# Dialysis Assessment and Response Tool (DART) for Infection Prevention and Control

## Injection Safety

This form is intended to aid a DART facilitator in the review of a dialysis facility's injection safety and controlled substances handling, if applicable (Part A). Additionally, questions are included to guide observations of facility/healthcare personnel (HCP) practices (Part B) and audits of injectable medication preparation and administration (Part C).

Injection safety includes practices intended to prevent transmission of infectious diseases between one patient and another or between HCP and patients. Good practice can also prevent harms such as needlestick injuries.

Examples of practices that have resulted in transmission of viruses (e.g., hepatitis C virus (HCV), hepatitis B virus (HBV)), bacteria (e.g., methicillin-resistant *Staphylococcus aureus* (MRSA)), and/or other pathogens (e.g., fungi) include:

- Using the same syringe to administer medication to more than one patient, including when the needle was changed or the injection was administered through an intervening length of intravenous (IV) tubing;
- Accessing a medication vial or bag with a syringe that has already been used to administer medication to a patient, then using the remaining contents from that vial or bag for another patient;
- Using medications packaged as single-dose or single-use for more than one patient;
- Failing to use aseptic technique when preparing and administering injections (e.g., preparing injections near sinks or other sources of contamination)

**Note:** Additional information on safe injection practices can be found on the CDC website: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

## Part A. Injection Safety Interview Questions

1. Describe where clinical healthcare personnel (HCP) prepare injectable medications and infusions (e.g., heparin, saline)?
   **Note:** Technicians (PCTs [patient care technicians], CCHTs [certified clinical hemodialysis technician], CHTs [certified hemodialysis technologist/technician]), Licensed Vocational Nurses (LVNs), and Licensed Practical Nurses (LPNs) may prepare injectable medications in a different location than Registered Nurses (RNs). The description should include information about all injectable medication preparation areas and which staff use that location.

**Rationale:**

Medications should be drawn up in a designated clean medication preparation area that is not adjacent to potential sources of contamination, including sinks or other water sources. Water can splash or spread as droplets more than a meter from a sink. In addition, any item that could have come in contact with blood or body fluids, such as soiled equipment used in a procedure, should not be in the medication preparation area. Examples of contaminated items that should not be placed in or near the medication preparation area include: used equipment such as syringes, needles, IV tubing, blood collection tubes, or needle holders (e.g., Vacutainer® holder).

The medication preparation area should be cleaned and disinfected on a regular basis and any time there is evidence of soiling. In addition, there should be ready access to necessary supplies (such as alcohol-based hand sanitizer, needles and syringes in their sterile packaging, and alcohol wipes) in the medication preparation area to ensure that staff can adhere to aseptic technique.

Parenteral medications should be accessed in an aseptic manner. This includes using a new sterile syringe and sterile needle to draw up medications while preventing contact between the injection materials and the non-sterile environment. Proper hand hygiene should be performed before handling medications and the rubber septum should be disinfected with alcohol prior to piercing it.

Source: Preventing Unsafe Injection Practices

https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

"Unused medications or supplies (e.g., syringes, alcohol swabs) taken to the patient's station should not be returned to a common clean area or used on other patients. Additional measures to prevent contamination of clean or sterile items include a) preparing medications in a room or area separated from the patient treatment area and designated only for medications; b) not handling or storing contaminated (i.e., used) supplies, equipment, blood samples, or biohazard containers in areas where medications and clean (i.e., unused) equipment and supplies are handled; and c) delivering medications separately to each patient. Common carts should not be used within the patient treatment area to prepare or distribute medications. If trays are used to distribute medications, clean them before using for a different patient."

Source: Recommendations for Preventing Transmission of Infections Among Chronic Hemodialysis Patients, pg 19: https://www.cdc.gov/mmwr/pdf/rr/rr5005.pdf

2. Which staff members are permitted to prepare injectable medications? (*select all that apply*)

- ☐ Technicians
- ☐ LVNs
- ☐ LPNs
- ☐ Registered nurses
- ☐ Other (*specify*): _____

**Rationale:**

In the outpatient hemodialysis setting, direct patient care is provided by RNs, technicians [PCTs, CCHTs, CHTs], and LPNs/LVNs. The scope of practice and regulatory rules under which these staff practice varies by state. Some states limit the ability of technicians, LPNs, and LVNs to prepare and administer any medications (e.g., saline, heparin, and other anticoagulants), while other states allow these activities. The preparation and administration of intravenous (IV) medications by technicians, LPNs, and LVNs in the hospital setting is generally prohibited. However, in the hemodialysis setting it is more common for heparin and saline to be prepared and administered to patients by these staff.

Source: The Authority for Certain Clinical Tasks Performed by Unlicensed Patient Care Technicians and LPNs/LVNs in the Hemodialysis Setting: https://www.dialysistech.net/images/The_Authority_for_Certain_Clinical_Tasks_Performed_by_Unlicensed_Patient_Care_Technicians_and_LPNs-LVNs_in_the_Hemodialysis_Setting.pdf

**3.** Does the facility use multi-dose vials of medication(s)?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

***If YES:***

**3a.** Describe the facility policy/procedure for labeling and discarding multi-dose vials.

**Rationale:**

A multi-dose vial is a vial of liquid medication intended for parenteral administration (injection or infusion) that contains more than one dose of medication. Multi-dose vials are labeled as such by the manufacturer and typically contain an antimicrobial preservative to help prevent the growth of bacteria. The preservative has no effect on viruses and does not protect against contamination when healthcare personnel fail to follow safe injection practices.

Medication vials should always be discarded whenever sterility is compromised or cannot be confirmed. In addition, the United States Pharmacopeia (USP) General Chapter 797 recommends the following for multi-dose vials of sterile pharmaceuticals:

- If a multi-dose has been opened or accessed (e.g., needle-punctured) the vial should be dated and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial.
- If a multi-dose vial has not been opened or accessed (e.g., needle-punctured), it should be discarded according to the manufacturer's expiration date.

The manufacturer's expiration date refers to the date after which an unopened multi-dose vial should not be used. The beyond-use-date refers to the date after which an opened multi-dose vial should not be used. The beyond-use-date should never exceed the manufacturer's original expiration date.

For information on storage and handling of vaccines please refer to the CDC Vaccine Storage and Handling Toolkit or the manufacturer's recommendations for specific vaccines.

Source: Preventing Unsafe Injection Practices:

https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**4.** Are any injectable medications batch prepared? (i.e., preparing syringes of medications for multiple patients ahead of the time when they will be administered to the patients)?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

***If YES:***

**4a.** Are USP 797 standards followed?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

**Rationale:**

USP 797 specifies that administration of immediate-use compounded sterile preparations (CSPs) must begin within 4 hours following the start of the preparation. If administration will begin more than 4 hours following the start of the preparation, the full Category 1, 2, or 3 requirements described in USP 797 must be followed.

Source: <797> FAQs

https://www.mbp.ms.gov/sites/default/files/2023-03/USP22_HQS_Compounding_797_FAQ_Document_V2a.pdf

From an infection control perspective, the safest practice is to prepare an injection as close as possible to the time of administration to the patient. This is to prevent compromised sterility (i.e., microbial contamination or proliferation) or compromised physical and chemical stability (e.g., loss of potency, adsorption to the container) of the medication when it is transferred outside of its original container and stored for a period of time before administration.

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/

**5.** Are single-dose medication vials reserved for single use for a single patient?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

**Rationale:**

A single-dose or single-use vial is a vial of liquid medication intended for parenteral administration (injection or infusion) that is meant for use in a single patient for a single case, procedure, injection. Single-dose or single-use vials are labeled as such by the manufacturer and typically lack an antimicrobial preservative.
Vials that are labeled as single-dose or single-use should be used for only a single patient as part of a single case, procedure, injection. There have been multiple outbreaks resulting from healthcare personnel using single-dose or single-use vials for multiple patients.
Source: Preventing Unsafe Injection Practices:
https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**6.** Describe where sharps containers are located for clinical staff to dispose of sharps at point of use.

**7.** Are HCP instructed to dispose of sharps containers per local regulations when they reach the fill line (generally ¾ full)?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

**Rationale:**

"Injuries due to needles and other sharps have been associated with transmission of HBV, HCV and HIV to healthcare personnel." The OSHA Bloodborne Pathogens Standard includes focused attention on removing sharps hazards through the development and use of engineering controls.
Source: Adapted from the Guideline for Isolation Precautions, pg 58:
https://www.cdc.gov/infection-control/media/pdfs/guideline-isolation-h.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/guidelines/Isolation-guidelines-H.pdf
"Sharps disposal containers are marked with a line to indicate when the container is about three-fourths (3/4) full. Following the manufacturer's instructions, close and seal sharps disposal containers when about three-fourths (3/4) full. Follow the health care facility's policy and procedures, medical waste disposal vendor instructions, and local medical waste disposal guidelines. To prevent injury to health care personnel, do not open, empty, or manually clean full sharps disposal containers."
Source: Sharps Disposal Containers in Health Care Facilities:
https://www.fda.gov/medical-devices/safely-using-sharps-needles-and-syringes-home-work-and-travel/sharps-disposal-containers-health-care-facilities
1910.1030(d)(4)(iii)(A)
Contaminated Sharps Discarding and Containment.
1910.1030(d)(4)(iii)(A)(1)
Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:
910.1030(d)(4)(iii)(A)(1)(i)
Closable;
1910.1030(d)(4)(iii)(A)(1)(ii)
Puncture resistant;
1910.1030(d)(4)(iii)(A)(1)(iii)
Leakproof on sides and bottom; and
1910.1030(d)(4)(iii)(A)(1)(iv)
Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.
1910.1030(d)(4)(iii)(A)(2)
During use, containers for contaminated sharps shall be: 1910.1030(d)(4)(iii)(A)(2)(i)
Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);
1910.1030(d)(4)(iii)(A)(2)(ii)
Maintained upright throughout use; and 1910.1030(d)(4)(iii)(A)(2)(iii)
Replaced routinely and not be allowed to overfill.
Source: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030#1910.1030(d)(4)(iii)(A)(1)

**8.** Does the facility use medications that are controlled substances (e.g., Schedule II, III, IV, V drugs)?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

***If YES:***

**8a.** Are all controlled substances kept locked within a secure area?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not assessed

**Rationale:**

"Some healthcare providers steal prescription medicines or controlled substances, such as opioids, for their own use. This behavior leads to unsafe situations like:

- An impaired healthcare provider delivering substandard care.
- Patient denied essential pain medication therapy.
- Healthcare providers spreading viruses or bacterial infections to patients by tampering with injectable drugs."

Source: CDC Clinical Brief: Drug Diversion: https://www.cdc.gov/injection-safety/hcp/clinical-overview/index.html

"Title 21 Code of Federal Regulations

PART 1301 — REGISTRATION OF MANUFACTURERS, DISTRIBUTORS, AND DISPENSERS OF CONTROLLED SUBSTANCES

SECURITY REQUIREMENTS

§1301.71 Security requirements generally.

(a) All applicants and registrants shall provide effective controls and procedures to guard against theft and diversion of controlled substances. In order to determine whether a registrant has provided effective controls against diversion, the Administrator shall use the security requirements set forth in Secs. 1301.72-1301.76 as standards for the physical security controls and operating procedures necessary to prevent diversion."

Source: https://www.ecfr.gov/current/title-21/section-1301.71

## Part B. Injection Safety – Facility-level Observations

Ideally, at least two observations of different staff (1 observation each) within the facility should be completed for the questions in this section. If direct observations cannot be gathered, then information can be obtained by asking staff for input when they are not providing direct patient care.

***Location of Observation #1:*** _____

***Role of Staff Observed:*** _____

**1.** Are needles and syringes used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens)?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"The safest practice is to use a syringe and needle once to administer medication to a single patient. The syringe and needle should be discarded after use. However, when this is not feasible (e.g., when administration of incremental doses to a single patient from the same syringe is an integral part of the procedure), the reuse of the same syringe and needle for the same patient should occur as part of a single procedure with strict adherence to aseptic technique. In such situations it is essential that the syringe never be left unattended and that it be discarded immediately at the end of the procedure."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**2.** Are single dose medication vials, ampules, and bags or bottles of intravenous solution used for only one patient?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"A single-dose vial of liquid medication intended for injection or infusion is only approved for use in a single patient for a single case, procedure, or injection. Single-dose vials are labeled by the manufacturer and typically lack an antimicrobial preservative."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**3.** Are medication administration tubing and connectors used for only one patient?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Use fluid infusion or administration sets (e.g., intravenous tubing) for one patient only."

Source: CDC Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings: https://www.cdc.gov/infection-control/hcp/core-practices/index.html

**4.** Are manufacturer pre-filled saline syringes and/or saline vials used for flushing patient dialysis access lines or after injectable medications are administered?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Filling Saline Syringes at the Station: Pursuant to current recommendations from the Centers for Disease Control (CDC), ESRD facilities may not fill syringes with saline from the single dose saline bag or IV tubing connected to the patient at the dialysis station. To comply with recommended safe injection practices, the facility may acquire pre-filled syringes or may prepare saline syringes for an individual patient in a clean area away from the patient treatment area."

Source: End Stage Renal Disease (ESRD) Facilities: Filling Saline Syringes at the Patient Treatment Station: https://www.cms.gov/medicare/provider-enrollment-and-certification/surveycertificationgeninfo/policy-and-memos-to-states-and-regions-items/survey-and-cert-letter-17-31

**5.** Are multi-dose vials that will be used for more than one patient kept in a designated medication area?

**Note:** If multi-dose vials enter the immediate patient treatment station they should be dedicated only for use on that individual patient or discarded immediately after use.

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff
- ◯ Not applicable (facility does not use multi-dose vials)

**Rationale:**

"Limit the use of multi-dose vials and dedicate them to a single patient whenever possible. Reused multi-dose vials should be kept and accessed in a designated clean medication preparation area, away from immediate patient treatment areas. If a multi-dose vial enters an immediate patient treatment area, dedicate it for single patient use only."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**6.** Are all sharps disposed of in a puncture-resistant sharps container?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"1910.1030(d)(4)(iii)(A)

Contaminated Sharps Discarding and Containment.

1910.1030(d)(4)(iii)(A)(1)

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

910.1030(d)(4)(iii)(A)(1)(i)

Closable;

1910.1030(d)(4)(iii)(A)(1)(ii)

Puncture resistant;

1910.1030(d)(4)(iii)(A)(1)(iii)

Leakproof on sides and bottom; and

1910.1030(d)(4)(iii)(A)(1)(iv)

Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

1910.1030(d)(4)(iii)(A)(2)

During use, containers for contaminated sharps shall be:

1910.1030(d)(4)(iii)(A)(2)(i)

Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

1910.1030(d)(4)(iii)(A)(2)(ii)

Maintained upright throughout use; and

1910.1030(d)(4)(iii)(A)(2)(iii)

Replaced routinely and not be allowed to overfill."

Source: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030#1910.1030(d)(4)(iii)(A)(1)

**7.** Are sharps containers strategically located near dialysis stations so sharps can be promptly discarded at point-of-use?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**8.** Are needles/cannulae with safety features used in the facility to protect staff from needle stick injuries?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Injuries due to needles and other sharps have been associated with transmission of HBV, HCV and HIV to healthcare personnel." The OSHA Bloodborne Pathogens Standard includes focused attention on removing sharps hazards through the development and use of engineering controls.

Source: Adapted from the Guideline for Isolation Precautions, pg 58:

https://www.cdc.gov/infection-control/media/pdfs/guideline-isolation-h.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/guidelines/Isolation-guidelines-H.pdf

## Part B. Injection Safety – Facility-level Observations #2

Ideally, at least two observations of different staff (1 observation each) within the facility should be completed for the questions in this section. If direct observations cannot be gathered, then information can be obtained by asking staff for input when they are not providing direct patient care.

***Location of Observation #2:*** _____

***Role of Staff Observed:*** _____

**1.** Are needles and syringes used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens)?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"The safest practice is to use a syringe and needle once to administer medication to a single patient. The syringe and needle should be discarded after use. However, when this is not feasible (e.g., when administration of incremental doses to a single patient from the same syringe is an integral part of the procedure), the reuse of the same syringe and needle for the same patient should occur as part of a single procedure with strict adherence to aseptic technique. In such situations it is essential that the syringe never be left unattended and that it be discarded immediately at the end of the procedure."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/?CDC_AAref_Val=https://www.cdc.gov/injectionsafety/providers/provider_faqs_med-admin.html

**2.** Are single dose medication vials, ampules, and bags or bottles of intravenous solution used for only one patient?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"A single-dose vial of liquid medication intended for injection or infusion is only approved for use in a single patient for a single case, procedure, or injection. Single-dose vials are labeled by the manufacturer and typically lack an antimicrobial preservative."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**3.** Are medication administration tubing and connectors used for only one patient?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Use fluid infusion or administration sets (e.g., intravenous tubing) for one patient only."

Source: CDC Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings: https://www.cdc.gov/infection-control/hcp/core-practices/index.html

**4.** Are manufacturer pre-filled saline syringes and/or saline vials used for flushing patient dialysis access lines or after injectable medications are administered?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Filling Saline Syringes at the Station: Pursuant to current recommendations from the Centers for Disease Control (CDC), ESRD facilities may not fill syringes with saline from the single dose saline bag or IV tubing connected to the patient at the dialysis station. To comply with recommended safe injection practices, the facility may acquire pre-filled syringes or may prepare saline syringes for an individual patient in a clean area away from the patient treatment area."

Source: End Stage Renal Disease (ESRD) Facilities: Filling Saline Syringes at the Patient Treatment Station: https://www.cms.gov/medicare/provider-enrollment-and-certification/surveycertificationgeninfo/policy-and-memos-to-states-and-regions-items/survey-and-cert-letter-17-31

**5.** Are multi-dose vials that will be used for more than one patient kept in a designated medication area?

**Note:** If multi-dose vials enter the immediate patient treatment station they should be dedicated only for use on that individual patient or discarded immediately after use.

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff
- ◯ Not applicable (facility does not use multi-dose vials)

**Rationale:**

"Limit the use of multi-dose vials and dedicate them to a single patient whenever possible. Reused multi-dose vials should be kept and accessed in a designated clean medication preparation area, away from immediate patient treatment areas. If a multi-dose vial enters an immediate patient treatment area, dedicate it for single patient use only."

Source: Preventing Unsafe Injection Practices: https://www.cdc.gov/injection-safety/hcp/clinical-safety/index.html

**6.** Are all sharps disposed of in a puncture-resistant sharps container?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"1910.1030(d)(4)(iii)(A)
Contaminated Sharps Discarding and Containment.
1910.1030(d)(4)(iii)(A)(1)
Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:
910.1030(d)(4)(iii)(A)(1)(i)
Closable;
1910.1030(d)(4)(iii)(A)(1)(ii)
Puncture resistant;
1910.1030(d)(4)(iii)(A)(1)(iii)
Leakproof on sides and bottom; and
1910.1030(d)(4)(iii)(A)(1)(iv)
Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.
1910.1030(d)(4)(iii)(A)(2)
During use, containers for contaminated sharps shall be:
1910.1030(d)(4)(iii)(A)(2)(i)
Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);
1910.1030(d)(4)(iii)(A)(2)(ii)
Maintained upright throughout use; and
1910.1030(d)(4)(iii)(A)(2)(iii)
Replaced routinely and not be allowed to overfill."

Source: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030#1910.1030(d)(4)(iii)(A)(1)

**7.** Are sharps containers strategically located near dialysis stations so sharps can be promptly discarded at point-of-use?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**8.** Are needles/cannulae with safety features used in the facility to protect staff from needle stick injuries?

- ◯ Yes
- ◯ No
- ◯ Not observed, but endorsed by frontline staff
- ◯ Not observed, not endorsed by staff

**Rationale:**

"Injuries due to needles and other sharps have been associated with transmission of HBV, HCV and HIV to healthcare personnel." The OSHA Bloodborne Pathogens Standard includes focused attention on removing sharps hazards through the development and use of engineering controls.

Source: Adapted from the Guideline for Isolation Precautions, pg 58:

https://www.cdc.gov/infection-control/media/pdfs/guideline-isolation-h.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/guidelines/Isolation-guidelines-H.pdf

## Part C. Injection Safety – Staff-level Observations of Injectable Medication Preparation and Administration

Ideally, complete 5 audits of HCP performing medication prep and administration within the facility using the audit tools in this section. Audit tools are not fillable and can be accessed below or at this link: https://www.cdc.gov/dialysis-safety/media/pdfs/Hemodialysis-InjectionSafety-Observations-P.pdf

*Facility Name:*_____ *Observer:*_____

*Date(s):*_____ *Location of Medication Preparation:*_____

# ***Audit Tool:*** Hemodialysis injectable medication preparation

Observe a medication preparation *session*. (Use a "√" if action performed correctly, a "Φ" if not performed/performed incorrectly. If not observed, leave blank. All applicable actions within a row must have "√" for the procedure to be counted as successful.)

| Day (i.e., M, Tu, W) | Shift (i.e., 1 - 4) | Discipline | Med prep done in designated area | Med prep area is clean * | All vial(s) are inspected ** | Hand hygiene performed | Septum of all vial(s) disinfected | All vials entered with new needle and new syringe | Med prep done aseptically | All single dose vial(s) discarded | All multi dose vial(s) discarded or stored properly |
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Discipline: **P**=physician, **N**=nurse, **T**=technician, **S**=student, **O**=other

Number of sessions performed correctly =_____

Total number of sessions observed =_____

*ADDITIONAL COMMENTS/OBSERVATIONS:*

*Preparation of injectable medications must be performed in a designated clean area that is free of obvious contamination sources (e.g., blood, body fluids, contaminated equipment, tap water).

**Vial should be discarded if sterility is questionable, or expiration date or beyond-use date has been exceeded. If a multi-dose vial will not be immediately discarded after use, the vial should be labeled upon opening to indicate the beyond-use date.

*Facility Name:*_____ *Observer:*_____

*Date:*_____ *Day: M W F Tu Th Sa* *Shift: 1st 2nd 3rd 4th* *Start time:*_____*AM / PM*

# ***Audit Tool:*** Hemodialysis injectable medication administration

(Use a "√" if action performed correctly, a "Φ" if not performed/performed incorrectly. If not observed, leave blank. All applicable actions within a row must have "√" for the procedure to be counted as successful.)

| Discipline | Medication properly transported to patient station* | Hand hygiene performed | Clean gloves worn | Injection port disinfected with antiseptic** | Medication administered aseptically | Syringe discarded at point of use | Gloves removed | Hand hygiene performed |
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Discipline: **P**=physician, **N**=nurse, **T**=technician, **S**=student, **O**=other

Duration of observation period: _____

Number of procedures performed correctly = _____

Total number of procedures observed during audit = _____

***ADDITIONAL COMMENTS/OBSERVATIONS:***

* Medications should be transported directly from medication preparation area to individual patient. Medications should be prepared as close as possible to the time of medication administration. Medications that are not immediately administered by the person who prepared the medication must be labeled appropriately.

**Appropriate antiseptics are chlorhexidine, povidone-iodine, tincture of iodine, and 70% alcohol.

MAKING DIALYSIS SAFER COALITION

National Center for Emerging and Zoonotic Infectious Diseases

Division of Healthcare Quality Promotion

CDC