



**Simulation:** Safe Injection Practices

**Time:** 5-10 minutes

**Max number of people per station:** 15

**Number of facilitators per station:** 1

**Supplies Needed:**

- Vials of normal saline or sterile water-two per person
- Red food coloring
- 3mL luer lock syringe-one per person
- IM injection needle with safety –two per person
- Alcohol prep pads
- Fruit (orange) or other place to dispose drawn up solution
- Sharps container
- Garbage can

**Steps to Perform Simulation**

1. Prepare one vial per person of saline or sterile water with 1mL of red food coloring.
2. Participants will have one vial of red solution and one vial of clear solution.
3. Discuss the vials at hand.
  - a. Point out single dose vs multi-dose
  - b. Examine expiration date/ BUD
  - c. Point out lot numbers, manufacturers and explain importance of documentation especially with vaccines
4. Demonstrate the correct way to open a syringe and needle package. Discuss various packaging, whether syringe and needle are packaged together or separate.
5. Demonstrate how to correctly connect needle and syringe aseptically.
6. Participants will clean the vial with 70% alcohol pad, covering the entire surface of the diaphragm.
7. Participants will remove syringe from package and connect needle aseptically.
8. Participants draw up 1mL of red solution. At this point, participants can practice injecting on an orange or dispose of solution in a container and engage safety mechanisms.
9. Participants keep the syringe, but change the needle aseptically.
10. Participants then draw 1mL up from the clear solution. Assess the color of the solution drawn up. A pink solution would indicate contamination.
11. Dispose of the solution in the syringe and engage safety mechanism.
12. Ensure all sharps are properly disposed of in sharps containers.
13. Have participants examine the clear bottle for contamination indicated by the solution turning pink.
14. Discuss the implications of re-using a syringe even if the needle is new.

**Debriefing Script\*:**

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

TRUTH		MYTH
	<p>1. Changing the needle makes a syringe safe for reuse.  <i>Syringes and needles should never be reused. The IV tubing, syringe, and other components represent a single, interconnected unit. Distance from the patient, gravity, or infusion pressure do not ensure that small amounts of blood won't contaminate the syringe once it has been connected to the unit.</i></p>	x
x	<p>2. Single-dose or single-use vials should not be used for more than one patient regardless of how much medicine is remaining</p>	
x	<p>3. Once they are used, both the needle and syringe are contaminated and must be discarded. A new sterile needle and a new sterile syringe should be used for each injection and each entry into a medication vial.</p>	
x	<p>4. Syringes and needles should never be reused. The IV tubing, syringe, and other components represent a single, interconnected unit. Distance from the patient, gravity, or infusion pressure do not ensure that small amounts of blood won't contaminate the syringe once it has been connected to the unit.</p>	
	<p>5. Syringes can be reused as long as an injection is administered through IV tubing.  <i>Once they are used, both the needle and syringe are contaminated and must be discarded. A new sterile needle and a new sterile syringe should be used for each injection and each entry into a medication vial.</i></p>	x
	<p>6. If you don't see blood in the IV tubing or syringe, it means that those supplies are safe for reuse.  <i>Germ such as hepatitis C virus and staph or MRSA are invisible to the naked eye, but can easily infect patients even when present in microscopic quantities. Do not reuse syringes, needles, or IV tubing</i></p>	x
	<p>7. It's okay to use leftover medicine from use single-dose or single-use vials for more than one patient.  <i>No, never pool or combine leftover medication from different vials. This has a high risk of contamination.</i></p>	x
x	<p>8. Germs such as hepatitis C virus and staph or MRSA are invisible to the naked eye, but can easily infect patients even when present in microscopic quantities. Do not reuse syringes, needles, or IV tubing</p>	

**Facilitator:** Thank you for your participation. Understanding the importance safe injection practices will prevent injuries and infections to both the patient and the healthcare worker. 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).(2001).The One & Only Campaign injection safety training materials. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/injectionsafety/1anonly.html>.4.Ce

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