback to close gaps in knowledge
 - d. Prompts to consider
 - i. "What errors did you identify?"
 - ii. "What is the impact?"
 - iii. "What practices may prevent this issue?"
 - iv. "How far up the chain will you take this?"
 - v. "How can Human Factors Engineering be applied to this issue?"
- 5. Application and Summary
 - a. Take-away points
 - i. What did the learner take away?
 - ii. What were the key learning points from the instructors view?

Facilitator: Thank you for participating in this debriefing session about the importance of appropriate glove removal. Let's discuss the key points and address any questions or concerns you may have.

Question 1: Is there a perfect way to remove gloves, and NEVER contaminate yourself?

Answer: No. There is no way to guarantee 100% that removing soiled gloves will not result in contamination of the hands.

Question 2: What are some of the incorrect practices you notice when you observe others donning/doffing gloves?

Answer: Encourage discussion. No wrong answers. (I.e. people don't always perform hand hygiene before or after putting on gloves/removing gloves)

Question 3: True or False. It is okay to double glove while performing routine patient care because it protects you more.

Answer: There are certain situations when one would double glove, but not during routine patient care.

Question 4: It is okay to use hand sanitizer on your gloves instead of changing them between patients.

Answer: No, this is poor practice. You should remove old gloves, perform hand hygiene, and then don new gloves when going to a new patient or when moving from a dirty to clean area of the same patient.

Question 5: Wearing clean gloves can take the place of hand hygiene, since your skin is not coming in contact with that of the patient?

Answer: No, this is poor practice. You should always perform hand hygiene before removing gloves from the box, and donning the gloves, and after removing them.

Question 6: Is it always okay to keep the same pair of gloves on while taking care of the same patient?

Answer: It depends on what the task is. If your gloves are soiled (i.e. changing soiled bedsheets, cleaning up the patient) you should remove them, perform hand hygiene, and put on a new clean pair of gloves before continuing care.

Facilitator: Thank you for your participation. Understanding the importance of appropriate glove removal technique and hand hygiene is essential to preventing the spread of germs. If you have any further questions or need clarification on any topic, please feel free to ask.

*Disclaimer: Please follow this debriefing script. The skill of debriefing is a process that takes time and experience to learn. Please do not use these debriefing tools outside of this situation without appropriate knowledge and experience.

Centers for Disease Control and Prevention (CDC). (2021, Apr 26). *Episode 9: What is Personal Protective Equipment (PPE)?* [Video]. Youtube. https://www.youtube.com/watch?v=e-t2yZsEo70&t=18s

CDC (2022). Hand Hygiene in Healthcare Settings. Updated January 2021. Retrieved August 15, 2022, from https://www.cdc.gov/handhygiene/providers/index.html

CDC (2017). Healthcare Infection Control Practices Advisory Committee. Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings—Recommendations of the Healthcare Infection Control Practices Advisory Committee (HICPAC). Updated November 2022. Retrieved December 12, 2022, from https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html

CDC. (2020a). Using Personal Protective Equipment (PPE). COVID-19. Https://Cdc.gov/coronavirus/2019-ncov/downloads/A-FS_HCP_COVID19_PPE.pdf. Accessed July 4, 2022.

Jensen PA, Lambert LA, Iademarco MF, Ridzon R. (2005). Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Healthcare-Care Settings, 2005. (2005). MMWR 54(RR17); 1-141.

Siegel JD, Rhinehart E, Jackson M, Chiarello L, Healthcare Infection Control Practices Advisory Committee. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Am J Infect control. 2007 Dec 35(10 Suppl 2)S65-164. Available from http://www.cdc.gov/hicpac/pdf/isolation/Isolation/2007.pdf

Developed by the Kentucky Infection Prevention Training Center (KyIP, 2023). Used with permission.