Safe Injection Practices & Drug Diversion Awareness:

Training for Front-Line Healthcare Personnel for Safe Healthcare Delivery

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NE ICAP

Learning Objectives

1. Define safe injection practices.
2. Outline that a needle or a syringe should never be reused. Safe practice is always adhering to "**only one needle, one syringe, and only one time.**"
3. Describe clean areas for safe injection and medication preparation.
4. List at least 3 differences between single-dose vials and multi-dose vials.

Image Courtesy of CDC

Safe Injection Practices: Overview & Importance

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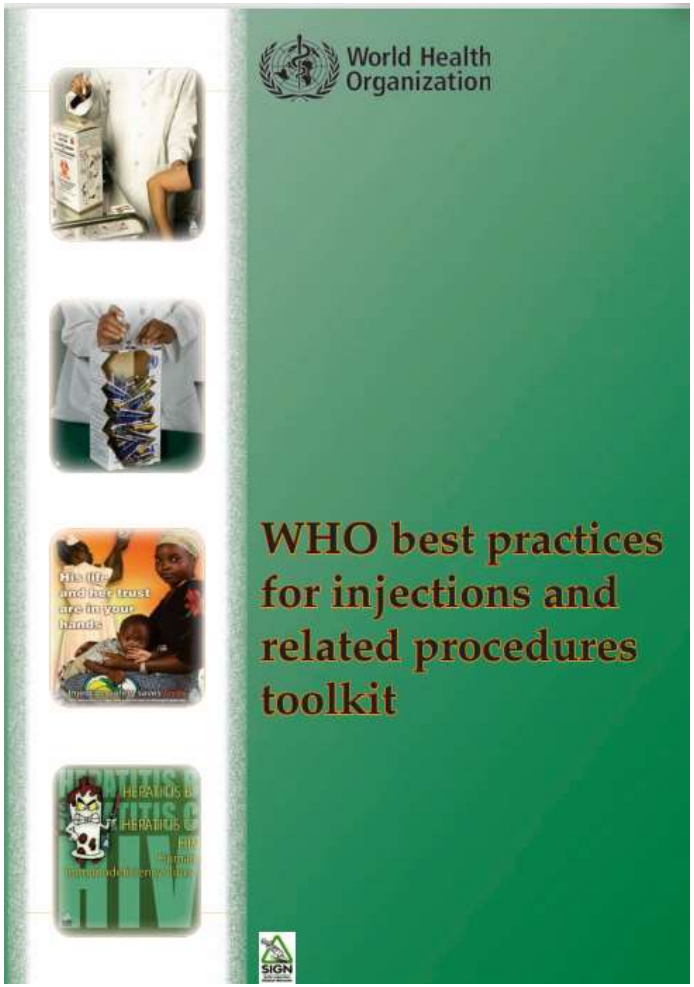
World Health Organization (WHO) Statement on Safe Injections

A safe injection is one that does not harm the recipient, does not expose the provider to any avoidable risks and does not result in waste that is dangerous for the community.

Unsafe injection practices can lead to transmission of bloodborne pathogens, with their associated burden of disease.

To ensure rational and safe use of injections globally, better injection safety practices are needed. The responsibility for ensuring injection safety rests with national governments, prescribers, administrators, receivers of injections and the wider community.



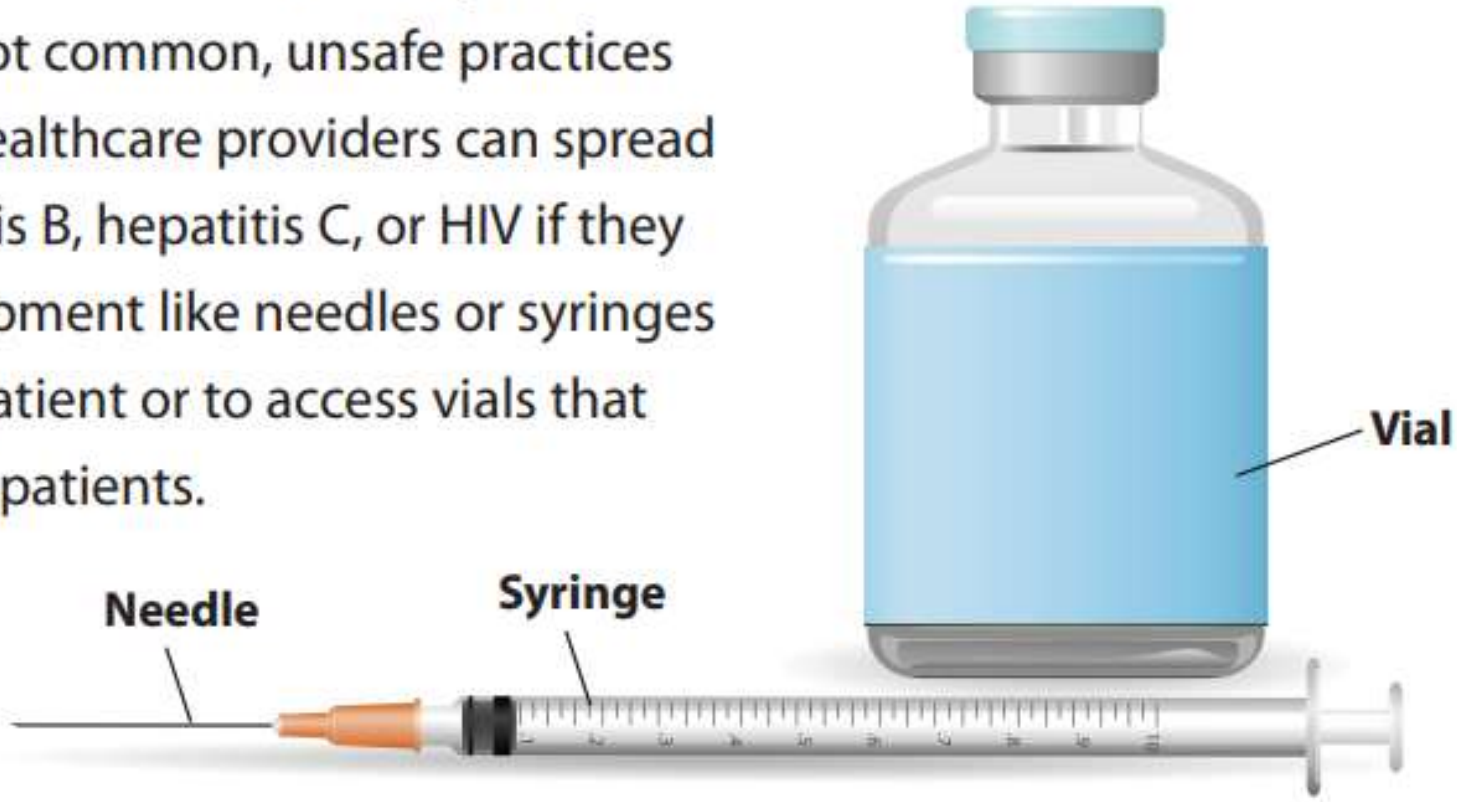
WHO Best Practices for Injections Toolkit

ICAP

Did You Know That Unsafe Practices Still Sometimes Occur?

Did you know?

Most healthcare providers follow safe injection practices. Though not common, unsafe practices sometimes occur. Healthcare providers can spread diseases like hepatitis B, hepatitis C, or HIV if they reuse injection equipment like needles or syringes on more than one patient or to access vials that are shared between patients.



CDC - Did You Know - Safe Medical Injections

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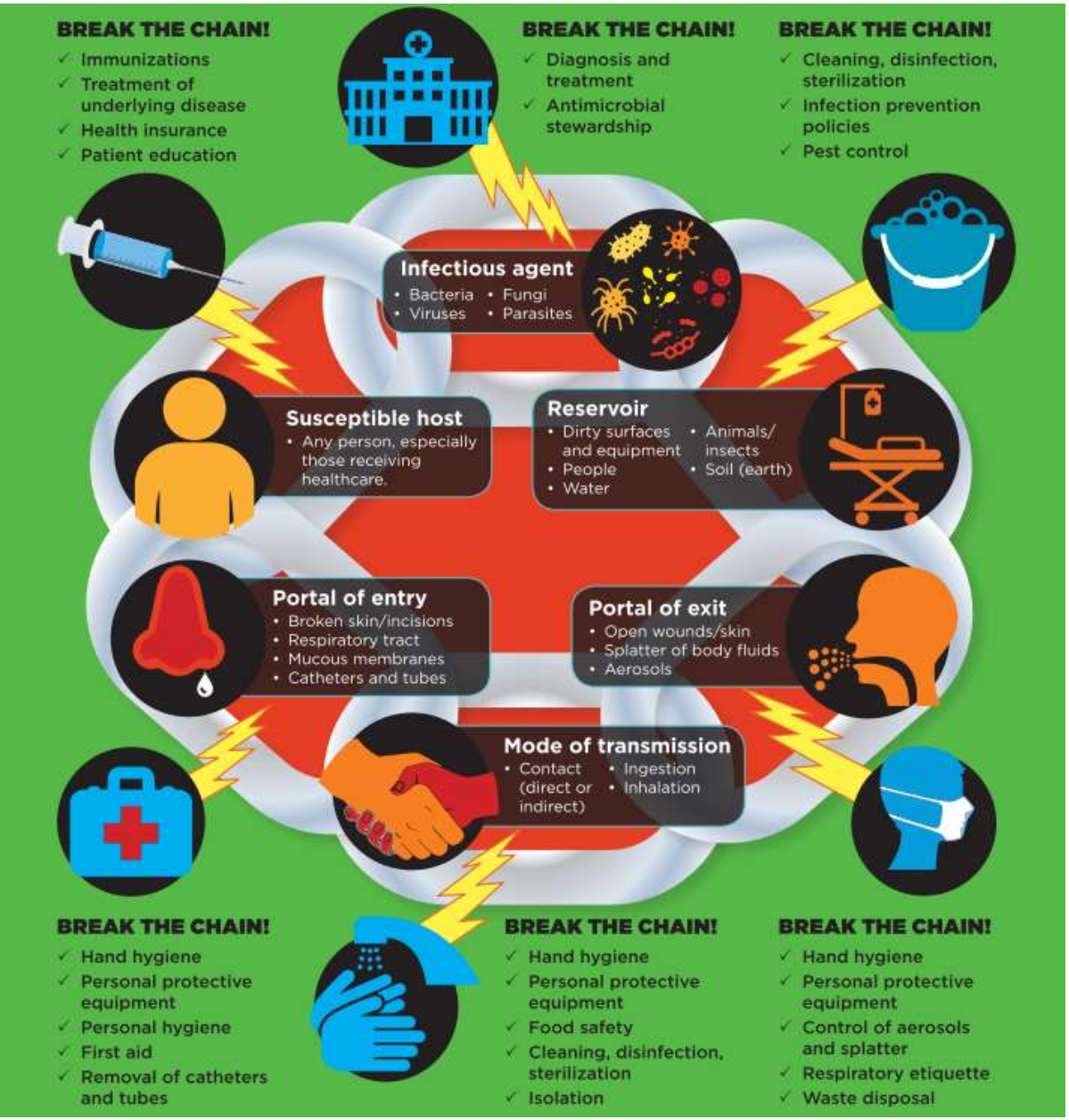
Infection Prevention and Control (IPC) Fundamentals - Break the Chain of Infection



Core IPC practices can prevent infections and reduce risk for safer healthcare and work.

- Vaccination
- Sharps Safety
- Safe Injection Practices
- Hand Hygiene
- Respiratory Etiquette
- Personal protective equipment
  - Standard Precautions
  - Transmission-Based Precautions
- Cleaning and Disinfecting including High-Level Disinfection and Sterilization

[APIC - Break the Chain of Infection]

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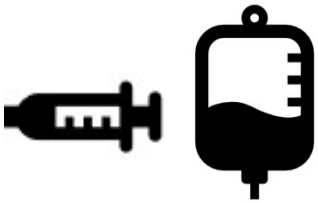
What are “Safe Injection Practices?”

Safe injection practices are a set of measures intended to prevent transmission of infectious diseases between one patient and another, or between a patient and health care personnel (HCP), during preparation and administration of injectable medications, such as:



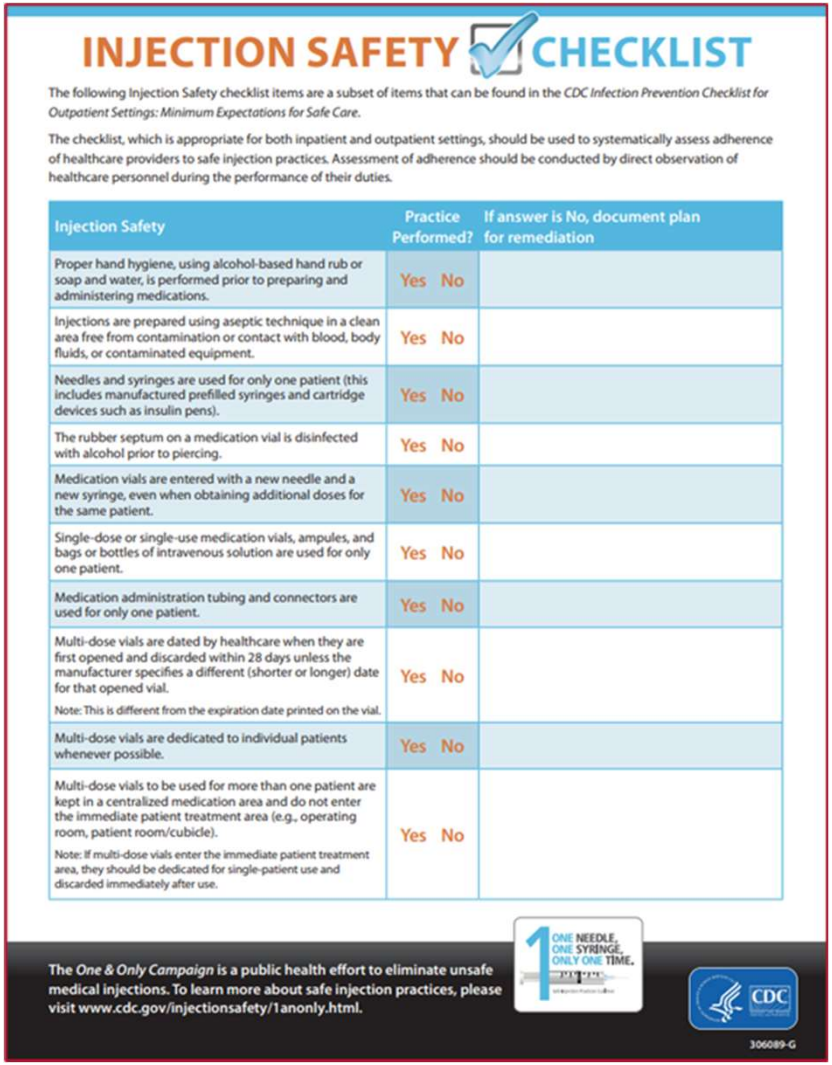
intravenous (IV)

intramuscular (IM)

subcutaneous (SQ)

intradermal (ID)

[CDC Injection Safety Checklist]



INJECTION SAFETY CHECKLIST

The following Injection Safety checklist items are a subset of items that can be found in the *CDC Infection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care.*

The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare providers to safe injection practices. Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.

Injection Safety	Practice Performed?	If answer is No, document plan for remediation
Proper hand hygiene, using alcohol-based hand rub or soap and water, is performed prior to preparing and administering medications.	Yes No	
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids, or contaminated equipment.	Yes No	
Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).	Yes No	
The rubber septum on a medication vial is disinfected with alcohol prior to piercing.	Yes No	
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.	Yes No	
Single-dose or single-use medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.	Yes No	
Medication administration tubing and connectors are used for only one patient.	Yes No	
Multi-dose vials are dated by healthcare when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial. Note: This is different from the expiration date printed on the vial.	Yes No	
Multi-dose vials are dedicated to individual patients whenever possible.	Yes No	
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle). Note: If multi-dose vials enter the immediate patient treatment area, they should be dedicated for single-patient use and discarded immediately after use.	Yes No	

The *One & Only Campaign* is a public health effort to eliminate unsafe medical injections. To learn more about safe injection practices, please visit www.cdc.gov/injectionsafety/1anonly.html.

1 ONE NEEDLE. ONE SYRINGE. ONLY ONE TIME.

CDC

306089-G

[CDC Safe Injection Practices to Prevent Transmission of Infections to Patients]

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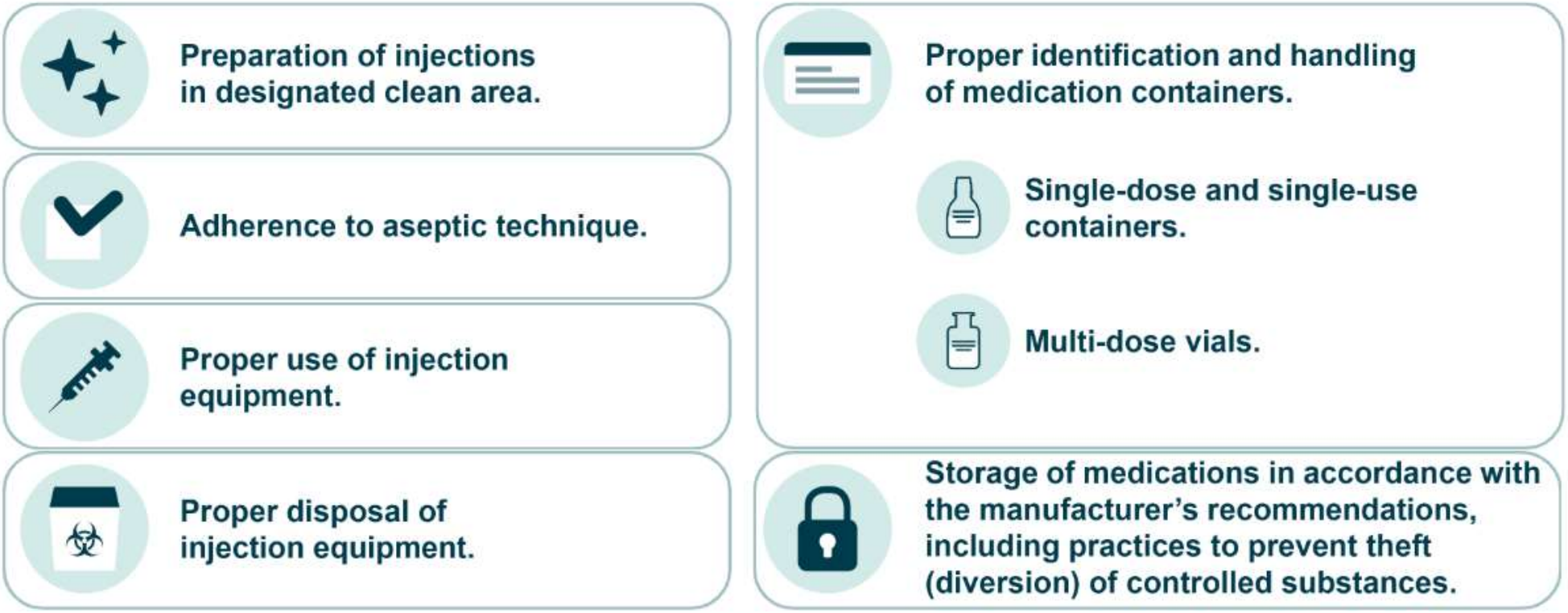
Safe Injection Practices

Recommended practices when preparing and administering injectable medications



CDC Train Module 8 Injection Safety LTC IPC

In-Course Knowledge Check

True or False:

Safe injection practices are a core infection prevention and control practices for safe healthcare delivery in all healthcare settings.

a) True
b) False

In-Course Knowledge Check

True or False:

Safe injection practices are a core infection prevention and control practices for safe healthcare delivery in all healthcare settings.

a) True

b) False

Drug Diversion

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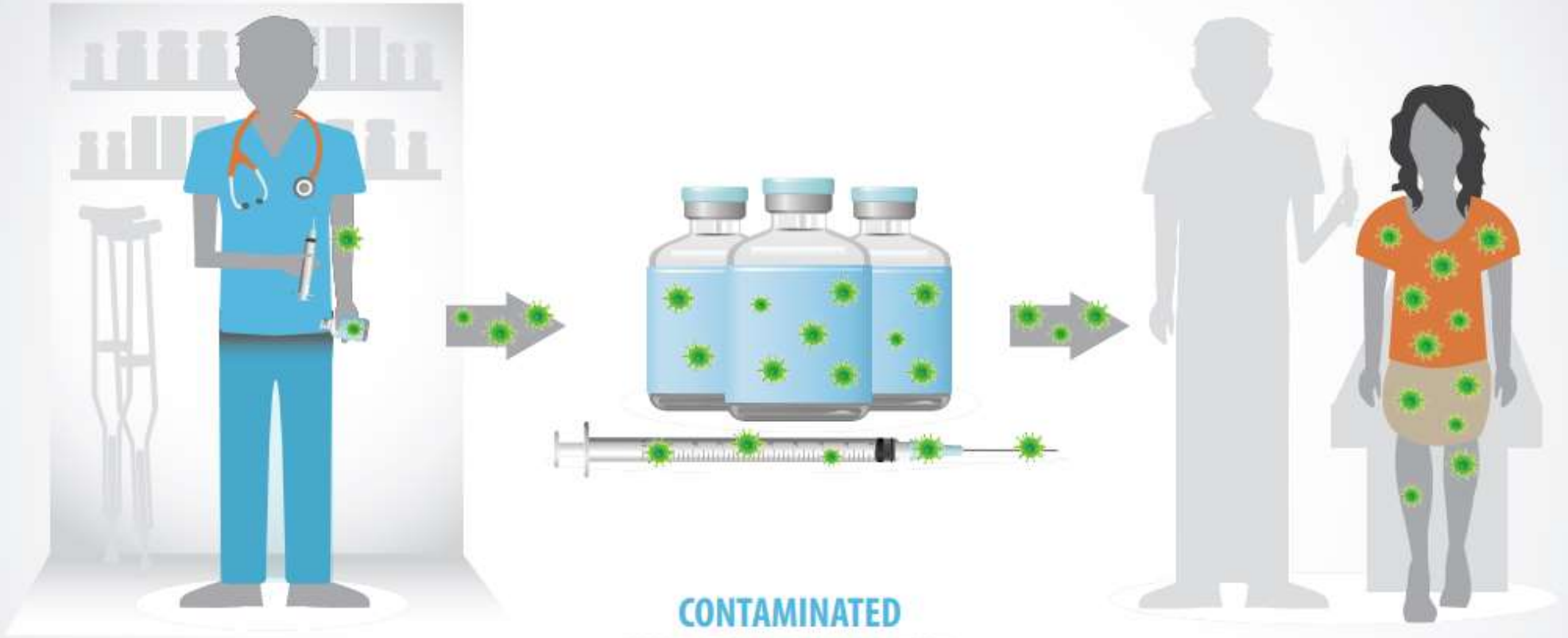
Drug Diversion Can Be an IPC Risk

- Some healthcare personnel (HCP) steal prescription medicines or controlled substances, such as opioids, for their own use. This behavior leads to unsafe situations like:
  - An impaired HCP providing or delivering substandard care.
  - Patients denied essential pain medication or therapy.
  - HCP spreading viruses or bacteria leading to patient infection by tampering with injectable drugs.

CSTE Drug Diversion Toolkit

CDC - Injection Safety - Clinician Brief - Drug Diversion
CDC - Drug Diversion Handout

DRUG DIVERSION* SPREADS INFECTION FROM HEALTHCARE PROVIDERS TO PATIENTS



HEALTHCARE PROVIDER
with Hepatitis C or other bloodborne infection tampers with injectable drug

CONTAMINATED INJECTION EQUIPMENT AND SUPPLIES
present in the patient care environment

EXPOSURE OF PATIENT
results from use of contaminated drug or equipment for patient injection or infusion

306089-D

*Drug diversion occurs when prescription medicines are obtained or used illegally by healthcare providers.

FOR MORE INFORMATION, VISIT CDC.GOV/INJECTIONSAFETY/DRUGDIVERSION/INDEX.HTML.

ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.

Procurement and Storage

- Purchase order and packing slip removed from records
- Unauthorized individual orders CS on stolen DEA 222 form
- Product container is compromised

Prescribing

- Prescription pads are diverted and forged to obtain CS
- Prescriber self-prescribes CS
- Verbal orders for CS created, but not verified by the prescriber
- Written prescriptions altered by patients

Preparation and Dispensing

- CS are replaced by product of similar appearance when prepackaging
- Removing volume from pre-mixed solutions
- Multi-dose vial overfill is diverted
- Prepared syringe contents replaced with saline solution

Administration

- CS are withdrawn from an ADC on discharged or referred patient
- Medication is documented as given but not administered to patient
- Waste is not adequately witnessed and subsequently diverted
- Substitute drug is removed and administered while CS are diverted

Waste, Removal, and Destruction

- CS waste is removed from unsecure waste container
- CS waste in syringe is replaced with saline
- Expired CS are diverted from holding area

Possible Signs and Methods of Drug Diversion

Examples of some common risk points and methods of diverting a controlled substance (CS).

- ADC indicates an automatic dispensing cabinet like those found in your medication room.
- DEA indicates the Drug Enforcement Administration that provides a code of regulations and enforcement.

American Society of Health-System Pharmacists (ASHP) Guidelines on Preventing Diversion of Controlled Substances

How Can You Help Prevent Drug Diversion?

- Report any possible signs of drug tampering
  - Missing, manipulated, or broken tamper-evident seals
  - Discoloration
  - Vial appears already accessed
- Protect medication during preparation, dispensing, and wastage.
- Follow all controlled substances policies.
- Understand the signs of drug diversion, including the behavioral and physical signs of substance use.

Image by rawpixel.com

[CSTE Drug Diversion Toolkit]

[Drug Tampering and Product Substitution in Healthcare Facilities]

Physical Signs of Opioid Use Disorder

Physical signs of opioid use disorder can include:

- Constricted pupils
- Sweating
- Chills
- Runny nose
- Anorexia
- Itching and Scratching
- Vomiting
- Diarrhea
- Needle tracks
- Blood on scrubs around arms or legs
- Wearing long sleeves even in warm weather

ISMP - Drug Diversion in Healthcare

In-Course Knowledge Check

True or False:

Drug diversion is really a Human Resources issue and doesn't pose any risks for patient infection?

a) True
b) False

In-Course Knowledge Check

True or False:

Drug diversion is really a Human Resources issue and doesn't pose any risks for patient infection?

a) True

b) False

High Risk and Harm from Unsafe Practices

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Impact of Unsafe Injection Practices

North Carolina Statewide Program for Infection Control and Epidemiology.
Courtesy of Dr. Andrew Watkins Acute and Outpatient Webinar 10/13/21

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Consequences of Unsafe Injection Practices

Patient illness and death

Legal charges/ malpractice suits

Loss of clinician license

Criminal charges

CDC Train Module 8 Injection Safety LTC IPC

Unsafe Injection Practices That Led to Patient Harm Include:

- Syringe reuse (with or without same needle)
- Reinserting a used syringe (with or without the same needle), into a medication vial or container (e.g., saline bag) to get more medication for a single patient and then that vial or container is used for other patients
- Preparing injections in close proximity to contaminated supplies or equipment or water

CDC Safe Injection Practices to Prevent Transmission of Infections to Patients

Direct Syringe Reuse

Direct Syringe Reuse

- Using the same syringe patient to patient
  - With or without changing the needle

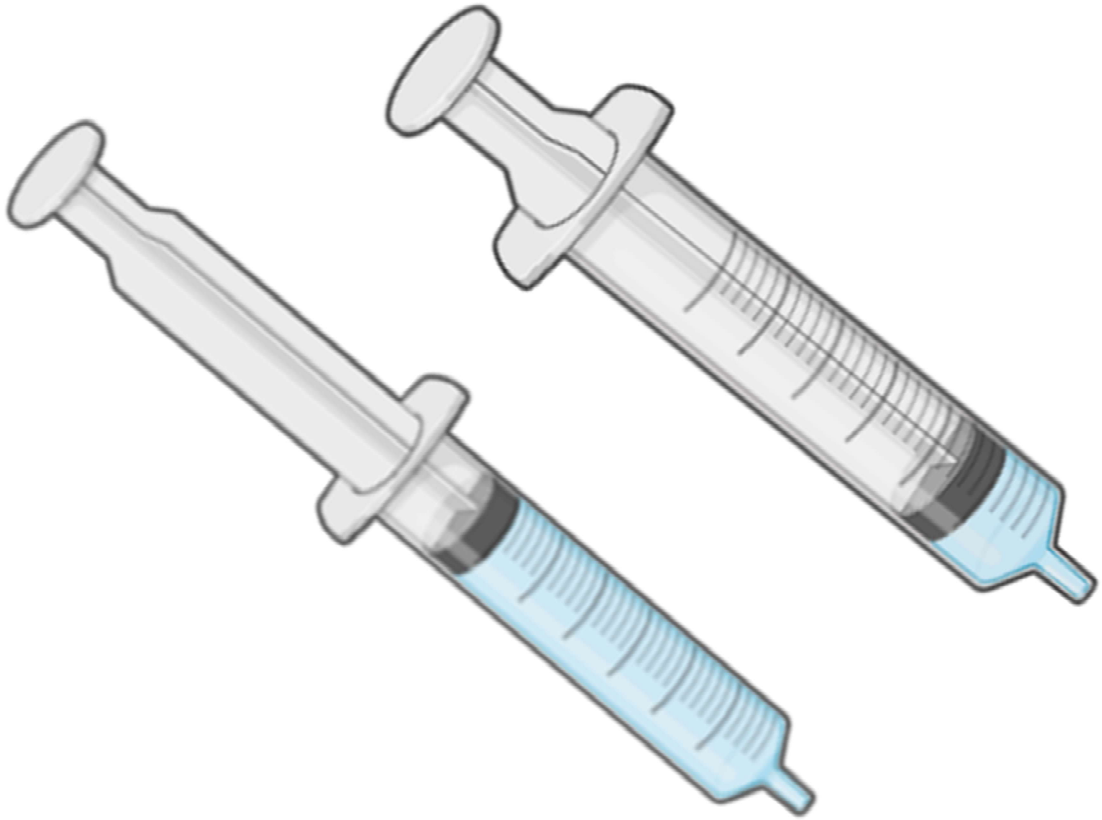

Image Courtesy Biorender

Unsafe Injection Practices That Led to Patient Harm Include:

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- Preparing injections in close proximity to contaminated supplies or equipment or water

CDC Safe Injection Practices to Prevent Transmission of Infections to Patients

Indirect Syringe Reuse & Medication Contamination

Indirect reuse

- Syringe used to inject medication into one patient and then used to re-enter the medication vial or container (ever after needle removal)
- Medication vial or container is now contaminated and is then used for subsequent patients
  - Use of auto-disable syringes can help prevent this from occurring.
  - Never use single-dose vials for more than one patient and one dose.
  - Never use a saline bag as a common source for multiple patients.

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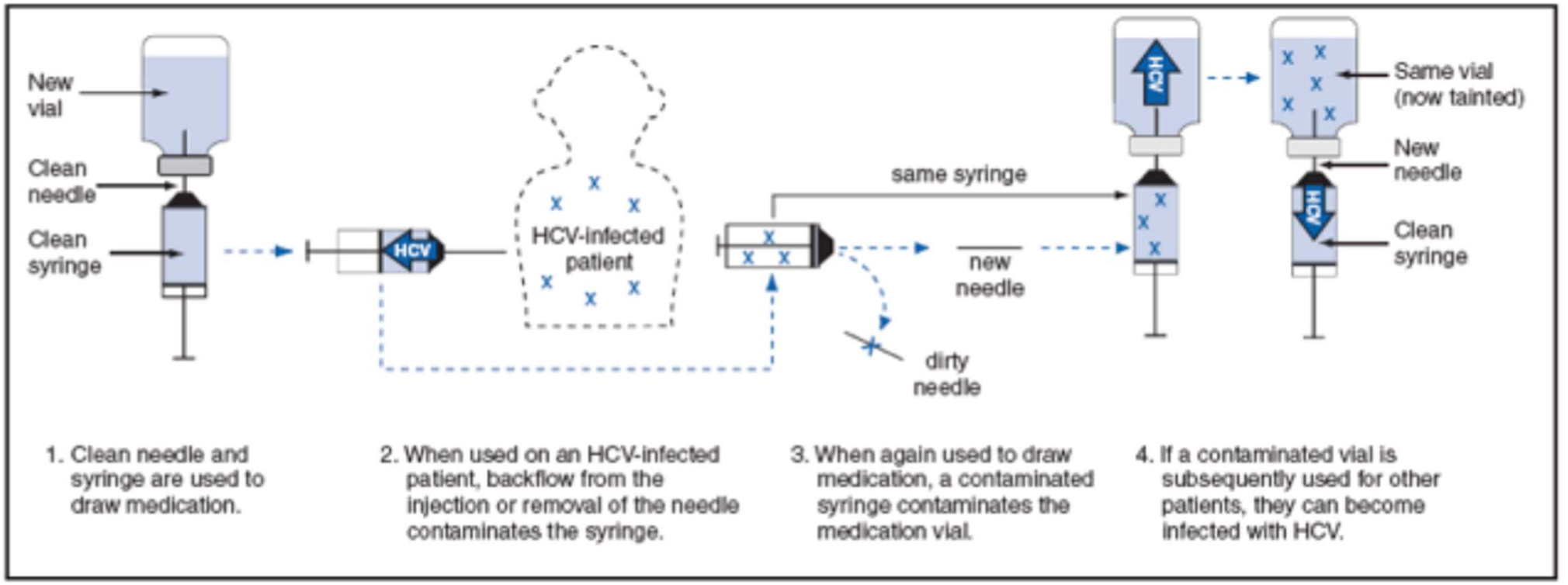
Indirect Syringe Reuse Leading to a Hepatitis C Outbreak

FIGURE 2. Unsafe injection practices and circumstances that likely resulted in transmission of hepatitis C virus (HCV) at clinic A — Nevada, 2007



Key point: Once used, the needle **AND** the syringe are <u>contaminated</u> and must be discarded

Acute Hepatitis C Virus Infections Attributed to Unsafe Injection Practices at an Endoscopy Clinic --- Nevada, 2007

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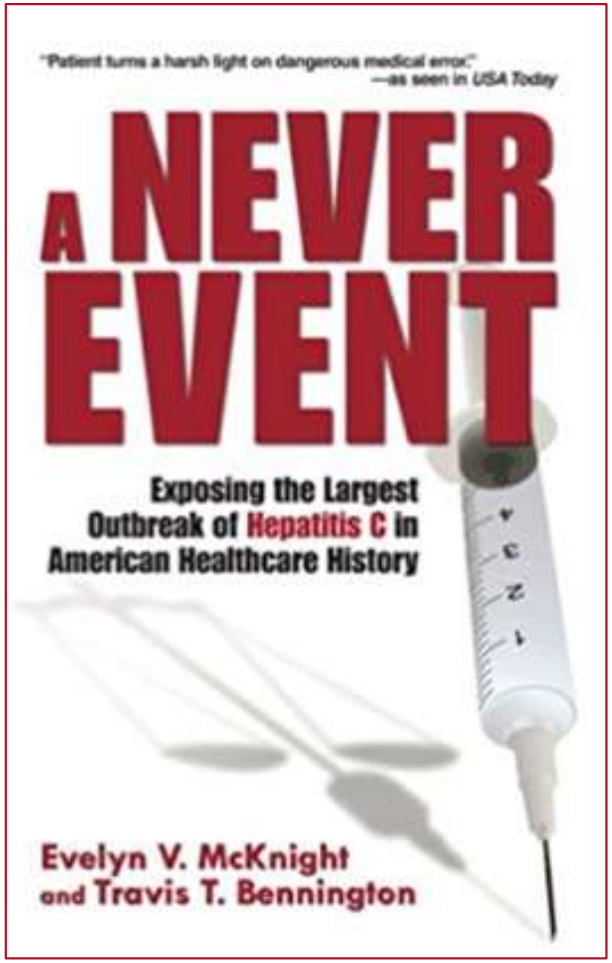
Nebraska Outbreak & Devastating Consequences

Nebraska had one of the largest health-care related outbreaks

- The investigation revealed that the health-care worker responsible for medication infusions routinely used the same syringe to draw blood from patients' central lines and to draw catheter-flushing solution from 500 mL saline bags that were used for multiple patients.
- **99 patients were infected as they were identified to have clinic-acquired hepatitis C virus infection**
- For more information, there is a book and other publications
  - CDC MMWR - Transmission of Hepatitis B and C Viruses in Outpatient Settings - New York, Oklahoma, Nebraska, 2000-2002
  - Unsafe Injections Put Patients at Risk of Serious Illness



Remember One & Only

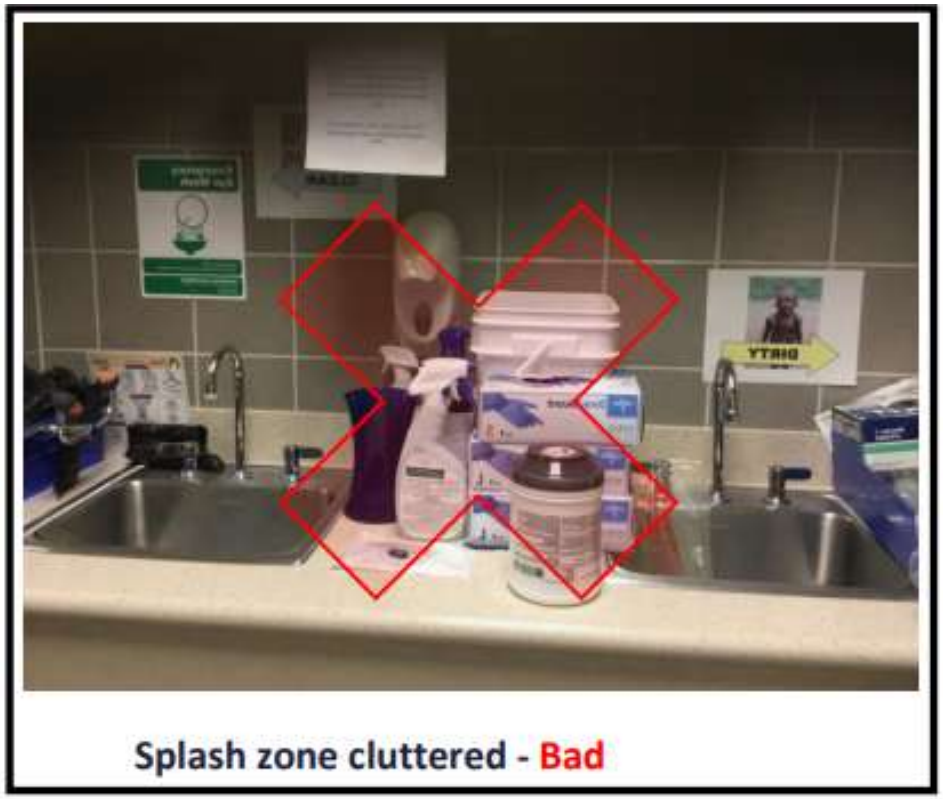
Unsafe Injection Practices That Led to Patient Harm Include:

- Syringe reuse (with or without same needle)
- Reinserting a used syringe (with or without the same needle), into a medication vial or container (e.g., saline bag) to get more medication for a single patient and then that vial or container is used for other patients
- Preparing injections in close proximity to water or contaminated supplies or equipment

CDC Safe Injection Practices to Prevent Transmission of Infections to Patients

Don’t Prepare Medication in Splash Zones

- Outbreaks of infection have been associated with medications like injections contaminated with tap water.
- Do not prepare medications near areas of splashing water (e.g., within 3 feet of a sink).
- Make sure sink splash zones do not contain any items which could become contaminated from hand washing/water splash.
- Mount a splash guard when workspace is limited.



Splash zone cluttered - **Bad**

Splash zone empty – **Good**

Sink with Plexiglass splash guard - **Good**

NE ICAP - In the Zone - The Splash Zone

NE ICAP

Observations Across Nebraska: On-Going Opportunities for Safer Injection Practices

Injection safety remains the biggest area of concern over the past few years identified from Nebraska Infection Control Assessment and Promotion (NE ICAP) program remote and on-site assessments.

- Medication preparation areas in splash zones.
- Lack of safety devices.
- Use of single-dose vials for multiple patients even with a new needle and new syringe.
- Pre-drawing injectable medication.
- Improper storage of injectable medication (past beyond use date, unlabeled, inadequate temperature control.

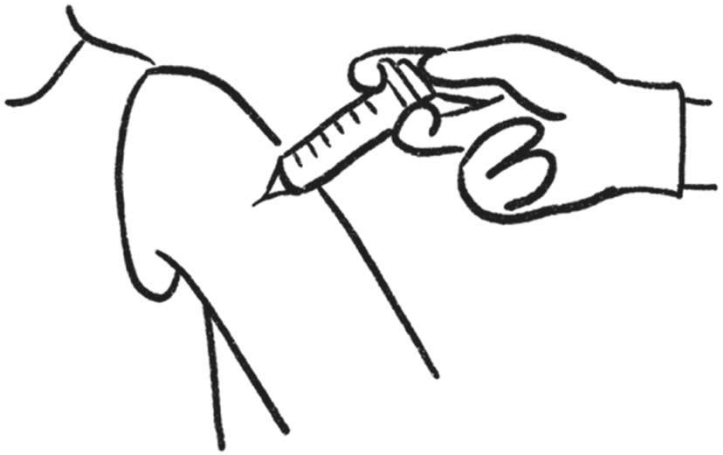


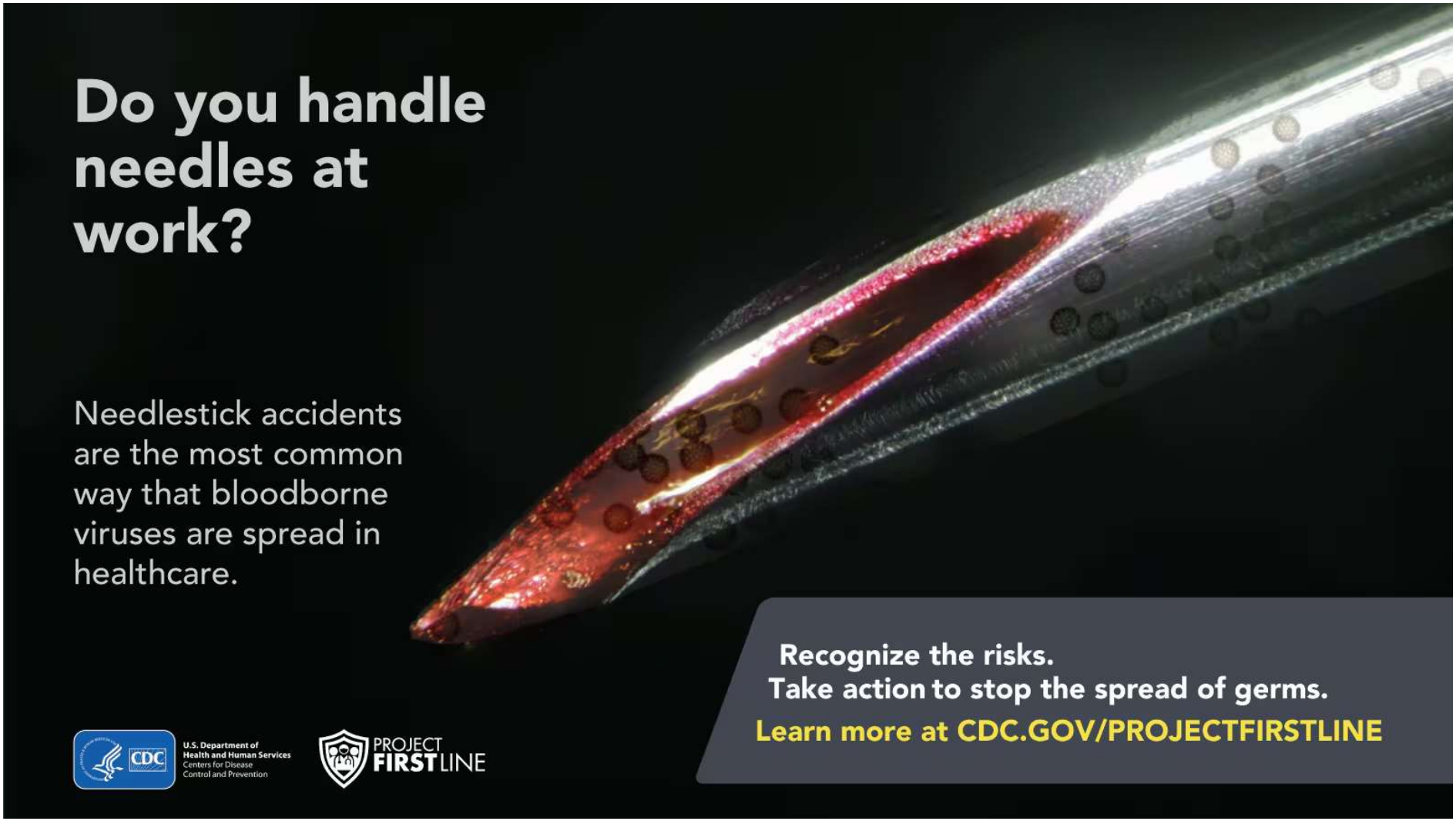
Image Courtesy of rawpixel.com

Safe Injection Practices Across the Facility:

Purchasing, Storing, Handling, Preparing, Administering, Disposing

NE ICAP

Reduce Risk In the Workplace – Purchase Safety Devices & Supplies



[CDC Project Firstline - Do You Handle Needles At Work]

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Use Safety Devices

BE PREPARED. Anticipate injury risks and prepare the patient and work area with prevention in mind. Use a sharps device with safety features whenever it is available.

BE AWARE. Learn how to use the safety features on sharps devices.

DISPOSE WITH CARE. Engage safety features immediately after use and dispose in sharps safety containers.

CDC Sharps Safety Poster

ICAP

Provide Safer Devices for Worker Protection

Safer Medical Devices

Employers are required to consider and use safer medical devices, wherever possible. These devices include those that are needleless or have built-in protection to guard workers against contact with the contaminated sharp. In addition, employers must ask non-managerial patient care workers who could be exposed to contaminated sharps injuries for their input in identifying, evaluating and selecting effective work practice and engineering controls, including safer medical devices. The employer must document consideration and implementation of these devices, and the solicitation of worker input, in the Exposure Control Plan.

OSHA FactSheet

Protecting Yourself When Handling Contaminated Sharps

Sharps are objects that can penetrate a worker's skin, such as needles, scalpels, broken glass, capillary tubes and the exposed ends of dental wires. If blood or other potentially infectious materials (OPIM), as defined in the OSHA Bloodborne Pathogens standard (29 CFR 1910.1030), are present or may be present on the sharp, it is a contaminated sharp and appropriate personal protective equipment must be worn.

A needlestick or a cut from a contaminated sharp can result in a worker being infected with human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), and other bloodborne pathogens. The standard specifies measures to reduce these types of injuries and the risk of infection.

Careful handling of contaminated sharps can prevent injury and reduce the risk of infection. Employers must ensure that workers follow these work practices to decrease the workers' chances of contracting bloodborne diseases.

Safer Medical Devices

Employers are required to consider and use safer medical devices, wherever possible. These devices include those that are needleless or have built-in protection to guard workers against contact with the contaminated sharp. In addition, employers must ask non-managerial patient care workers who could be exposed to contaminated sharps injuries for their input in identifying, evaluating and selecting effective work practice and engineering controls, including safer medical devices. The employer must document consideration and implementation of these devices, and the solicitation of worker input, in the Exposure Control Plan.

Prompt Disposal

Employers must also ensure that contaminated sharps are disposed of in sharps disposal containers immediately or as soon as feasible after use. Sharps disposal containers must be readily accessible and located as close as feasible to the area where sharps will be used. In some cases, they may be placed on carts to prevent patients, such as psychiatric patients or children, from accessing the sharps. Containers also must be available wherever sharps may be found, such as in laundries.

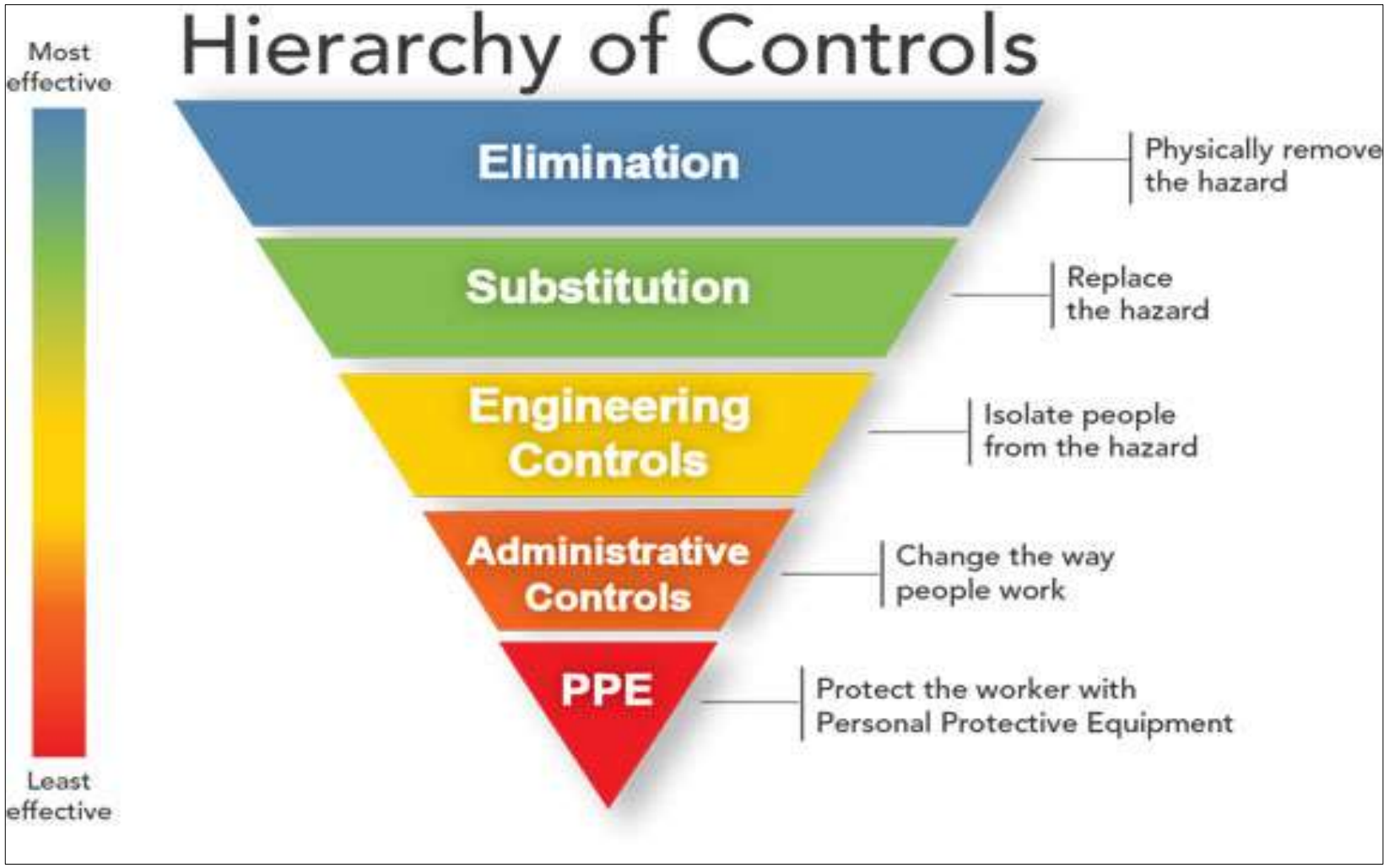
Contaminated sharps must never be sheared or broken. Recapping, bending, or removing needles is permissible only if there is no feasible alternative or if such actions are required for a specific medical or dental procedure. If recapping, bending, or removal is necessary, employers must ensure that workers use either a mechanical device or a one-handed technique. The cap must not be held in one hand while guiding the sharp into it or placing it over the sharp. A one-handed "scoop" technique uses the needle itself to pick up the cap, and then the cap is pushed against a hard surface to ensure a tight fit onto the device. Also, the cap may be held with tongs or forceps and placed over the needle. Contaminated broken glass must not be picked up by hand, but must be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

Sharps Containers

Containers for contaminated sharps must be puncture-resistant. The sides and the bottom must be leakproof. They must be appropriately labeled or color-coded red to warn everyone that the contents are hazardous. Containers for disposable sharps must be closable (that is, have a lid, flap, door, or other means of closing the container), and they must be kept upright to keep the sharps and any liquids from spilling out of the container.

OSHA Protecting Yourself When Handling Contaminated Sharps

Hierarchy of Controls to Reduce Risk



Use the CDC Injection Safety Checklist:
Aseptic Technique &
One Needle, One Syringe, Only One Time

Proper hand hygiene, using alcohol-based hand rub or soap and water, is performed prior to preparing and administering medications.

Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids, or contaminated equipment.

Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).

The rubber septum on a medication vial is disinfected with alcohol prior to piercing.

Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.

Single-dose or single-use medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.

Medication administration tubing and connectors are used for only one patient.

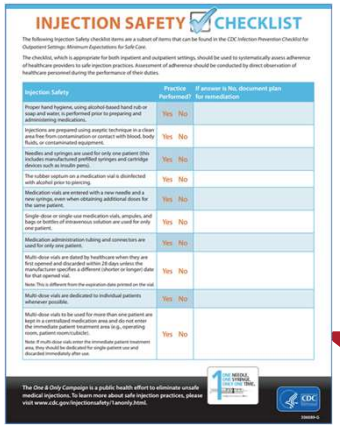
Multi-dose vials are dated by healthcare when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial.

Note: This is different from the expiration date printed on the vial.

Multi-dose vials are dedicated to individual patients whenever possible.

Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle).

Note: If multi-dose vials enter the immediate patient treatment area, they should be dedicated for single-patient use and discarded immediately after use.



CDC Injection Safety Checklist

NE ICAP

Store & Handle Supplies to Maintain Cleanliness & Reduce Risk

- Keep in sterile packaging until time of use
- Consider individual packaging (e.g. bandages, gauze, etc.)
- Cover and protect integrity of supplies
- Only clean hands should access clean supplies
- Store medications and vaccine at temperatures indicated by the manufacturer and discard when expired or otherwise indicated (e.g. beyond use date)

Follow Instructions for Use for Proper Storage

CDC PFL Video - Multi-Dose Vaccine Vial Injection Safety Tips

In-Course Knowledge Check

When does hand hygiene need to be performed by the HCP? Select all that apply.

a) Before preparing medication and touching clean supplies
b) After administering medication
c) Only needed if not wearing gloves
d) Only needed for visibly dirty hands

In-Course Knowledge Check

When does hand hygiene need to be performed by the HCP? Select all that apply.

a) Before preparing medication and touching clean supplies

b) After administering medication

c) Only needed if not wearing gloves

d) Only needed for visibly dirty hands

Prepare Medication in Clean Area

Injections should be prepared in a designated clean area that is not adjacent to potential sources of contamination, including sinks. Any item that could have come in contact with blood or body fluids should not be in the medication preparation area.

The medication preparation area should be cleaned and disinfected on a regular basis and any time there is evidence of soiling.

There should be ready access to necessary supplies (such as alcohol-based hand rub, needles and syringes in their sterile packaging, and alcohol wipes) to ensure that staff can adhere to aseptic technique.

CDC Preventing Unsafe Injection Practices

CDC Train Module 8 Injection Safety LTC IPC

Aseptic Technique & Proper Use of Equipment

- Perform hand hygiene before and after preparing/administering doses.
- Open sterile packages immediately before use.
- Disinfect rubber septum on medication vial with alcohol and allow to dry before piercing.
- Medication vials and containers including pre-filled cartridges or insulin pens are entered with a new needle and new syringe each time.
- Tubing and connectors are dedicated to the one patient.

Image by rawpixel.com

[CDC Injection Safety Checklist]

Use the CDC Injection Safety Checklist:
Safe Use of a Multi-dose Vial (MDV)

Proper hand hygiene, using alcohol-based hand rub or soap and water, is performed prior to preparing and administering medications.
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids, or contaminated equipment.
Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).
The rubber septum on a medication vial is disinfected with alcohol prior to piercing.
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.
Single-dose or single-use medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.
Medication administration tubing and connectors are used for only one patient.

Multi-dose vials are dated by healthcare when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial. Note: This is different from the expiration date printed on the vial.
Multi-dose vials are dedicated to individual patients whenever possible.
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle). Note: If multi-dose vials enter the immediate patient treatment area, they should be dedicated for single-patient use and discarded immediately after use.

Infection control for multi-dose vials is very important

CDC Injection Safety Checklist

ICAP

Single-Dose Vial (SDV) vs. Multiple-Dose Vial (MDV)

A SINGLE-DOSE VIAL (SDV) is approved for use on a **SINGLE** patient for a **SINGLE** procedure or injection.

SDVs typically lack an antimicrobial preservative. Do not save leftover medication from these vials. Harmful bacteria can grow and infect a patient.

DISCARD after every use!

SIZE DOES NOT MATTER!

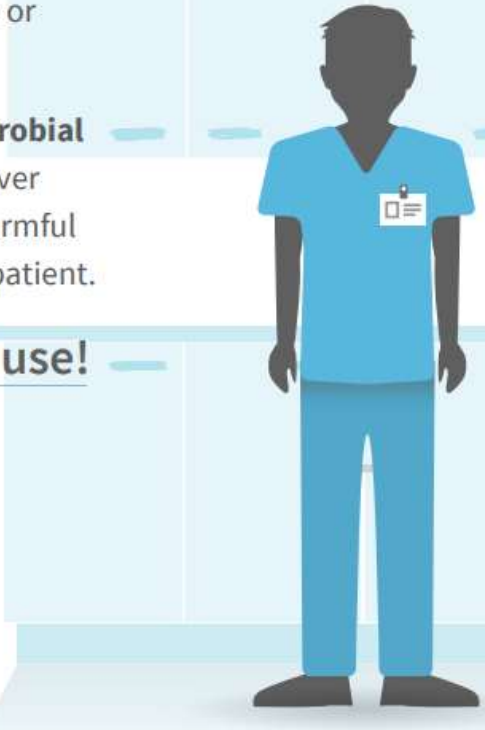
SDVs and MDVs can come in any shape and size. ***Do not assume*** that a vial is an SDV or MDV based on size or volume of medication. ***ALWAYS check the label!***

A MULTIPLE-DOSE VIAL (MDV) is recognized by its FDA-approved label.

Although MDVs can be used for more than one patient when aseptic technique is followed, ***ideally even MDVs are used for only one patient.***

MDVs typically contain an antimicrobial preservative to help limit the growth of bacteria. Preservatives have no effect on bloodborne viruses (i.e. hepatitis B, hepatitis C, HIV).

Discard MDVs when the beyond-use date has been reached, when doses are drawn in a patient treatment area, or any time the sterility of the vial is in question!



CDC Single-Dose or Multi-Dose

FDA Approved Drugs

How to Safely Use a MDV

HOW DO I SAFELY USE A

MULTI-DOSE VACCINE VIAL?

You vaccinate patients to protect them. Correctly using multi-dose vials keeps your patients safe from germs that can spread from contaminated vials, needles, and syringes.

CHECK THAT YOU ARE USING MULTI-DOSE VACCINE VIALS SAFELY ***EVERY TIME.***

- **Always prepare multi-dose vial injections away from patient care spaces in a clean designated area**
- **Clean your hands** before touching the vial
- **Check the label** to make sure it is a multi-dose vaccine vial
- Check to make sure the vaccine is **not expired or "beyond use"**
- **Look and see** if the vaccine appears the way the vaccine maker tells you it should
- Use **brand-new, sterile needles and syringes** for every vaccine dose
- **Disinfect the top** part of the vial (the vial stopper) with an alcohol prep pad—**every time**
- Make sure the **top is dry** before sticking the needle in it
- When you first put a needle in, **write the date and time** on the label
- Follow the vaccine maker's **instructions for storage**
- **Never "pool" doses** (combine partial doses from multiple vials to make one dose for a patient)

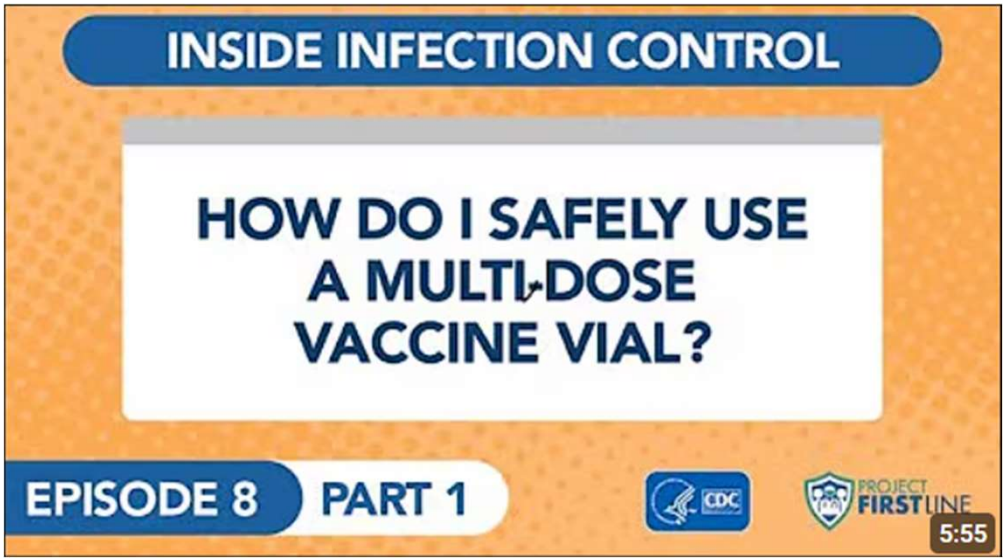
U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

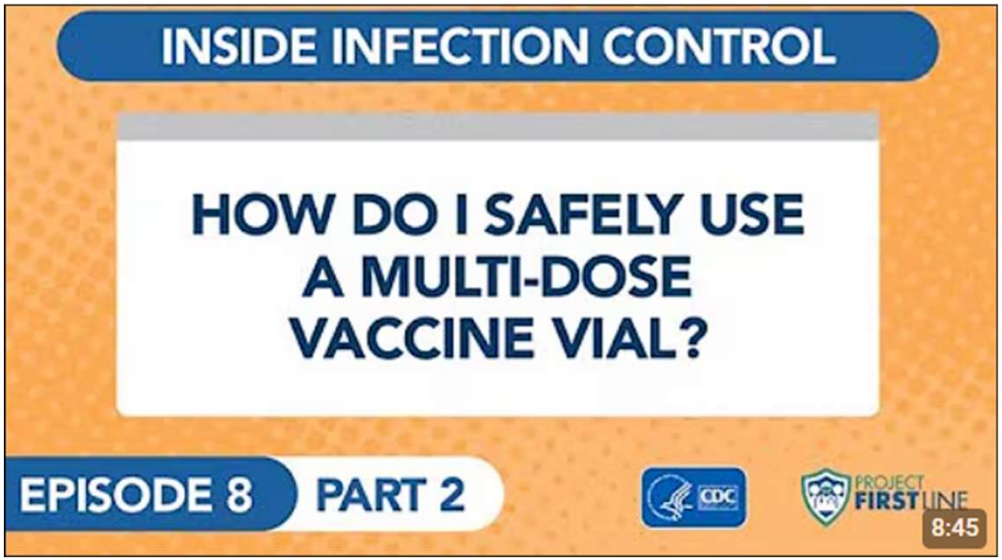
PROJECT FIRSTLINE

[CDC PFL - How Do I Safely Use a Multi-Dose Vaccine Vial?]

ICAP

CDC Project Firstline Short Videos

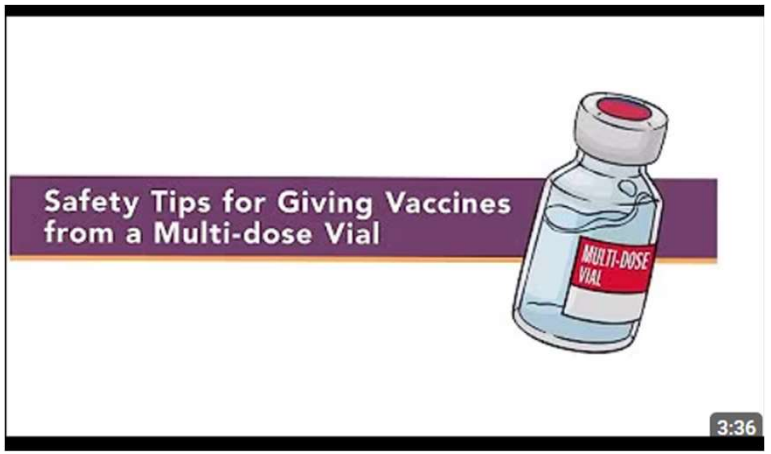




How Do I Safely Use a Multi-Dose Vaccine Vial? Part 1
https://www.youtube.com/watch?v=bRt_FWrpEuQ

How Do I Safely Use a Multi-Dose Vaccine Vial? Part 2
https://www.youtube.com/watch?v=2Cbx4zKm2Fg

Multi-Dose Vaccine Vial Injection Safety Tips
https://www.youtube.com/watch?v=RDH5UH8M07c



In-Course Knowledge Check

Does This Apply to a Single Dose Vial (SDV) or a Multi-Dose Vial (MDV)?

a. Typically does not contain a preservative
    i. SDV
    ii. MDV
b. Can be used for more than one patient
    i. SDV
    ii. MDV
c. Can only be used for a single patient for a single procedure or injection
    i. SDV
    ii. MDV
d. Must be labeled with a beyond use date (BUD)
    i. SDV
    ii. MDV

In-Course Knowledge Check

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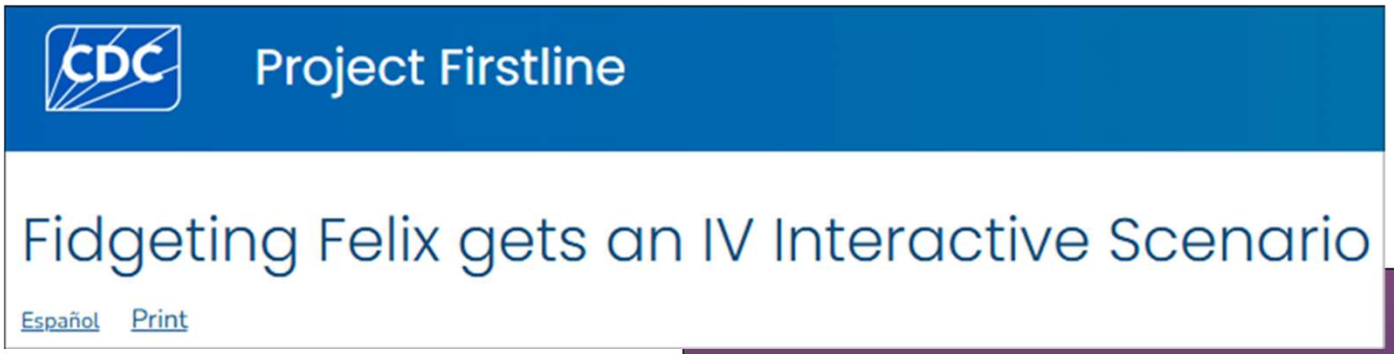
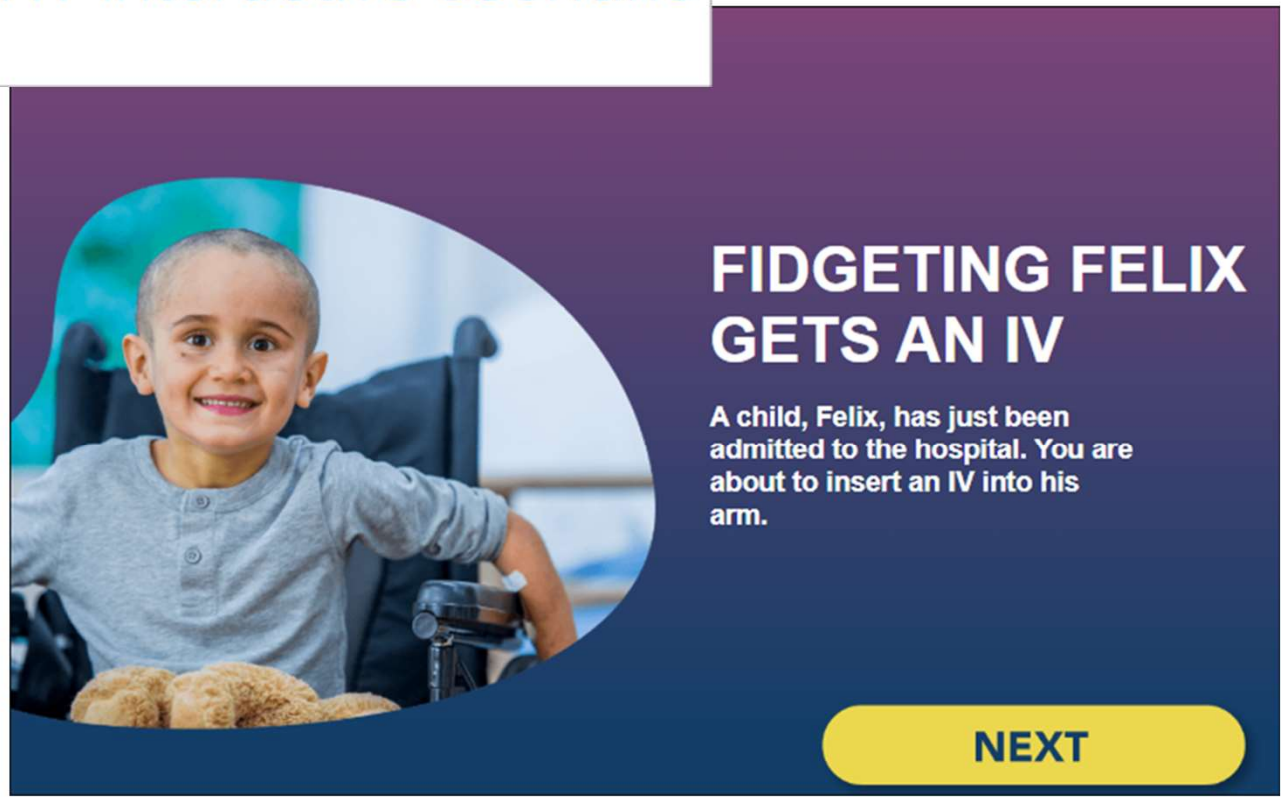
Fidgeting Felix gets an IV Interactive Scenario

Español Print

Scenario by CDC Project Firstline: Fidgeting Felix Gets an IV





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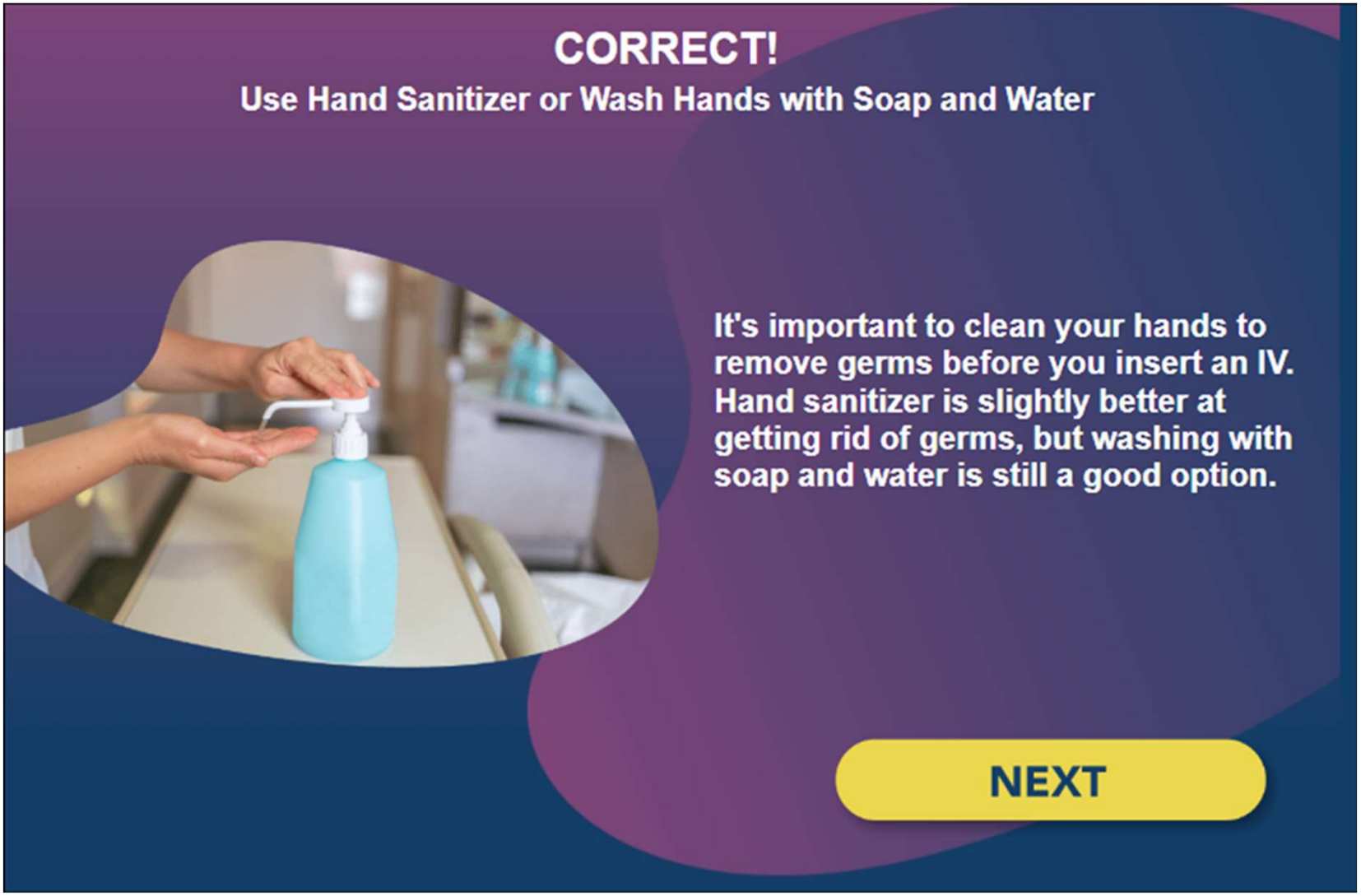

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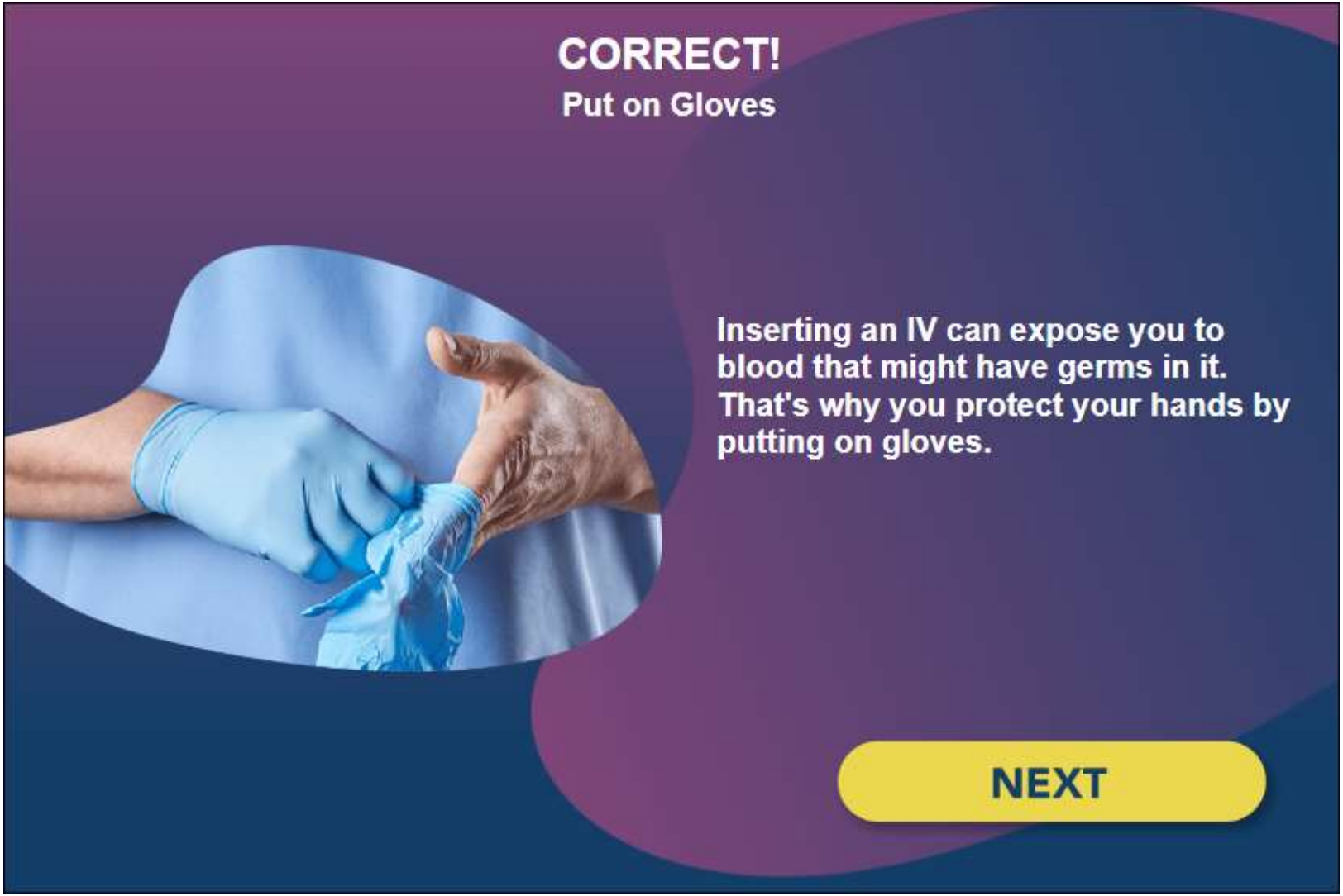

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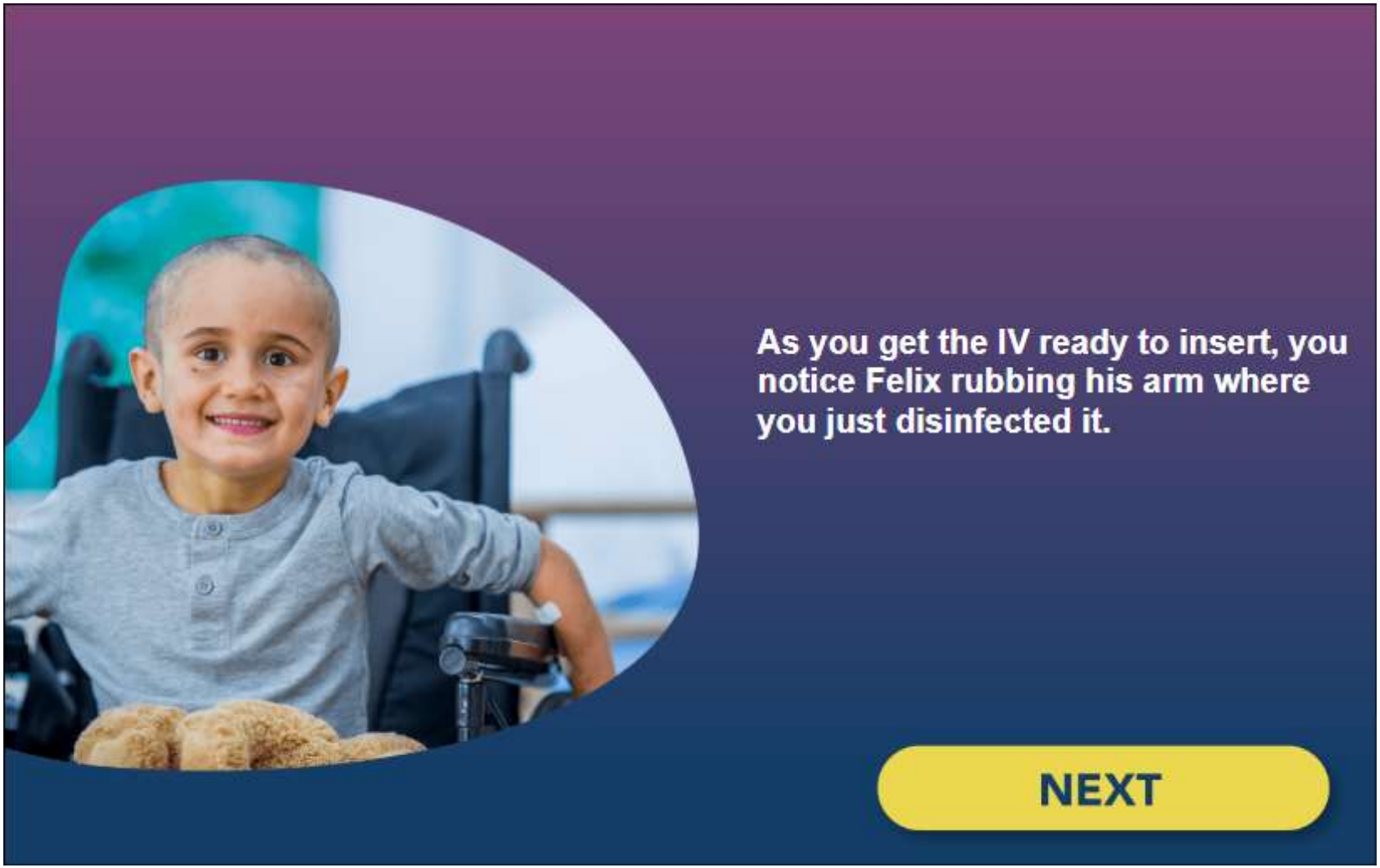

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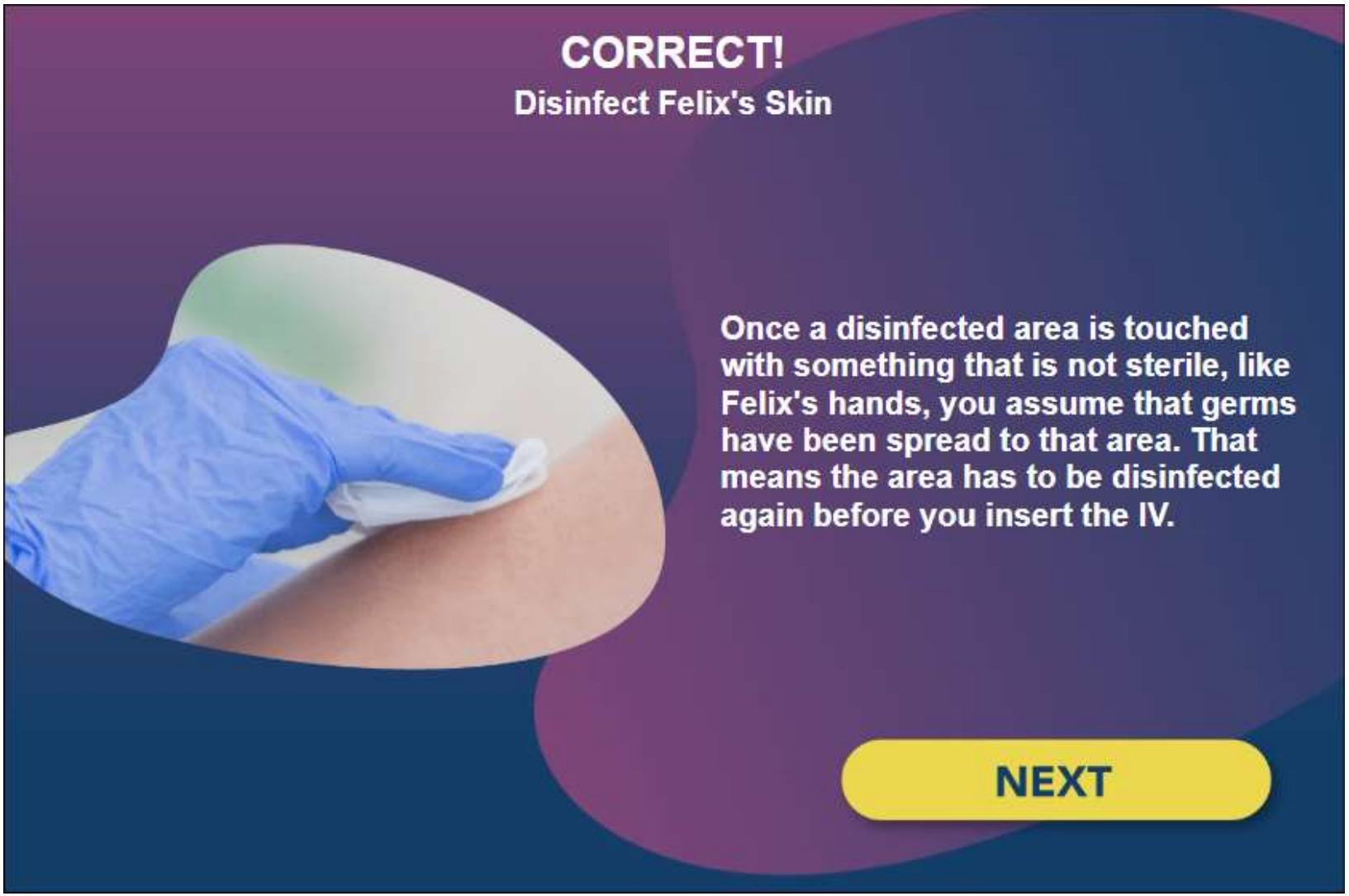

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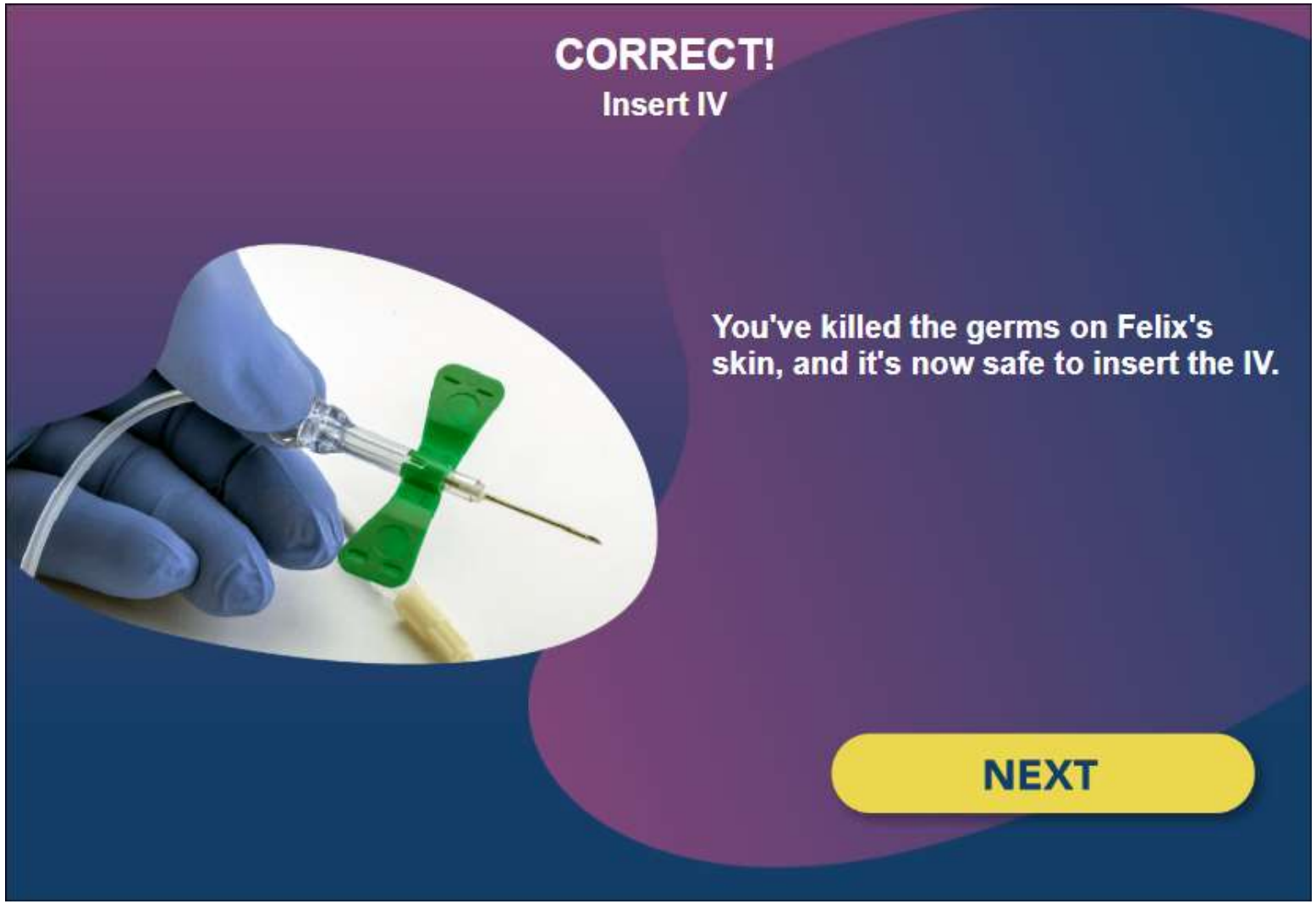

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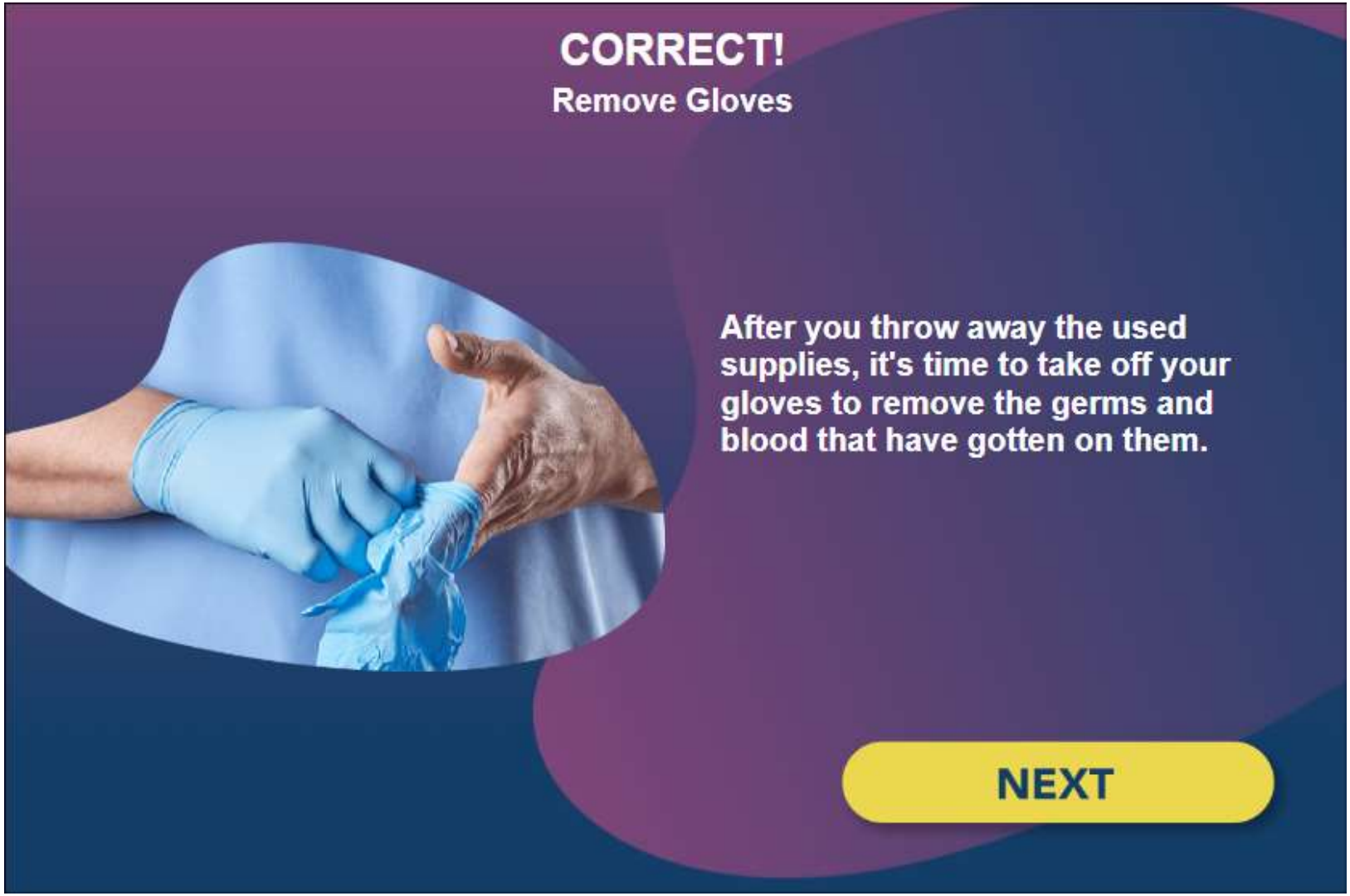

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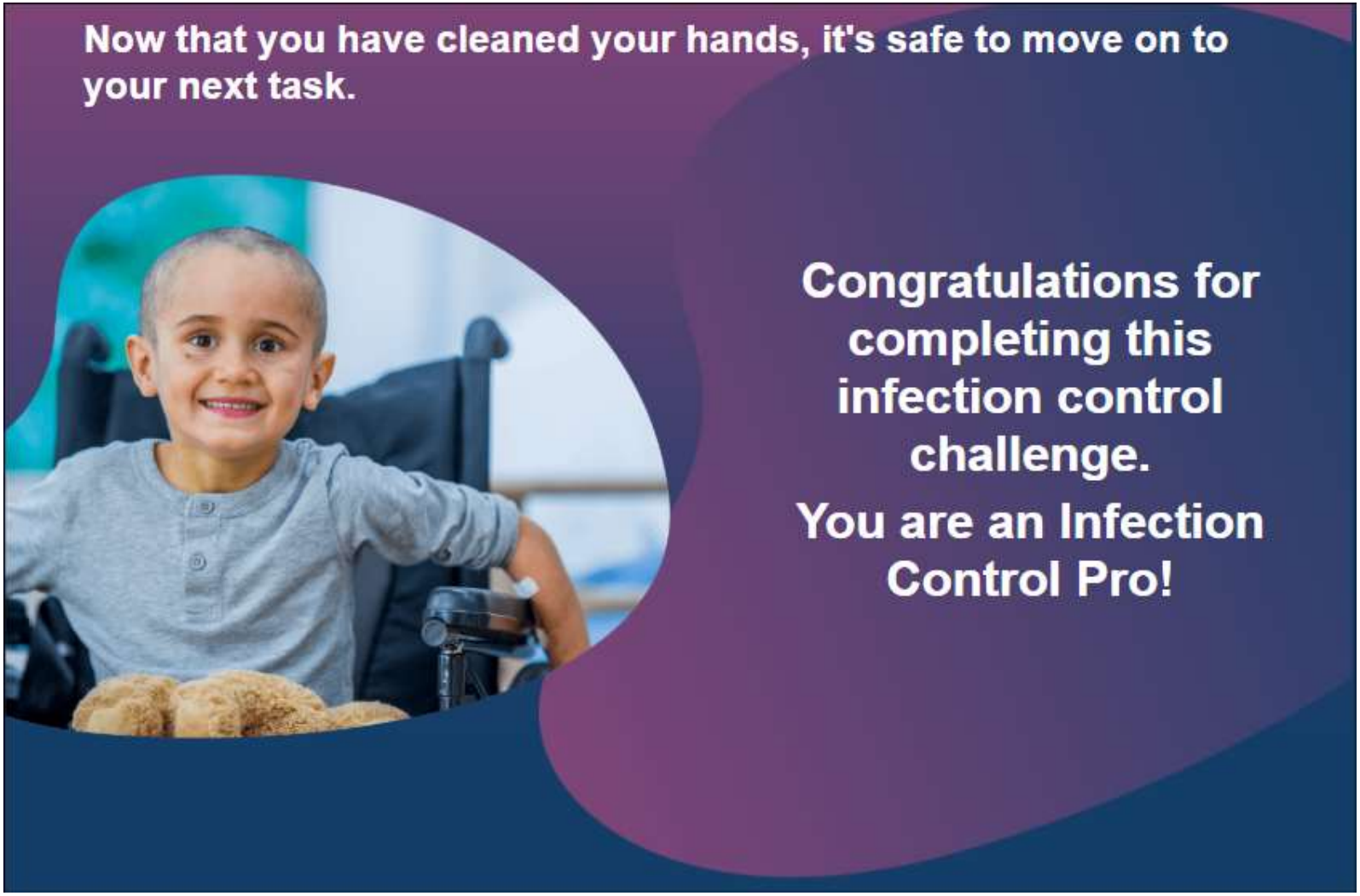

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Facemask for Epidural or Subdural Procedures

Wear a facemask when placing a catheter or injecting material into the epidural or subdural space (e.g., during myelogram, epidural or spinal anesthesia)

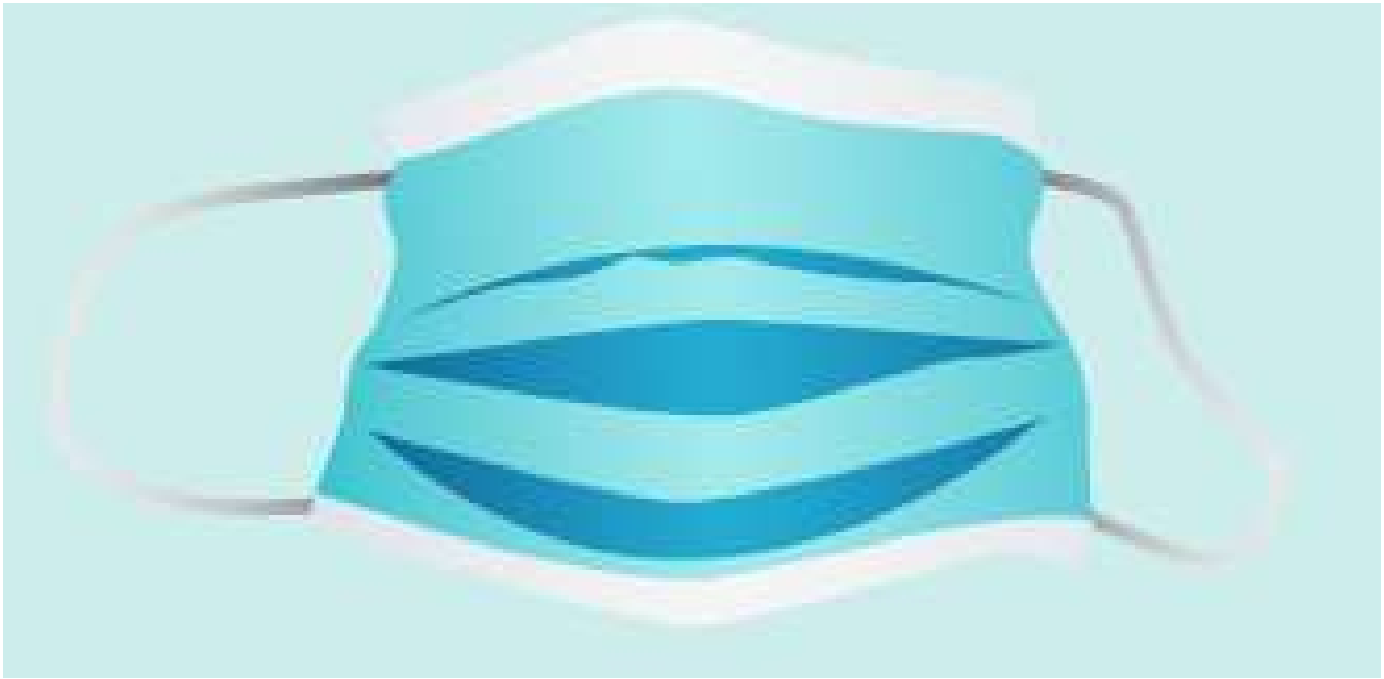
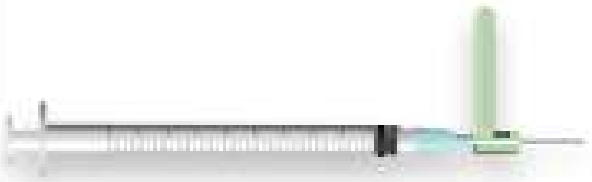


Image Courtesy of CDC

REMEMBER! WHEN PREPARING MEDICATIONS AND INJECTIONS…

NEVER reuse these items:



Needles or syringes that have been used for any purpose

Vials with "single-dose vial" printed on the label

Intravenous tubing

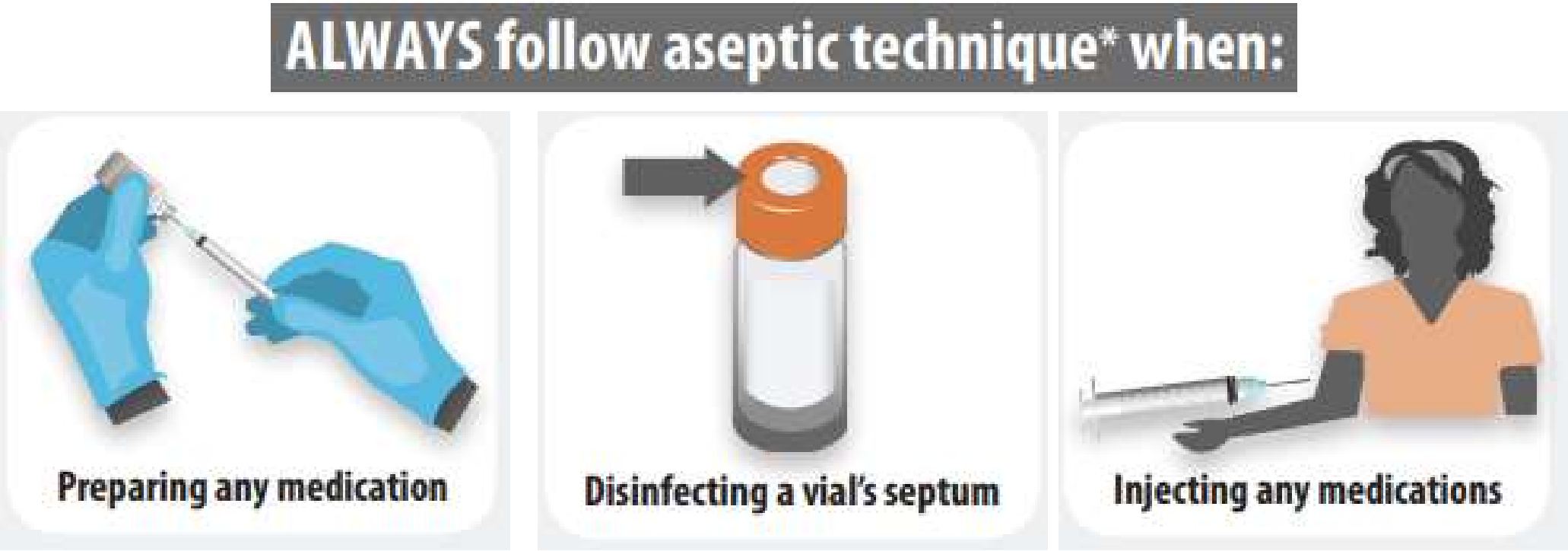
Saline bags

CDC - Do You Provide Treatment for Patients

ALWAYS follow Aseptic Technique

***Use aseptic technique to prevent the contamination of clean areas, equipment, and sterile medications to help prevent the spread of infection.**

<u>Always use</u> aseptic technique when preparing medications, disinfecting the vial's septum, accessing a line (e.g. IV, central line, port), and injecting any medication.



[CDC - Do You Provide Treatment for Patients]

Prompt Proper Sharps Disposal

Once used, needles and syringes should be discarded, intact, in an appropriate sharps container.

Containers should be compliant with the OSHA Bloodborne Pathogens Standard:

- Closable
- Puncture-resistant
- Leak-proof
- Labeled or color-coded

Syringe being placed into red sharps disposal container with biohazard label.

FDA - Sharps Disposal Containers in Health Care Facilities
CDC Train Module 8 Injection Safety LTC IPC

Photos of Unsafe Practices

NE ICAP

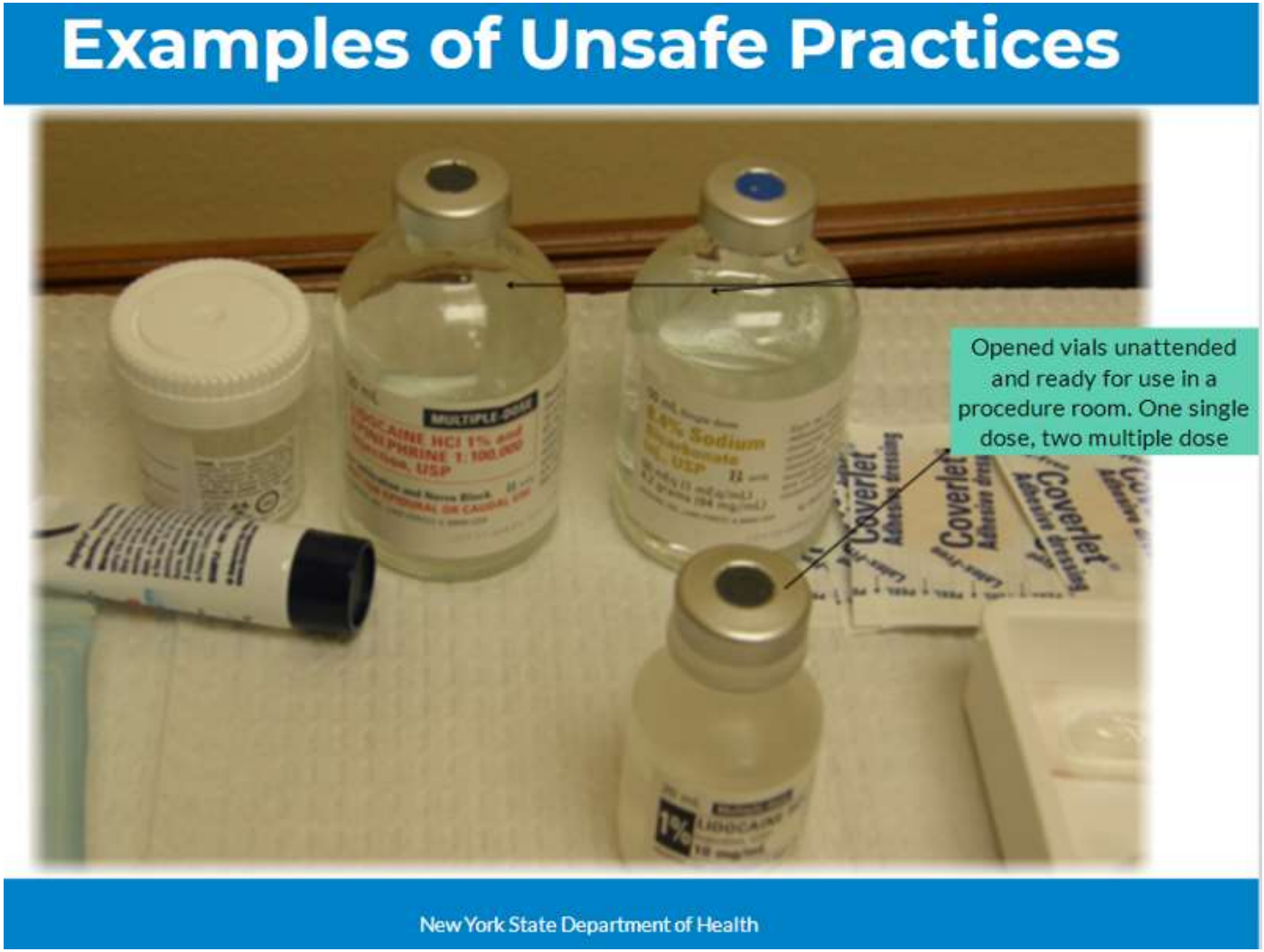
What is Wrong With Photo?

Examples of Unsafe Practices

New York State Department of Health

CDC Train - Safe Injection Practices for Healthcare Settings 1084876

What is Wrong With Photo?



CDC Train - Safe Injection Practices for Healthcare Settings 1084876

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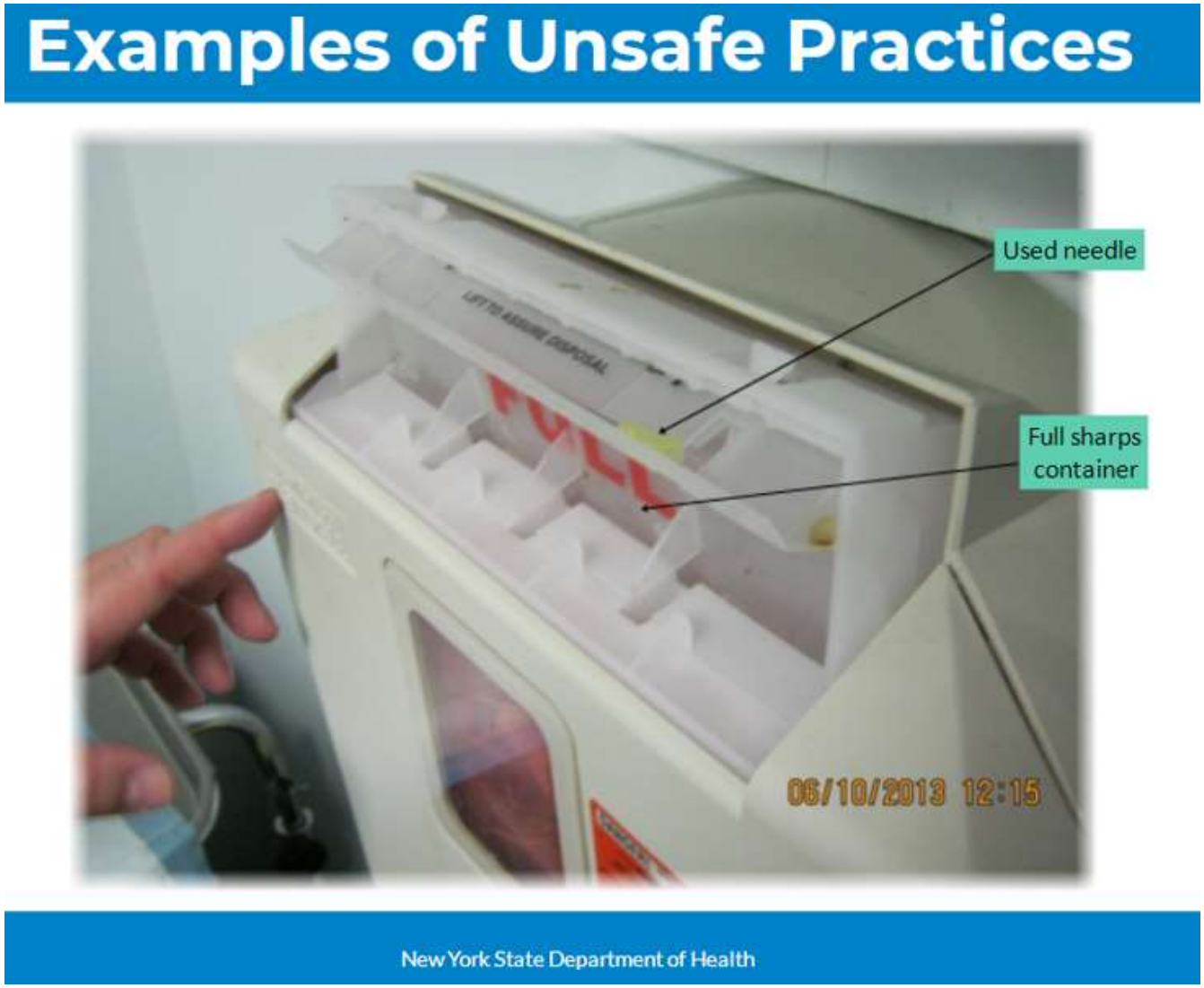


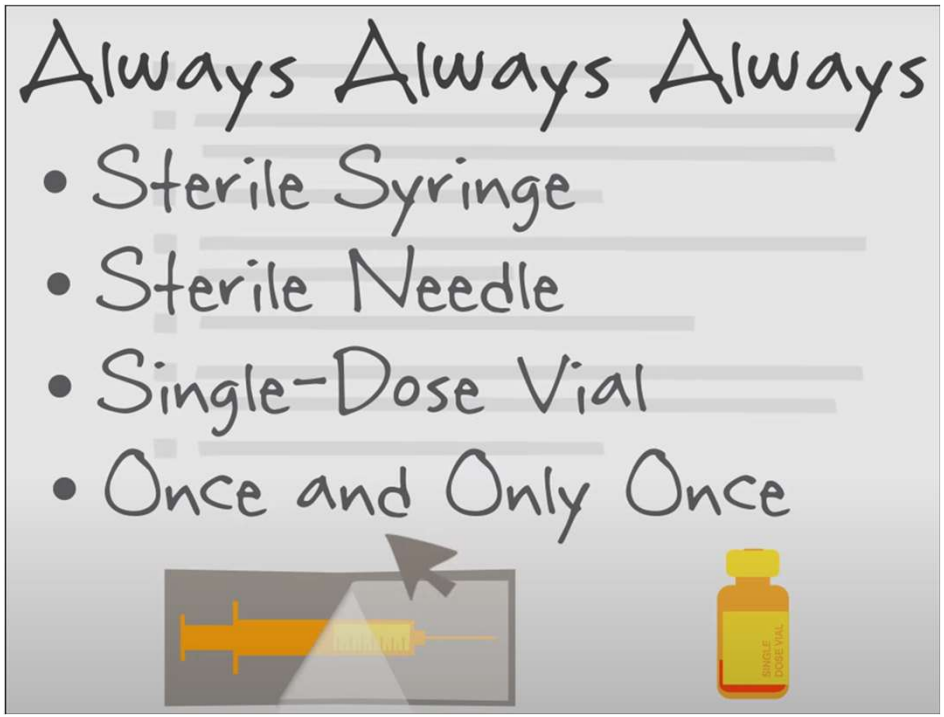
CDC Train - Safe Injection Practices for Healthcare Settings 1084876

Call to Action & Additional Resources

NE ICAP

Closing Thoughts

- ✓ Ensure you review policies and procedures that should be clear and follow evidence-based guidelines
- ✓ Ensure you receive job-specific competency-based training tailored for you and your role
- ✓ Incorporate the CDC Injection Safety Checklist elements into your everyday practice
- ✓ Read medication package inserts for instructions for use
- ✓ Never administer anything in question
- ✓ Workplaces should be safe – ensure safety devices and safe practices
- ✓ Be open to being audited or auditing others to validate practices
- ✓ Provide and receive both positive and constructive feedback for safety



Safe Injection Practices - How to Do It Right

Call to Action

Safe Injection Practices - How to Do It Right

SAFETY STEPS

FOLLOW THESE INJECTION SAFETY STEPS FOR SUCCESS!

BEFORE THE PROCEDURE

Carefully ***read the label*** of the vial of medication.

- If it says single-dose and it has already been accessed(e.g. needle-punctured), ***throw it away.***
- If it says multiple-dose, ***double-check the expiration date*** and the beyond-use date if it was previously opened, and visually inspect to ensure no visible contamination.
- When in doubt, throw it out.

DURING THE PROCEDURE

Use aseptic technique.

- Use a new needle and syringe for every injection.

- Be sure to clean your hands immediately before handling any medication.
- Disinfect the medication vial by rubbing the diaphragm with alcohol.
- Draw up all medications in a clean medication preparation area.

AFTER THE PROCEDURE

Discard all used needles and syringes and SDVs after the procedure is over.

MDVs should be discarded when:

- the beyond-use date has been reached
- doses are drawn in a patient treatment area
- any time vial sterility is in question

Click for more information:

FAQs Regarding Safe Practices for Medical Injections

Additional Resources for an Infection Preventionist

CDC STRIVE Infection Control Training - Competency Based Training - Audits - Feedback

CDC Injection Safety Policy and Procedure Template

CDC's Core IPC Practices for Safe Healthcare Delivery in All Settings

CDC Train Module 8 Injection Safety LTC IPC

Patients Put Their Trust In You
Thank You Using Safe Injection Practices

Image Courtesy of rawpixel.com