Safe Injection Practices & Drug Diversion Awareness:

Training for Front-Line Healthcare Personnel for Safe Healthcare Delivery

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CDC's National Training Collaborative for Healthcare Infection Control

NE ICAP

Learning Objectives

- Define safe injection practices.
- 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."
- Describe clean areas for safe injection and medication preparation.
- List at least 3 differences between single-dose vials and multi-dose vials.
- Describe how germs can directly and indirectly spread to patients due to injectable drug diversion.

Safe Injection Practices

Overview & Importance

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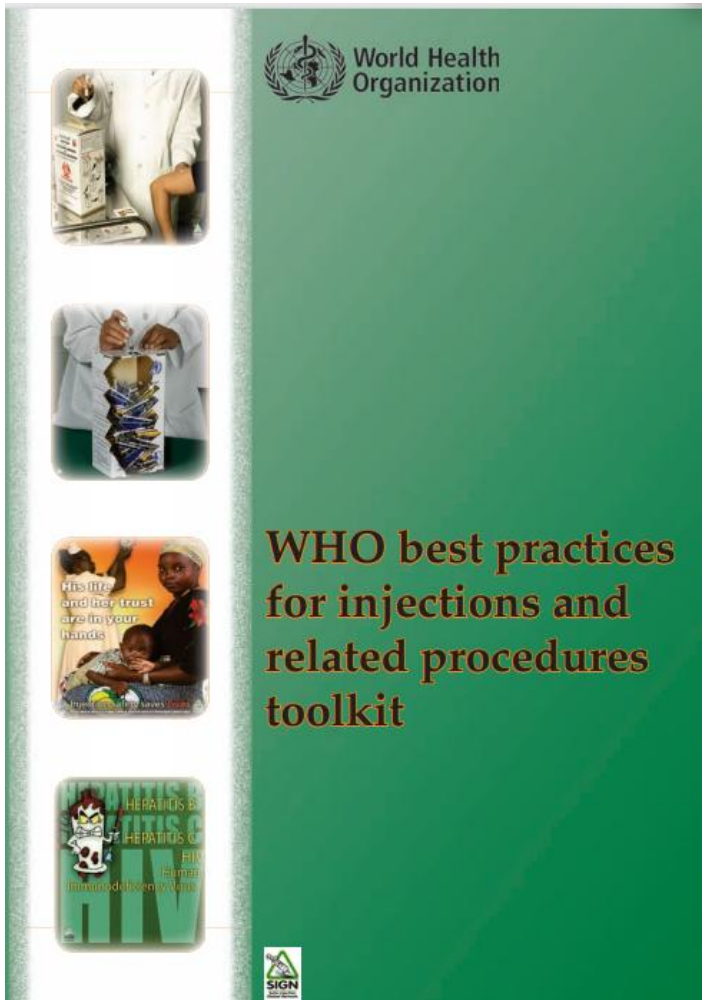
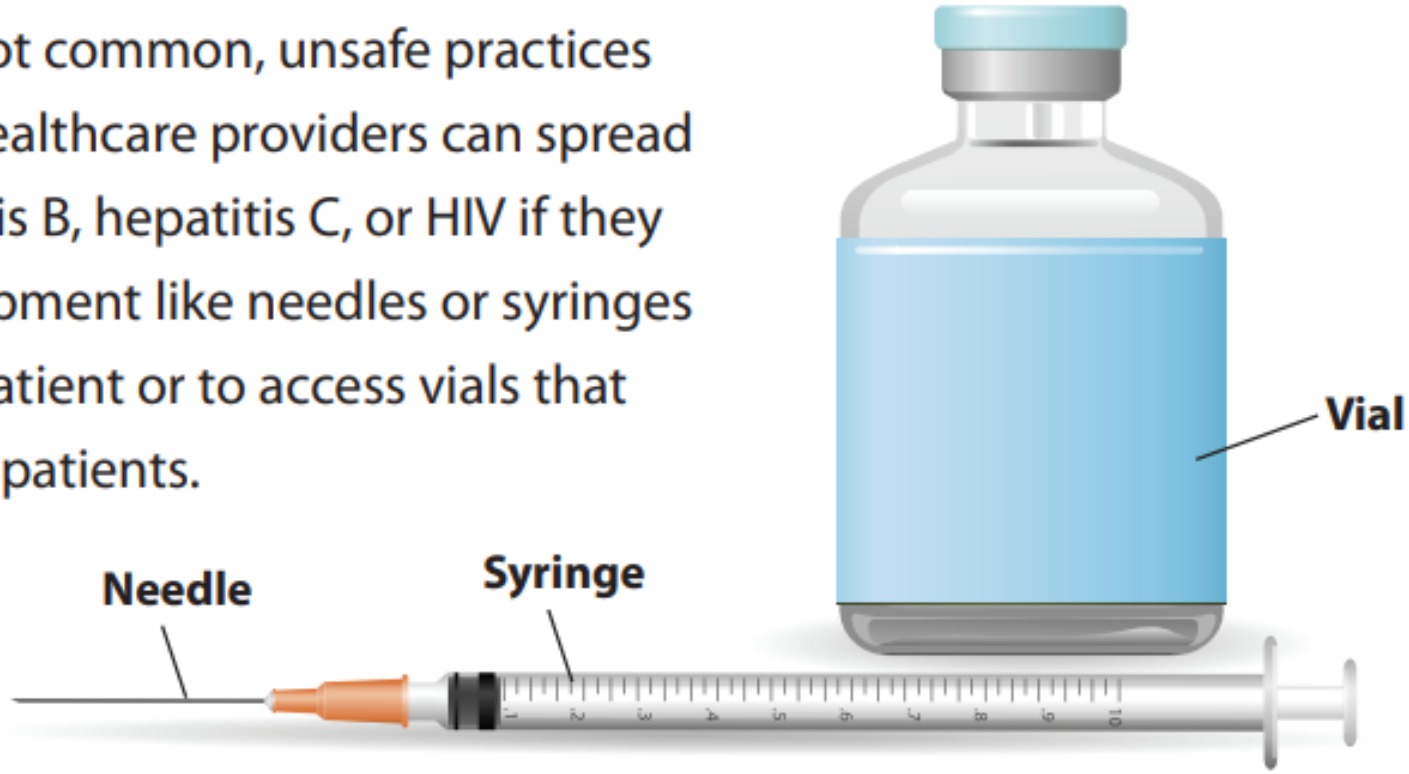
World Health Organization (WHO) Statement on Safe Injections

- *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.*



Did You Know That Unsafe Practices Still Occur?

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.

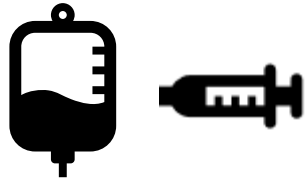


Five Elements of How Germs Spread and Cause Infection

What are “Safe Injection Practices?”

- Safe injection practices are part of CDC’s core infection prevention and control practices for safe healthcare delivery in all healthcare settings.
- Safe injection practices are a set of actions intended to prevent the spread of germs 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)

Safe Injection Practices

Recommended practices when preparing and administering injectable medications

- Preparation of injections in designated clean area.
- Adherence to aseptic technique.
- Proper use of injection equipment.
- Proper disposal of injection equipment.
- Proper identification and handling of medication containers.
  - Single-dose and single-use containers.
  - Multi-dose vials.
- Storage of medications in accordance with the manufacturer's recommendations, including practices to prevent theft (diversion) of controlled substances.

In-Course Knowledge Check

- True or False:
  - Safe injection practices are part of CDC's core infection prevention and control practices for safe healthcare delivery in all healthcare settings.

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In-Course Knowledge Check

- **True** or False:
  - Safe injection practices are part of CDC's core infection prevention and control practices for safe healthcare delivery in all healthcare settings.

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Drug Diversion

Be Aware of Infection Prevention and Control Risks

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Drug Diversion Can Be an IPC Risk

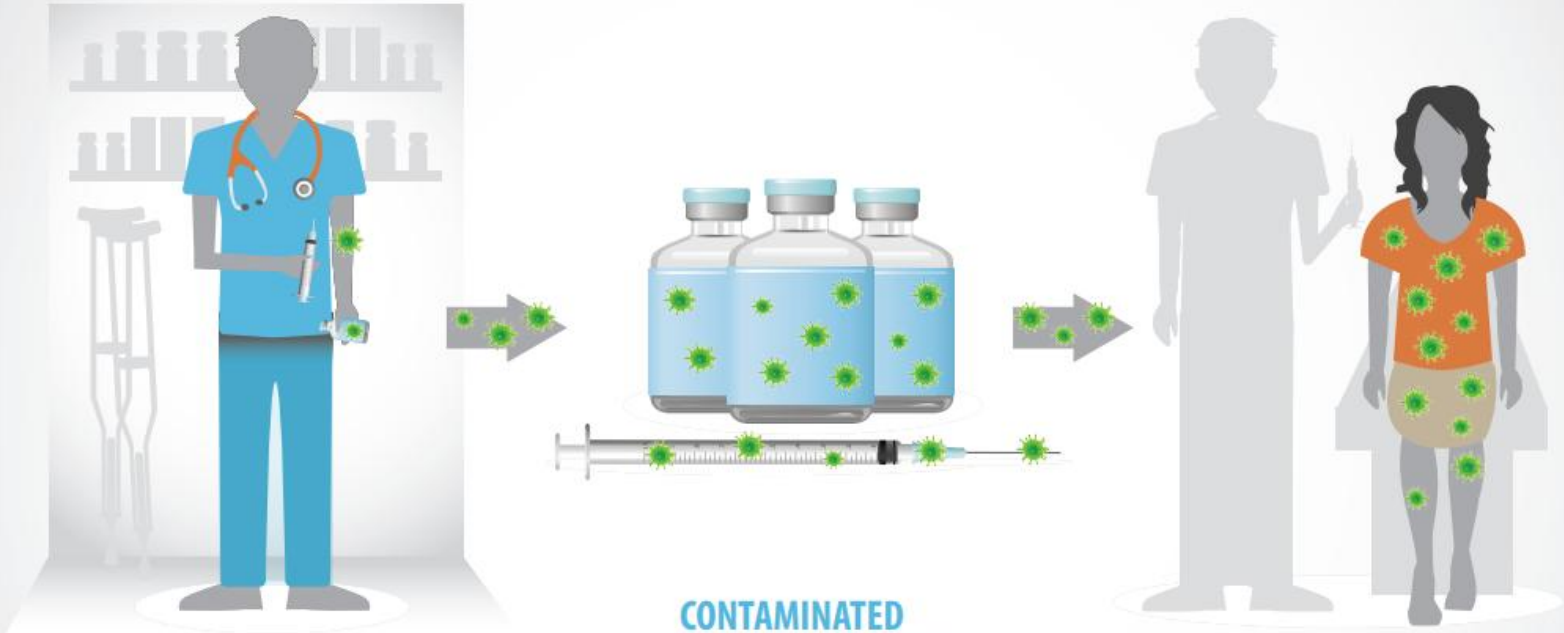
- Some healthcare personnel (HCP) steal prescription medicines or controlled substances, such as opioids, for their own use. This behavior leads to unsafe situations like:
  - An impaired HCP providing or delivering substandard care.
  - Patients denied essential pain medication or therapy.
  - HCP spreading germs 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

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*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.

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Possible Signs and Methods of Drug Diversion

Procurement and Storage

- Product container is compromised
- Purchase orders or packing slips removed

Prescribing

- Prescriptions pads diverted
- Prescriptions forged or altered
- Prescriber self-prescribes

Preparation and Dispensing

- Drug is replaced by similar looking product
- Removing volume from pre-mixed solutions
- Overfill from vial is diverted

Administration

- Drug withdrawn on a discharged patient
- Drug documented as given but not administered
- Waste not adequately witnessed, then diverted
- Substitute product given so drug is diverted

Waste, Removal, and Destruction

- Drug is removed from unsecure waste container
- Waste in syringe is replaced with other product
- Expired drugs are diverted from holding area

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 when preparing, dispensing, and during wastage.
- Follow all controlled substances policies.
- Be aware of possible signs of drug diversion and substance abuse.

Possible Signs of Drug Diversion or Opioid Abuse

- Possible signs of drug diversion could include:
  - Has heavy or no "wastage" of medication
  - Has a pattern of removal of controlled substances near or at the end of a shift
  - Exhibits a pattern of holding waste until oncoming shift
  - Linked to medication loss or patient complaints about not receiving medications documented as administered

- Physical signs of opioid abuse could include:
  - Slurred speech
  - Constricted pupils
  - Itching and scratching
  - Needle track marks

High Risk and Harm from Unsafe Practices

Impact of Unsafe Injection Practices

Consequences of Unsafe Injection Practices

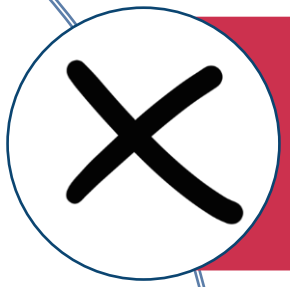
Patient illness and death

Loss of clinician license

Legal charges/ malpractice suits

Criminal charges

Unsafe Injection Practices That Led to Patient Harm Include:



Syringe reuse (with or without same needle)

Inserting a used needle and syringe into a multidose medication vial

Preparing injections in close proximity to water sources and other potential sources of contamination.

Don’t Reuse Syringes

- Use a new sterile syringe and needle for each patient. Once used, the syringe and needle are both contaminated and must be discarded.

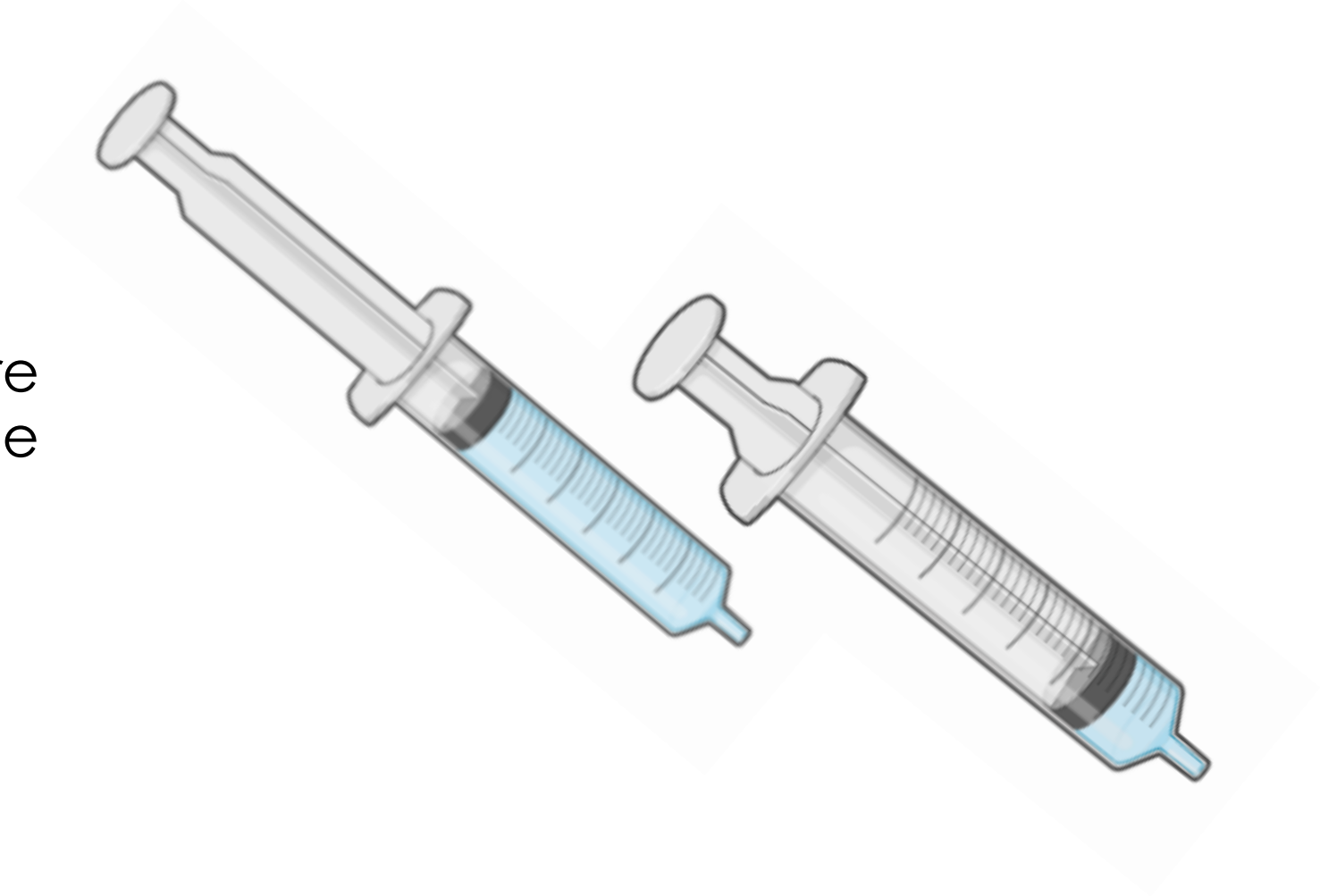


Image Courtesy Biorender

Unsafe Injection Practices That Led to Patient Harm Include:

- Syringe reuse (with or without same needle)
- Inserting a used needle or syringe into a multidose medication vial
- Preparing injections in close proximity to water sources and other potential sources of contamination.

Always Use a New Needle and New Syringe

- Always use needles and syringes for one patient only.
- Always enter medication vials with a new needle and a new syringe.
- To prevent the spread of germs:
  - Use single-dose vials for parenteral medications whenever possible.
    - Never use single-dose vials for more than one patient and one dose.
    - If multidose vials must be used, both the needle or cannula and syringe used to access the multidose vial must be new, even when obtaining additional doses for the same patient.
  - Never use a saline bag as a common source for multiple patients.

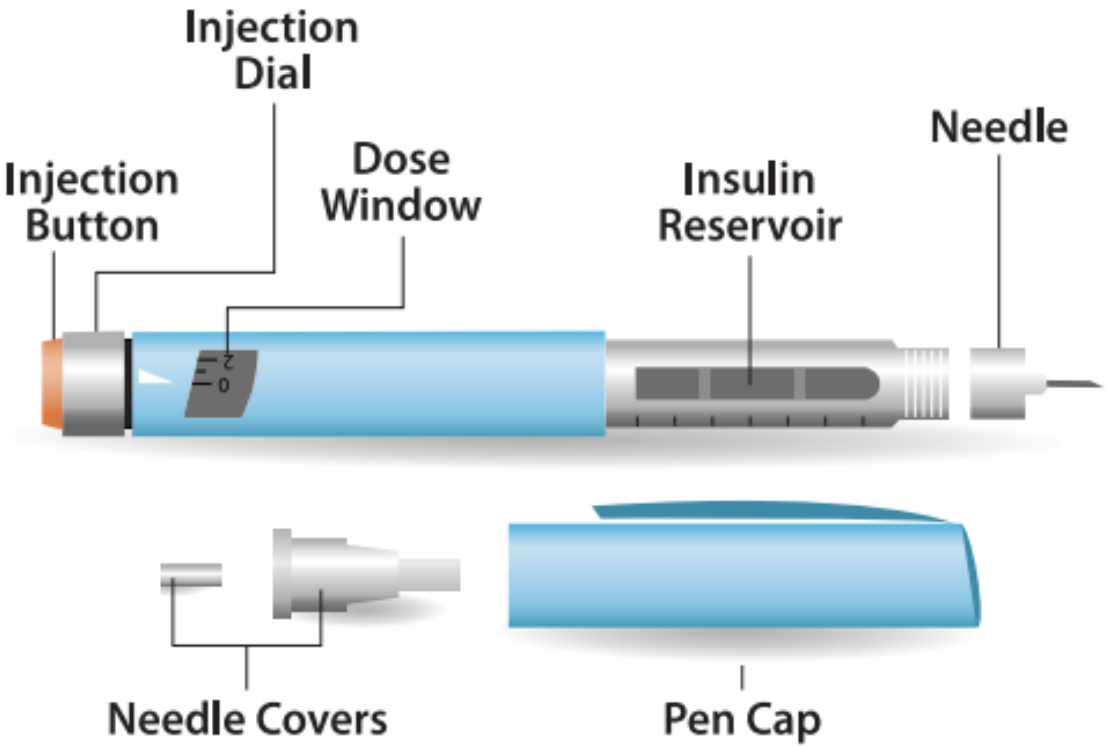
Safety Considerations for Multi-Dose Vials of Insulin

- Multi-dose vials of insulin should be dedicated to a single patient whenever possible.
  - If the vial must be used for more than one patient, it should be stored and prepared in a dedicated medication preparation area outside of the patient care environment.
  - Medication vials should always be entered with a new needle and new syringe.
  - Dispose of used injection equipment at point of use in an approved sharps container.

CDC - Considerations for Blood Glucose Monitoring and Insulin Administration

Don’t Share Insulin Pens

- Insulin pens should never be used for more than one patient, even when the needle is changed.
- Clearly label insulin pens and other injection equipment with the patient's name or other identifying information to ensure that the correct pen is used only on the correct patient.
- If reuse is identified, patients should be promptly notified and offered appropriate follow-up including bloodborne pathogen testing.

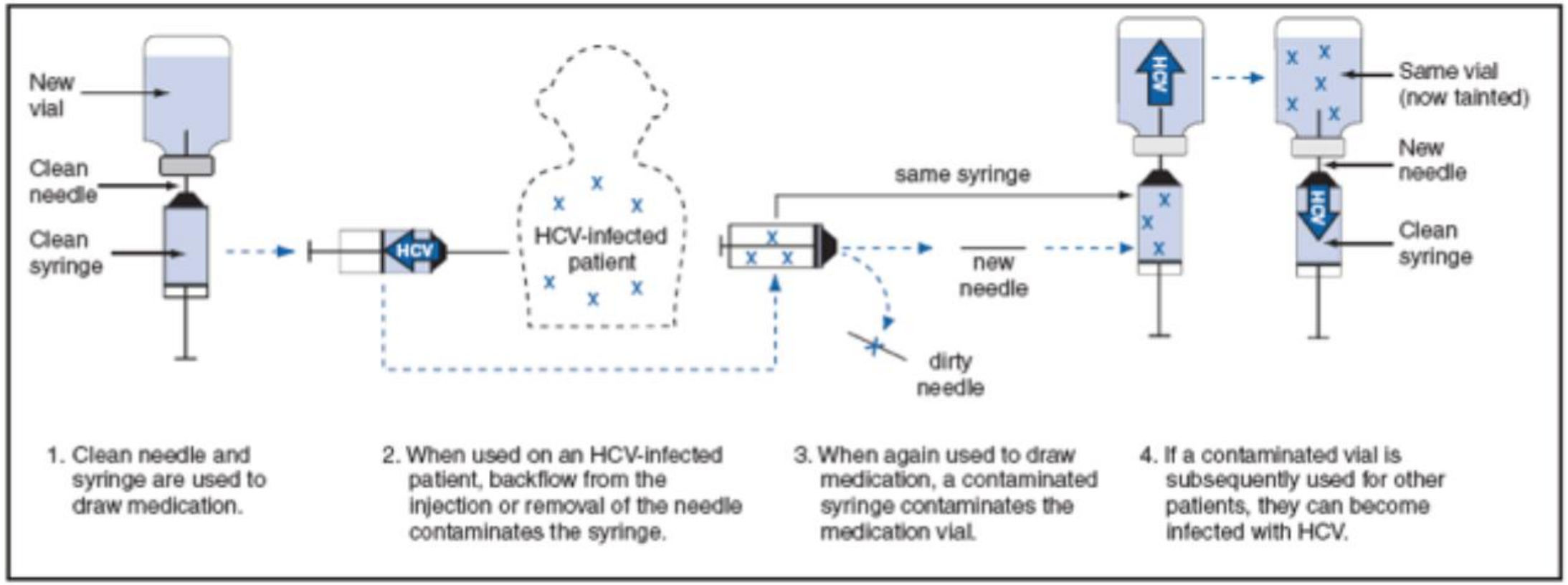


- Although invisible to the eye, back flow of blood into the insulin pen can happen during an injection. This can spread germs to patients if the pen is used for more than one person, even when the needle is changed.

CDC - Be Aware Don't Share Handout

Syringe Reuse Leading to a Hepatitis C Outbreak

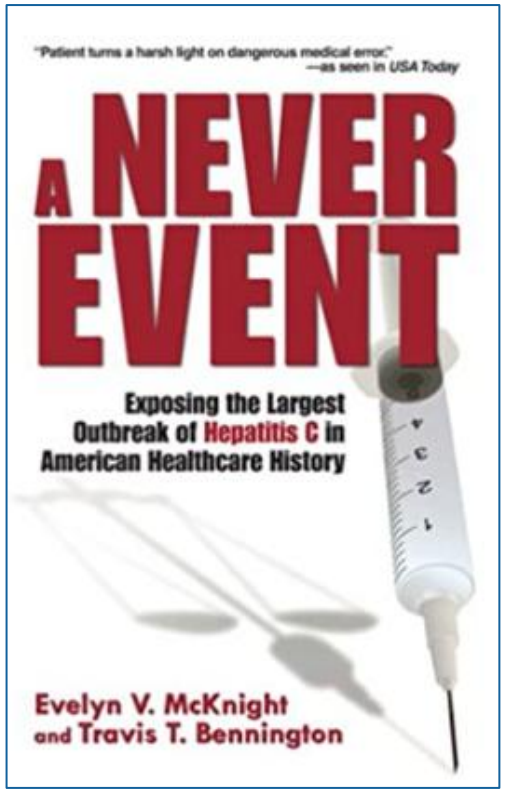
FIGURE 2. Unsafe injection practices and circumstances that likely resulted in transmission of hepatitis C virus (HCV) at clinic A — Nevada, 2007



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

Nebraska Outbreak & Devastating Consequences

- Nebraska had one of the largest health-care related outbreaks
  - The investigation revealed that the healthcare worker responsible for medication infusions routinely used the same syringe to draw blood from patients' central lines and then 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



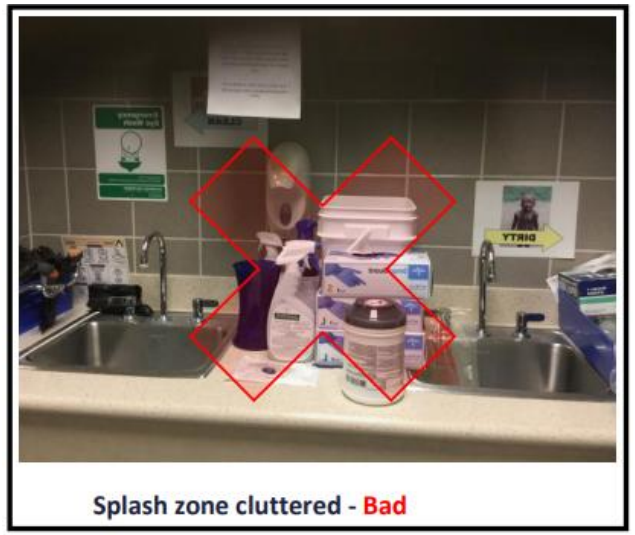
Remember One & Only

Unsafe Injection Practices That Led to Patient Harm Include:

- Syringe reuse (with or without same needle)
- Inserting a used needle and syringe into a multidose medication vial
- Preparing injections in close proximity to water sources and other potential sources of contamination.

Don't Prepare Medication in Splash Zones

- Germs can live and grow in water, including 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

Sink with splash guard – Good

Splash zone empty – Good

Sink with Plexiglass splash guard - Good

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, or inadequate temperature control.

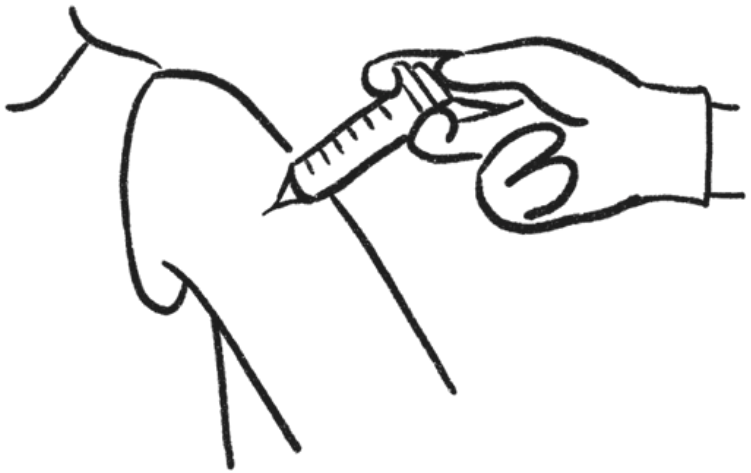


Image Courtesy of rawpixel.com

Safe Injection Practices Across the Facility:

Purchasing,
Storing,
Handling,
Preparing,
Administering,
Disposing

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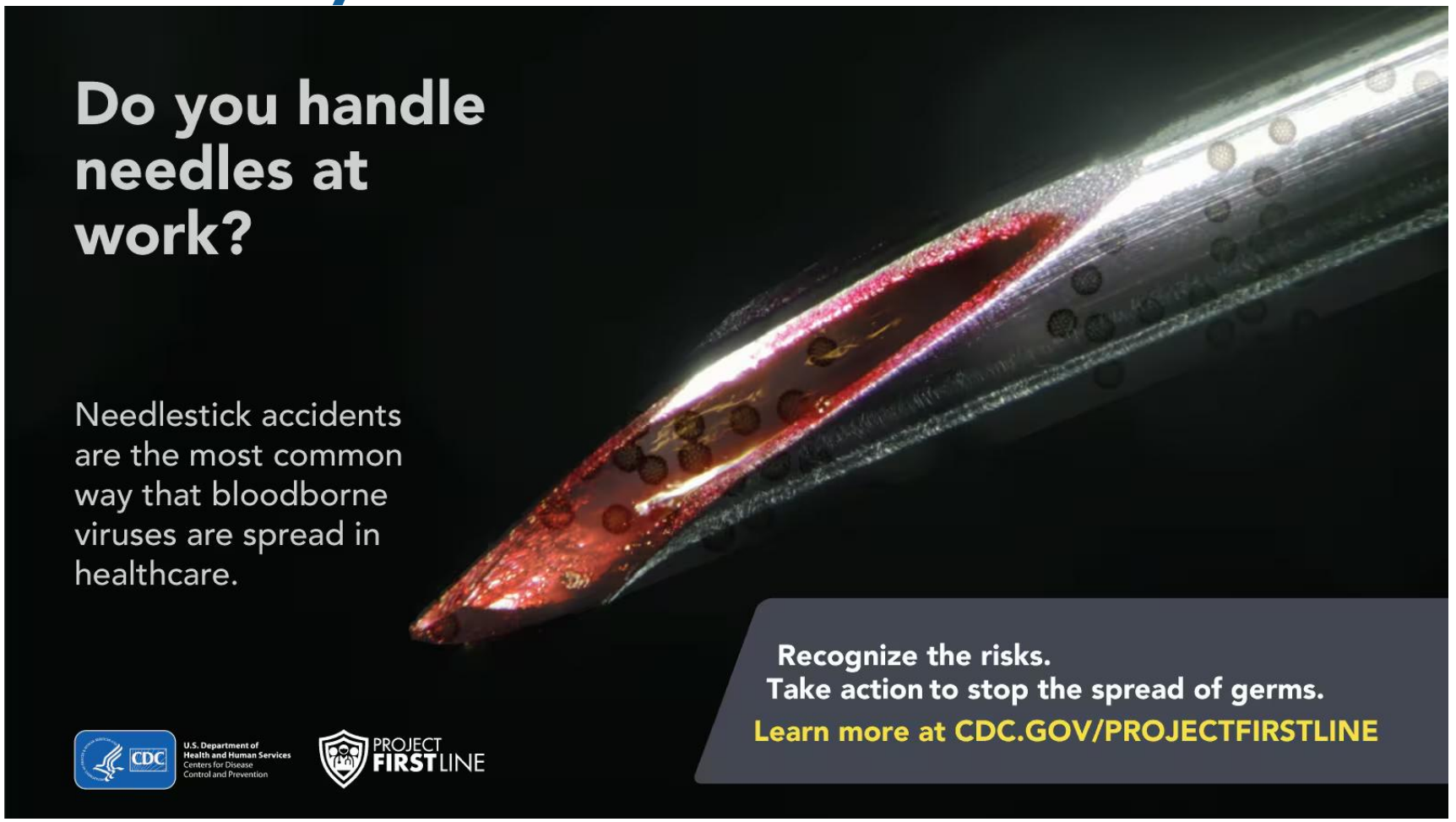
Reduce Risk In the Workplace – Purchase Safety Devices



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.

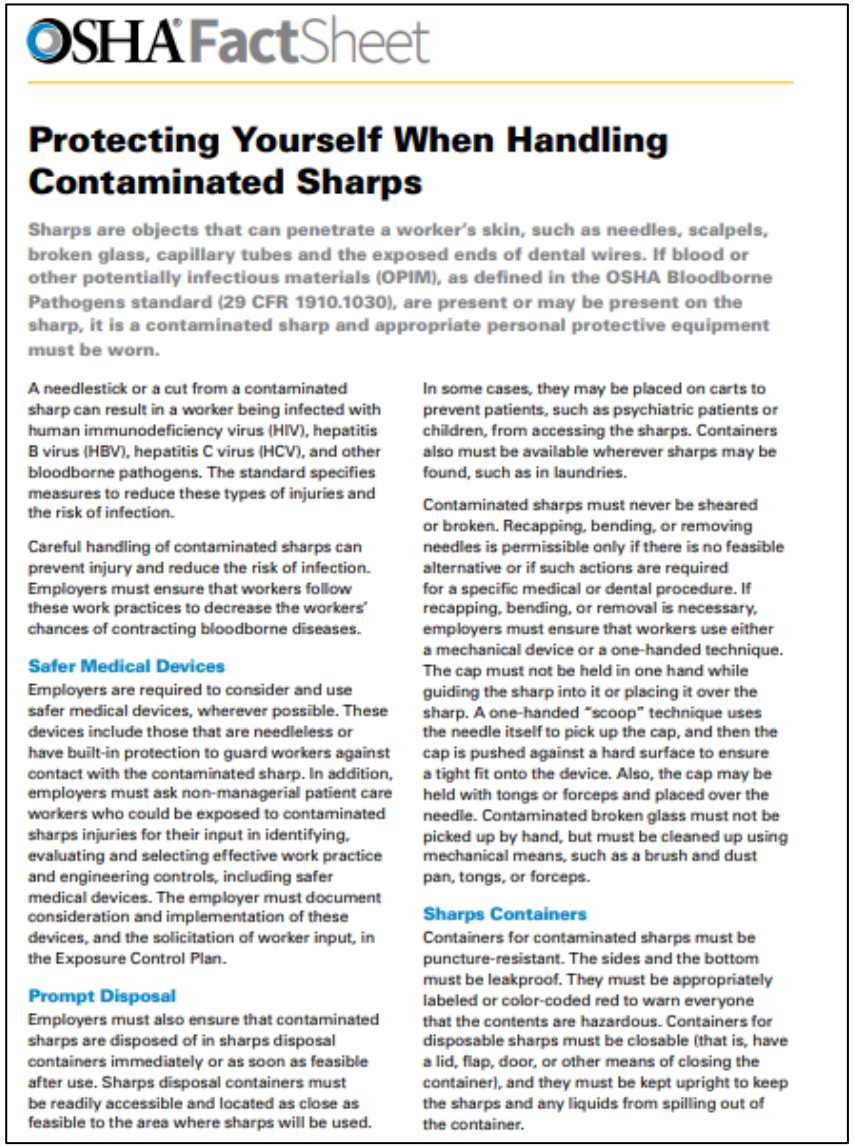
DISPOSE WITH CARE. Engage safety features immediately after use and dispose in sharps safety containers.

CDC Sharps Safety Poster

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.

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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.

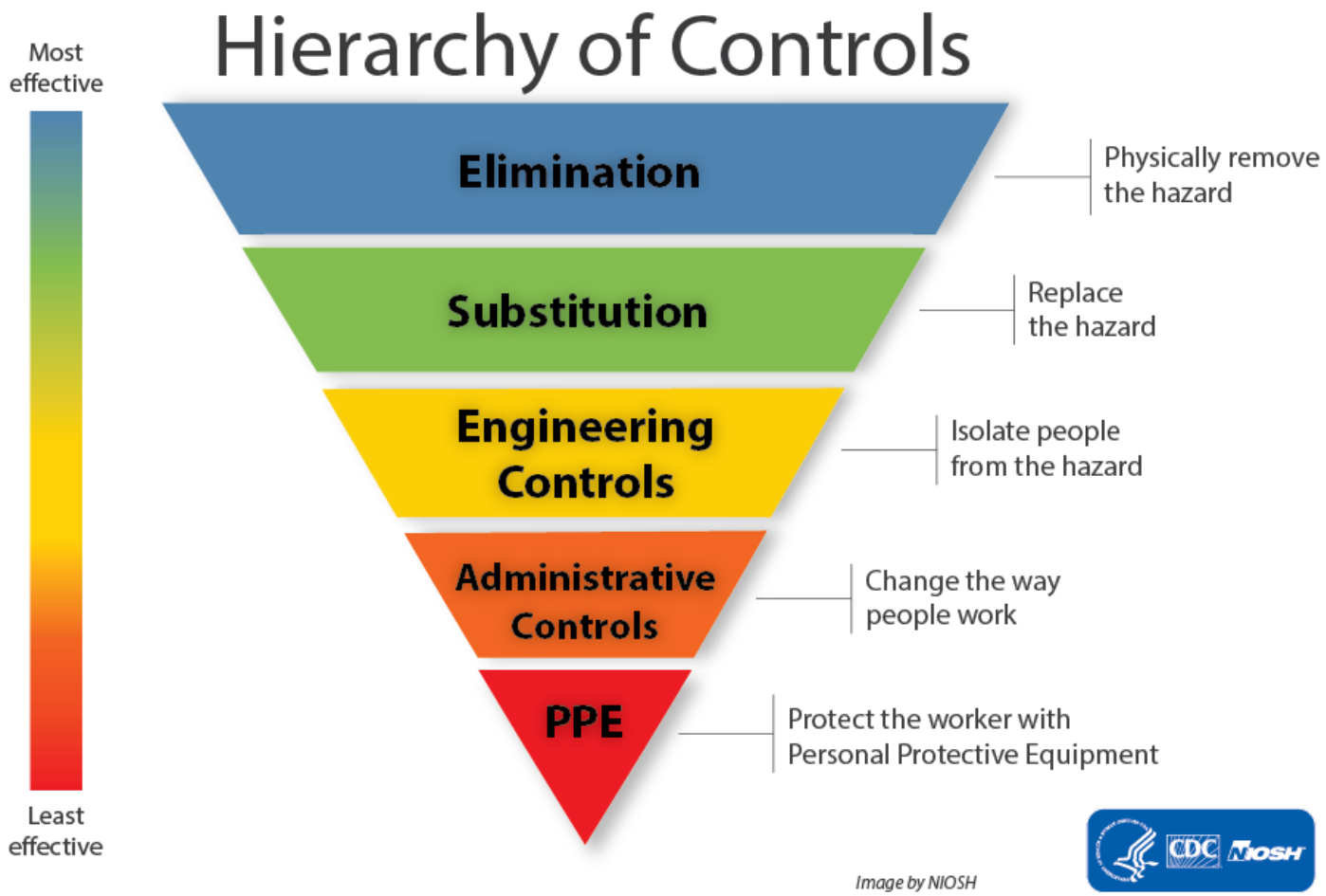
In some cases, they may be placed on carts to prevent patients, such as psychiatric patients or children, from accessing the sharps. Containers also must be available wherever sharps may be found, such as in laundries.

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.

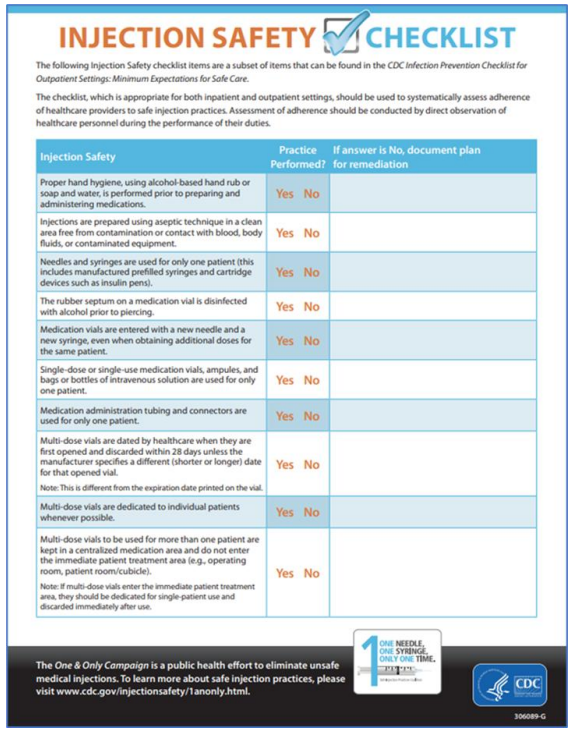
Sharps Containers

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.

Hierarchy of Controls to Reduce Risk



CDC Injection Safety Checklist: Practices on Aseptic Technique & One Needle, One Syringe, Only One Time



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.

ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.

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- 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.

Follow Instructions for Use (IFUs) for Storage and Use

- Store medications including vaccine at temperatures indicated by the manufacturer.

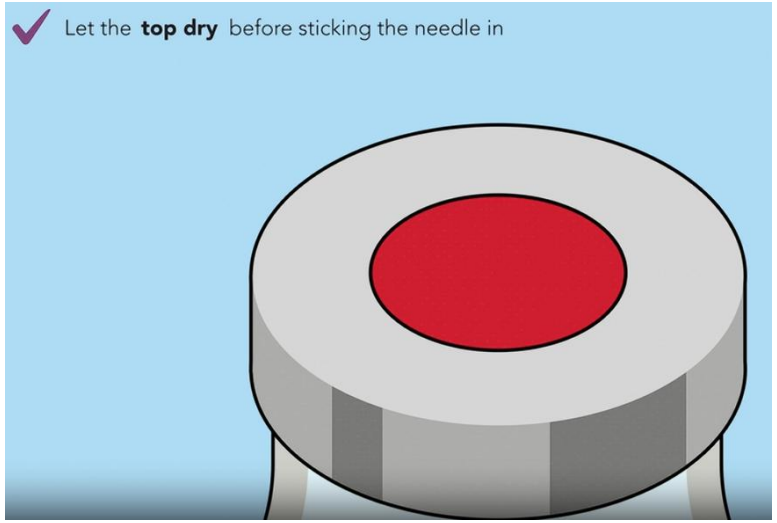
Clean Area for Medication Preparation

- Injections should be prepared in a designated clean area that is not in 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.
  - Clean and disinfect the medication preparation area 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 sanitizer, needles and syringes in their sterile packaging, and alcohol wipes) to ensure that staff can adhere to aseptic technique.

Safe injection, infusion, medication vial, and point-of-care testing practices in health care (2025) Ormsby, Jennifer et al. AJIC, Volume 53, Issue 9, 985 - 99

Preparation and Aseptic Technique

- Clean hands before and after preparing and administering doses.
- Remove the sterile needle and sterile syringe from their packaging just prior to use.
- Disinfect the rubber septum on the 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.



Safe injection, infusion, medication vial, and point-of-care testing practices in health care (2025) Ormsby, Jennifer et al. AJIC, Volume 53, Issue 9, 985 - 99

In-Course Knowledge Check

- When do healthcare personnel need to clean their hands? (*Select all that apply)*
  a) Before preparing medication and administering medication
  b) After administering medication
  c) Only needed if not wearing gloves
  d) Only needed for visibly dirty hands

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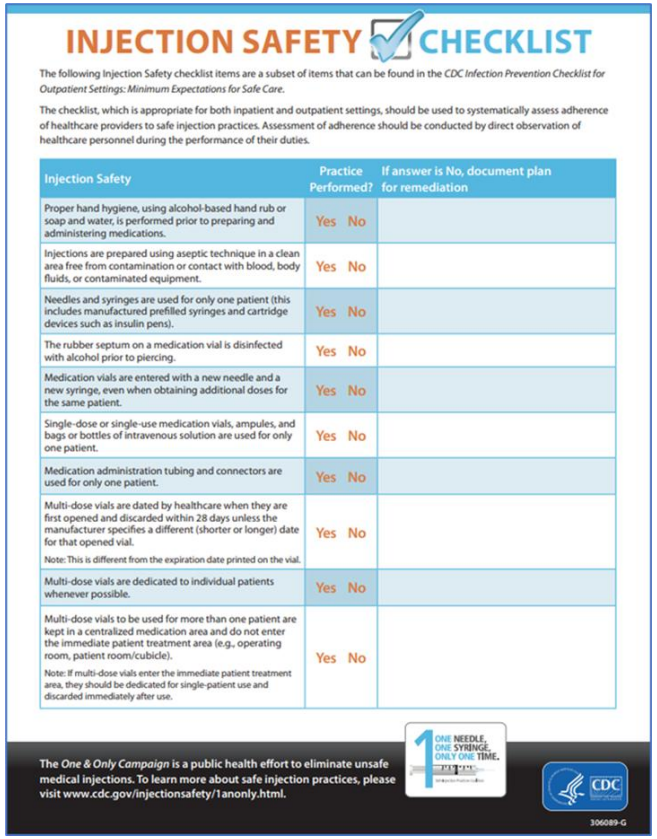
CDC Injection Safety Checklist:

3 Specific Practices for a Multi-dose Vial (MDV)



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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	

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

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.***

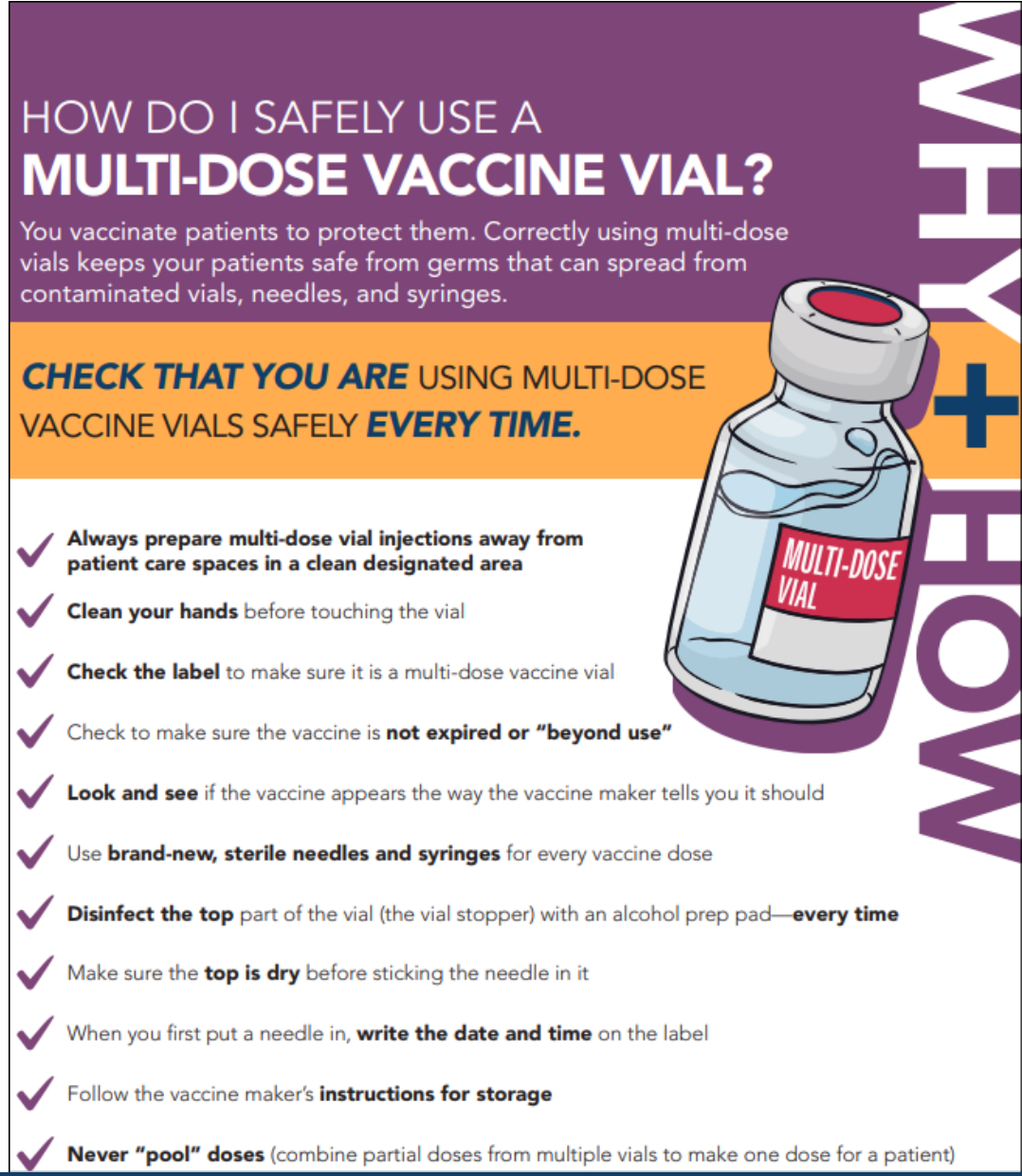
MDVs typically contain an antimicrobial preservative to help limit the growth of bacteria. Preservatives have no effect on bloodborne viruses (i.e. hepatitis B, hepatitis C, HIV).

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!

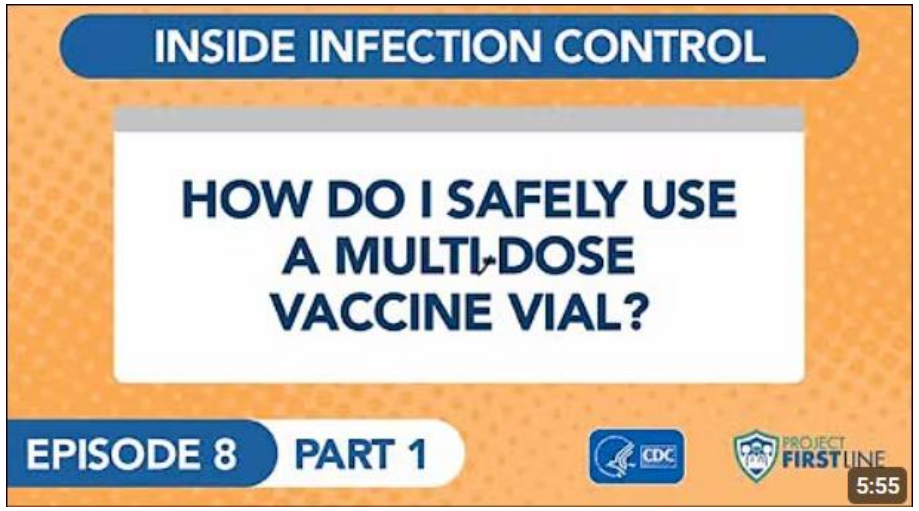
How to Safely Use a MDV

The United States Pharmacopeia (USP) General Chapter 797 recommends the following:

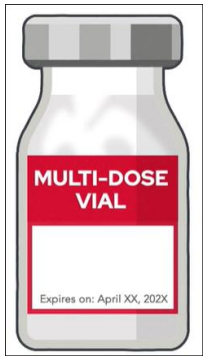
- An unopened multi-dose vial should be discarded according to the manufacturer's expiration date.
- Once a multi-dose vial is opened (e.g., needle-punctured) the vial should be dated and discarded within 28 days unless the manufacturer states another date for that opened vial. The beyond-use-date should never exceed the manufacturer's original expiration date

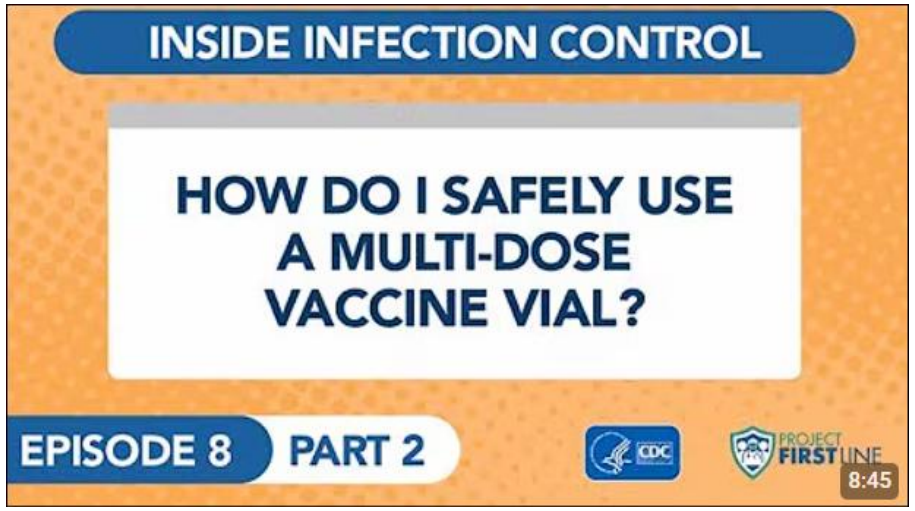


CDC Short Videos on Safe Multi-Dose Vial Use



[How Do I Safely Use a Multi-Dose Vaccine Vial? Part 1]





[How Do I Safely Use a Multi-Dose Vaccine Vial? Part 2]

[CDC Video - Multi-Dose Vaccine Vial Injection Safety Tips]

In-Course Knowledge Check

- Does This Apply to a Single Dose Vial (SDV) or a Multi-Dose Vial (MDV)? *(select single option)*
  a) Typically does not contain a preservative
     i. Single-Dose Vial
     ii. Multi-Dose Vial
  b) Can be used for more than one patient
     i. Single-Dose Vial
     ii. Multi-Dose Vial
  c) Limited to use for a single patient, for a single procedure or injection
     i. Single-Dose Vial
     ii. Multi-Dose Vial
  d) Must be labeled with a beyond use date
     i. Single-Dose Vial
     ii. Multi-Dose Vial

In-Course Knowledge Check

- Does This Apply to a Single Dose Vial (SDV) or a Multi-Dose Vial (MDV)? *(select single option)*
  a) Typically does not contain a preservative
     i. **Single-Dose Vial**
     ii. Multi-Dose Vial
  b) Can be used for more than one patient
     i. Single-Dose Vial
     ii. **Multi-Dose Vial**
     (ideally even a multi-dose vial (MDV) should be used for only one patient)
  c) Limited to use for a single patient, for a single procedure or injection
     i. **Single-Dose Vial**
     ii. Multi-Dose Vial
  d) Must be labeled with a beyond use date
     i. Single-Dose Vial
     ii. **Multi-Dose Vial**

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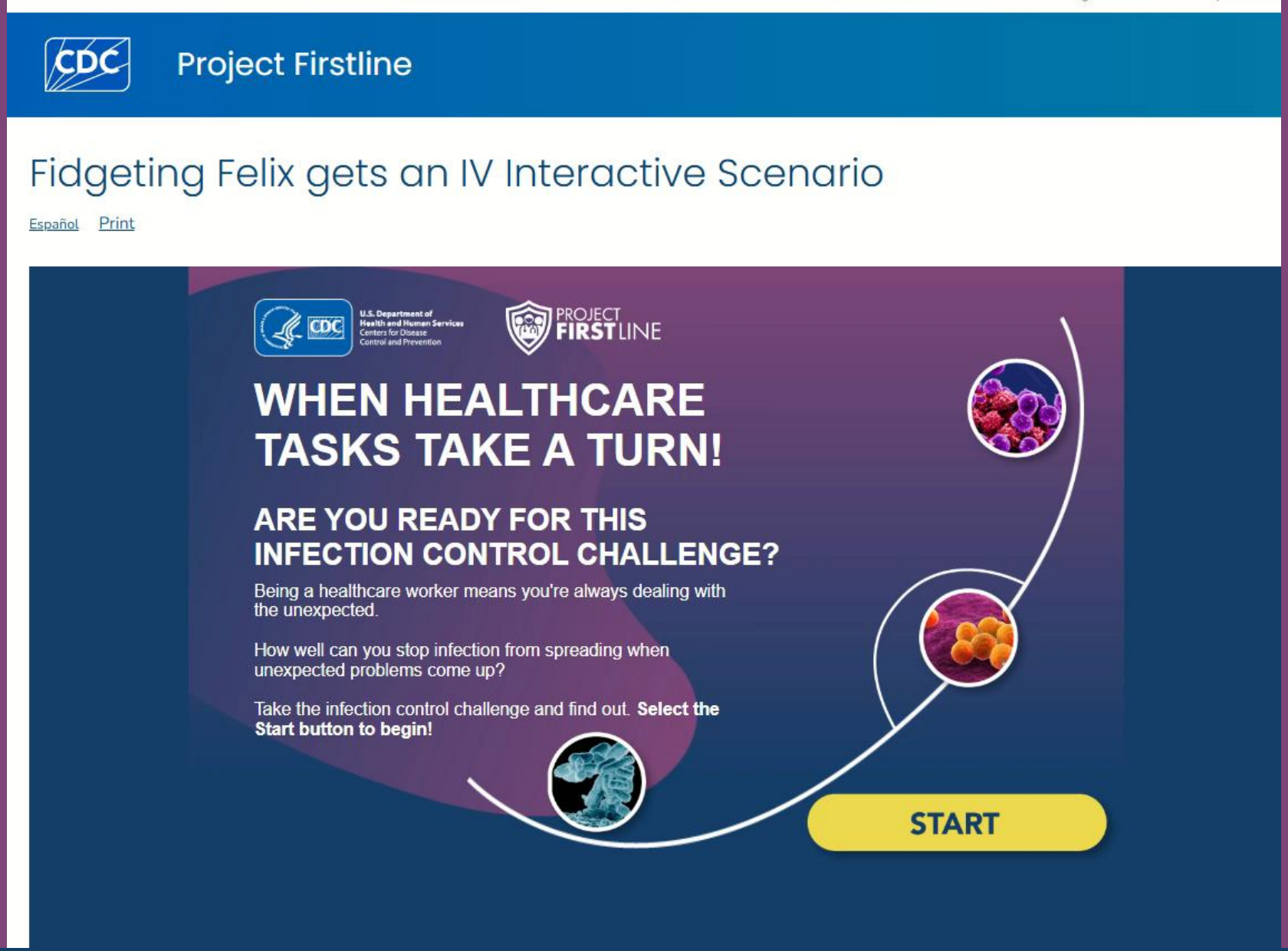
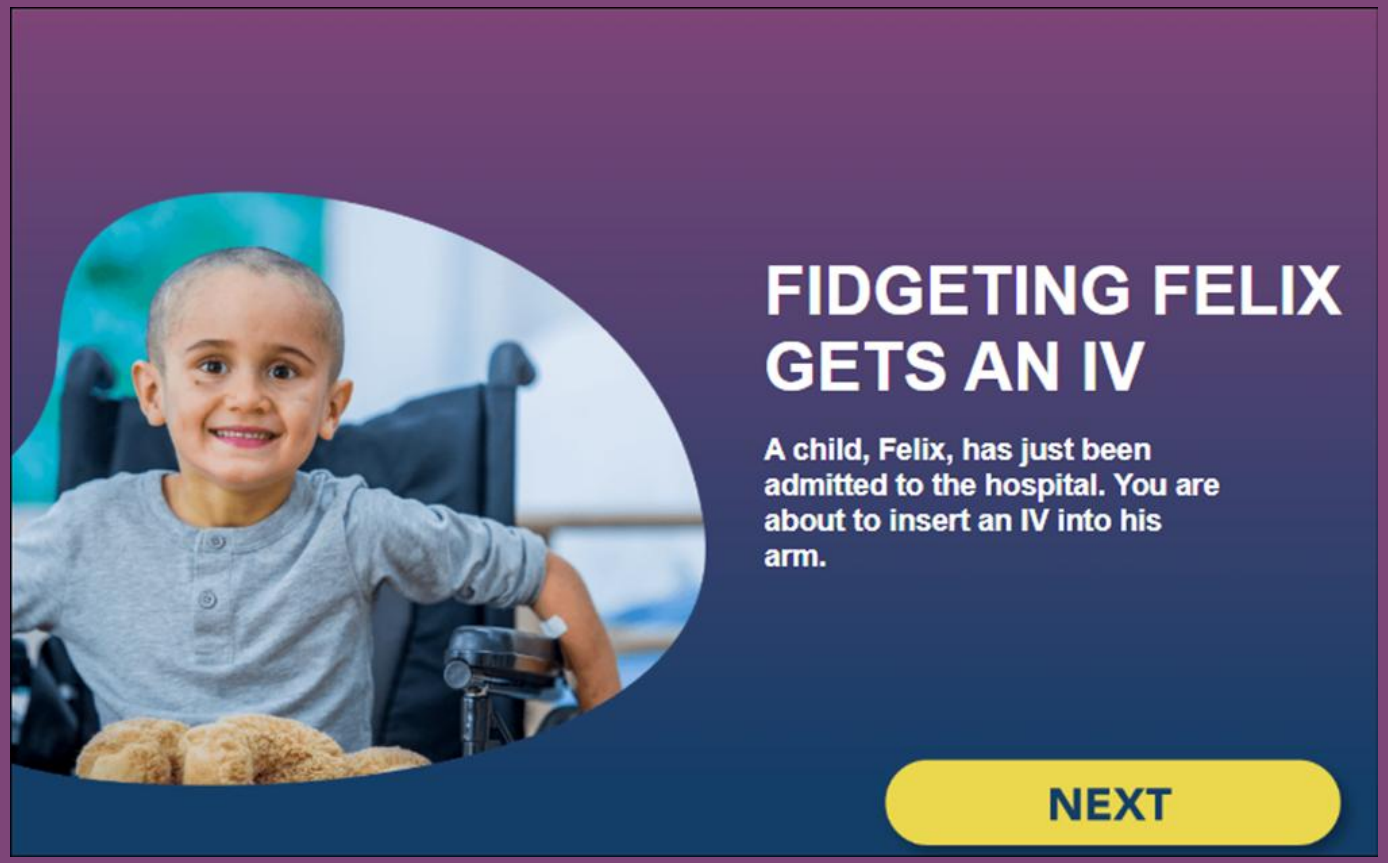


CDC - Fidgeting Felix Gets an IV Interactive Scenario

Project Firstline

Fidgeting Felix gets an IV Interactive Scenario

Español Print



What's the first thing you should do?

Select the correct option.

Disinfect Felix's Skin

Put on Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Use Hand Sanitizer or Wash Hands with Soap and Water

It's important to clean your hands to remove germs before you insert an IV. Hand sanitizer is slightly better at getting rid of germs, but washing with soap and water is still a good option.

NEXT

Now that your hands are clean, what's next?

Select the correct option.

Disinfect Felix's Skin

Put on Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Put on Gloves

Inserting an IV can expose you to blood that might have germs in it. That's why you protect your hands by putting on gloves.

NEXT

Great! Now that you have your gloves on, what's next?

Select the correct option.

Disinfect Felix's Skin

Remove Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Disinfect Felix's Skin

It is important to kill germs that might be on Felix's skin before you insert the IV, so the needle doesn't push those germs into his body.

NEXT

As you get the IV ready to insert, you notice Felix rubbing his arm where you just disinfected it.

NEXT

What should you do next?

Select the correct option.

Disinfect Felix's Skin

Remove Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Disinfect Felix's Skin

Once a disinfected area is touched with something that is not sterile, like Felix's hands, you assume that germs have been spread to that area. That means the area has to be disinfected again before you insert the IV.

NEXT

Great! Now that you have disinfected Felix's skin again, what's next?

Select the correct option.

Disinfect Felix's Skin

Remove Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Insert IV

You've killed the germs on Felix's skin, and it's now safe to insert the IV.

NEXT

Great! Now that you have inserted the IV, what's next?

Select the correct option.

Disinfect Felix's Skin

Remove Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Dispose of Used Supplies

It's important to throw away the used supplies to keep others from being exposed to Felix's blood. Be sure to put the needle and other sharps in the sharps container.

NEXT

Great! Now that you've disposed of the used supplies, what's next?

Select the correct option.

Disinfect Felix's Skin

Remove Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Remove Gloves

After you throw away the used supplies, it's time to take off your gloves to remove the germs and blood that have gotten on them.

NEXT

Great! Now that you have removed your gloves, what's next?

Select the correct option.

Disinfect Felix's Skin

Put on Fresh Gloves

Dispose of Used Supplies

Insert IV

Put on Mask

Use Hand Sanitizer

Put on Gown

Wash Hands with Soap and Water

CORRECT!

Use Hand Sanitizer or Wash Hands with Soap and Water

Even if you're careful when you take off your used gloves, you can still get germs on your hands that need to be removed. Hand sanitizer is a good option, but if you see or feel any blood on your skin, you should wash with soap and water.

NEXT

Now that you have cleaned your hands, it's safe to move on to your next task.

Congratulations for completing this infection control challenge.

You are an Infection Control Pro!

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)

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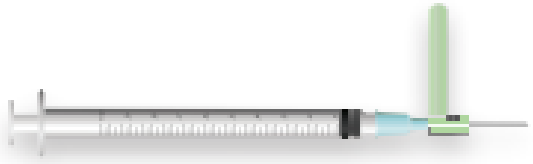
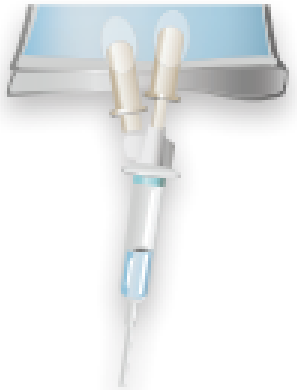
REMEMBER! WHEN PREPARING MEDICATIONS AND INJECTIONS…

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

ALWAYS follow aseptic technique* when:

- *Use aseptic technique to prevent the contamination of clean areas, equipment, and sterile medications to help prevent the spread germs.
- Always use aseptic technique when preparing medications, disinfecting the vial's septum, accessing a line (e.g. IV, central line, port), and injecting any medication.

Prompt Proper Sharps Disposal

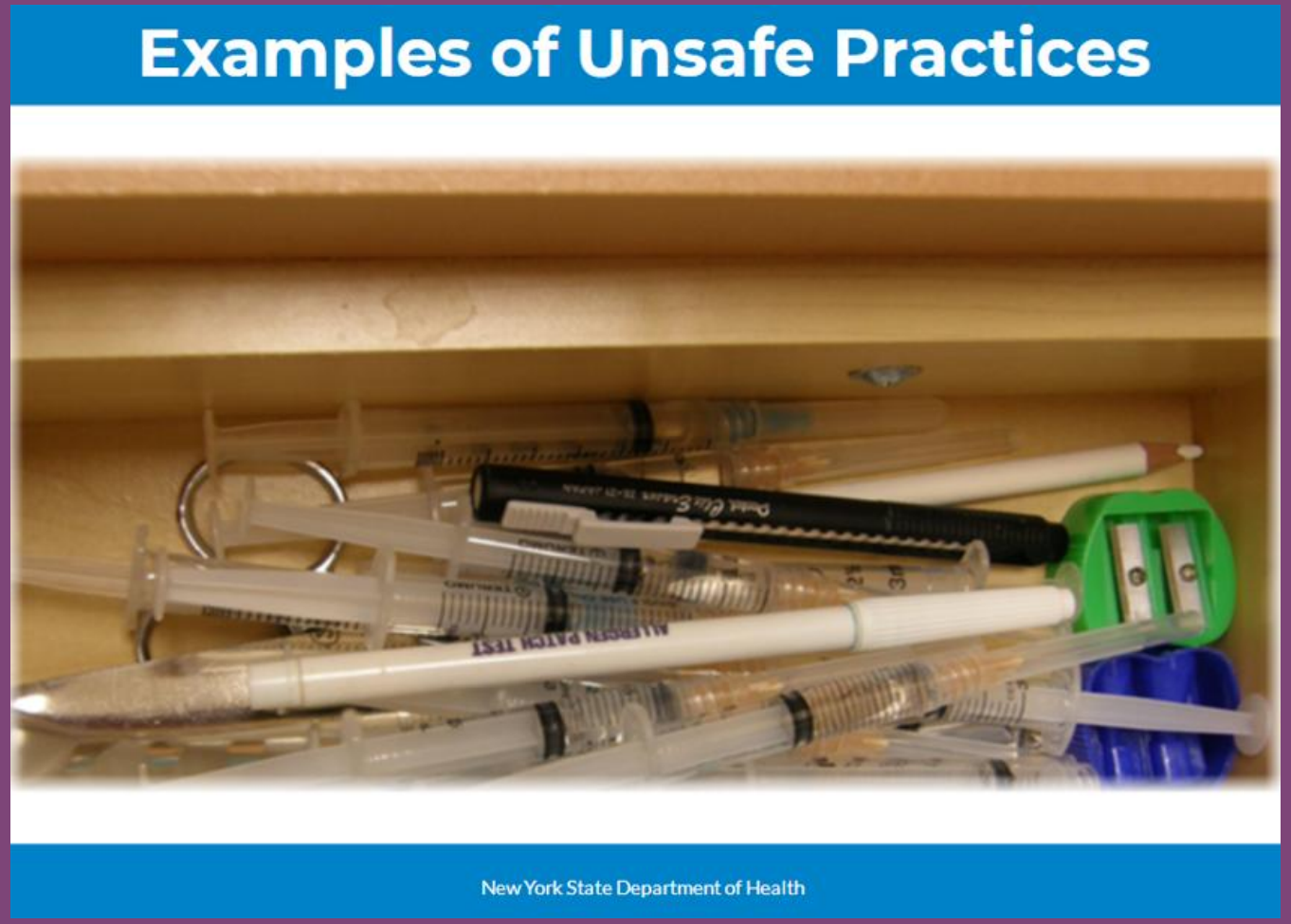
- Once used, needles and syringes should be discarded in an appropriate sharps container.

- Containers should be compliant with the OSHA Bloodborne Pathogens Standard:
  - Closable
  - Puncture-resistant
  - Leak-proof
  - Labeled or color-coded

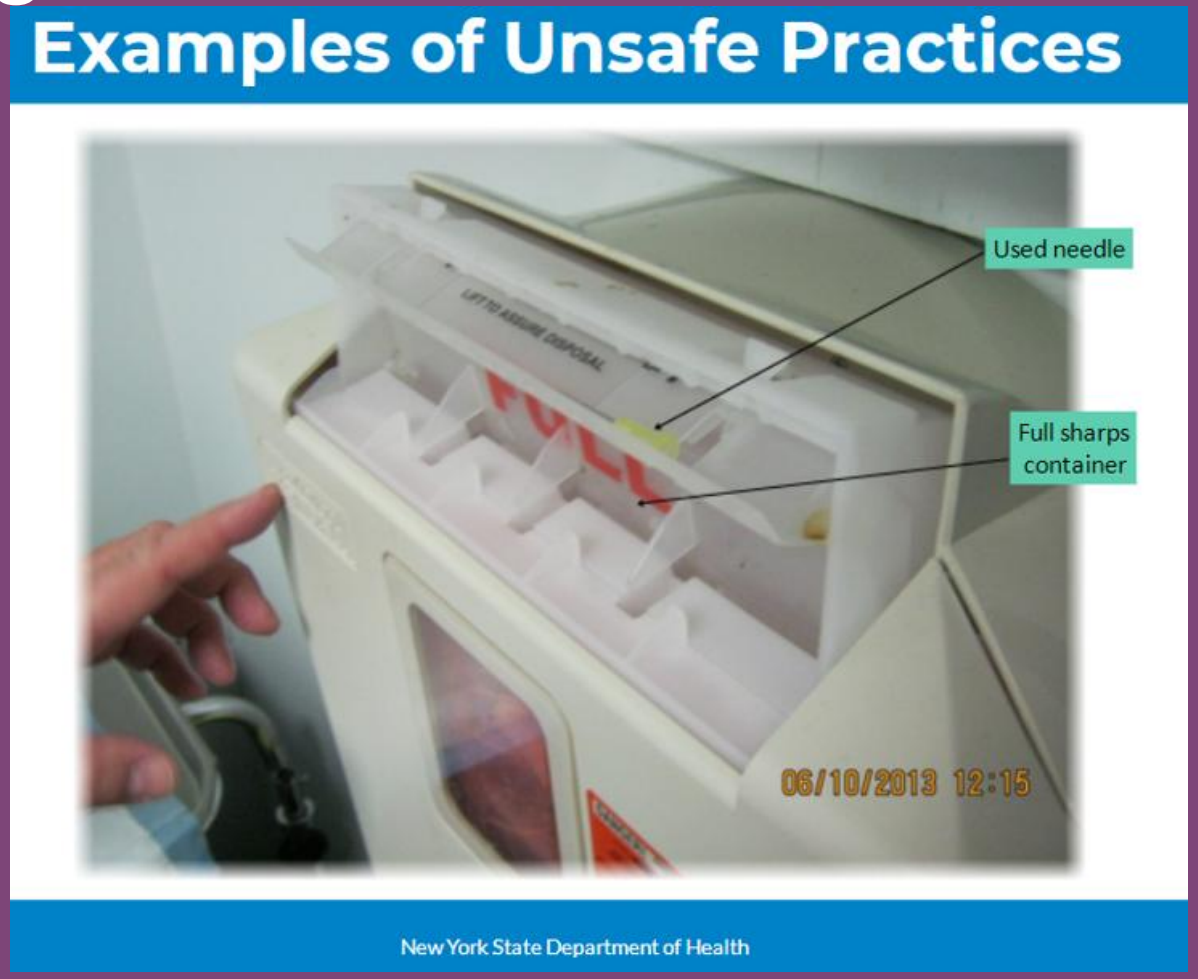
Syringe being placed into red sharps disposal container with biohazard label.

Photos of Unsafe Practices

What is Wrong With This Photo?



What is Wrong With This Photo?



Call to Action

- Incorporate the CDC Injection Safety Checklist elements into your everyday practice
- Never administer anything in question
- Be safe for you and your patients – use safe injection practices

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Additional Resources for an Infection Preventionist

[CDC Injection Safety Policy and Procedure Template]

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

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

[CDC Train Module 8 Injection Safety LTC IPC]

Thank You Using Safe Injection Practices

Patients Put Their Trust in You

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