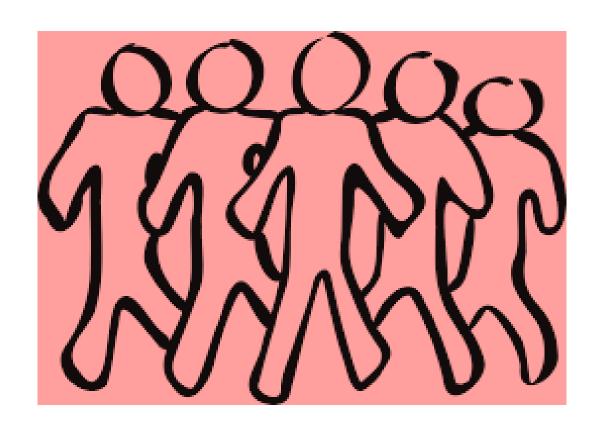


CREATING A CULTURE OF SAFETY RESOURCE GUIDE

Midwest Kidney Network
October 2016



INFECTION CONTROL RESOURCES

CDC Approach to BSI Prevention in Dialysis Facilities

(i.e., the Core Interventions for Dialysis Bloodstream Infection (BSI) Prevention)

1. Surveillance and feedback using NHSN

Conduct monthly surveillance for BSIs and other dialysis events using CDC's National Healthcare Safety Network (NHSN). Calculate facility rates and compare to rates in other NHSN facilities. Actively share results with front-line clinical staff.

2. Hand hygiene observations

Perform observations of hand hygiene opportunities monthly and share results with clinical staff.

3. Catheter/vascular access care observations

Perform observations of vascular access care and catheter accessing quarterly. Assess staff adherence to aseptic technique when connecting and disconnecting catheters and during dressing changes. Share results with clinical staff.

4. Staff education and competency

Train staff on infection control topics, including access care and aseptic technique. Perform competency evaluation for skills such as catheter care and accessing every 6-12 months and upon hire.

5. Patient education/engagement

Provide standardized education to all patients on infection prevention topics including vascular access care, hand hygiene, risks related to catheter use, recognizing signs of infection, and instructions for access management when away from the dialysis unit.

6. Catheter reduction

Incorporate efforts (e.g., through patient education, vascular access coordinator) to reduce catheters by identifying and addressing barriers to permanent vascular access placement and catheter removal.

7. Chlorhexidine for skin antisepsis

Use an alcohol-based chlorhexidine (>0.5%) solution as the first line skin antiseptic agent for central line insertion and during dressing changes.*

8. Catheter hub disinfection

Scrub catheter hubs with an appropriate antiseptic after cap is removed and before accessing. Perform every time catheter is accessed or disconnected.**

9. Antimicrobial ointment

Apply antibiotic ointment or povidone-iodine ointment to catheter exit sites during dressing change.***

- * Povidone-iodine (preferably with alcohol) or 70% alcohol are alternatives for patients with chlorhexidine intolerance.
- ** If closed needleless connector device is used, disinfect device per manufacturer's instructions.
- *** See information on selecting an antimicrobial ointment for hemodialysis catheter exit sites on CDC's Dialysis Safety website (http://www.cdc.gov/dialysis/prevention-tools/core-interventions.html#sites). Use of chlorhexidine-impregnated sponge dressing might be an alternative.

For more information about the Core Interventions for Dialysis Bloodstream Infection (BSI) Prevention, please visit http://www.cdc.gov/dialysis

Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol

This protocol outlines a suggested approach to preparing catheter hubs prior to accessing the catheter for hemodialysis. It is based on evidence where available and incorporates theoretical rationale when published evidence is unavailable.

Definitions:

Catheter refers to a central venous catheter (CVC) or a central line

Hub refers to the end of the CVC that connects to the blood lines or cap

Cap refers to a device that screws on to and occludes the hub

Limb refers to the catheter portion that extends from the patient's body to the hub

Blood lines refer to the arterial and venous ends of the extracorporeal circuit that connect the patient's catheter to the dialyzer

Catheter Connection and Disconnection Steps:

Connection Steps

- 1. Perform hand hygiene and don new clean gloves.
- Clamp the catheter (*Note:* **Always** clamp the catheter before removing the cap. Never leave an uncapped catheter unattended).
- 3. Disinfect the hub with caps removed using an appropriate antiseptic (*see notes*).
 - a. (Optional) Prior to cap removal, disinfect the caps and the part of the hub that is accessible and discard the antiseptic pad (i.e., use a separate antiseptic pad for the next step).
 - b. Remove the caps and disinfect the hub with a new antiseptic pad for each hub. Scrub the sides (threads) and end of the hub thoroughly with friction, making sure to remove any residue (e.g., blood).
 - c. Using the same antiseptic pad, apply antiseptic with friction to the catheter, moving from the hub at least several centimeters towards the body. Hold the limb while allowing the antiseptic to dry.
 - d. Use a separate antiseptic pad for each hub/ catheter limb. Leave hubs "open" (i.e., uncapped and disconnected) for the shortest time possible.

- 4. Always handle the catheter hubs aseptically. Once disinfected, do not allow the catheter hubs to touch nonsterile surfaces.
- 5. Attach sterile syringe, unclamp the catheter, withdraw blood, and flush per facility protocol.
- 6. Repeat for other limb (this might occur in parallel).
- Connect the ends of the blood lines to the catheter aseptically.
- 8. Remove gloves and perform hand hygiene.

Disconnection Steps:

- 1. Perform hand hygiene and don new clean gloves.
- 2. Clamp the catheter (*Note:* **Always** clamp the catheter before disconnecting. Never leave an uncapped catheter unattended).
- 3. Disinfect the catheter hub before applying the new cap using an appropriate antiseptic (see notes).
 - a. (*Optional*) Disinfect the connection prior to disconnection. If this is done, use a separate antiseptic pad for the subsequent disinfection of the hub.
 - b. Disconnect the blood line from the catheter and disinfect the hub with a new antiseptic pad. Scrub the sides (threads) and end of the hub thoroughly with friction, making sure to remove any residue (e.g., blood).
 - c. Use a separate antiseptic pad for each hub. Leave hubs "open" (i.e., uncapped and disconnected) for the shortest time possible.
- 4. Always handle the catheter hubs aseptically. Once disinfected, do not allow the catheter hubs to touch nonsterile surfaces. Hold the catheter until the antiseptic has dried.
- 5. Attach the new sterile caps to the catheter aseptically. Use caution if tape is used to secure caps to the catheter (*see notes*).
- 6. Ensure that catheter is still clamped.
- 7. Remove gloves and perform hand hygiene.



Notes/Discussion:

Antiseptic Use and Selection

As described in the 2011 CDC/Healthcare Infection Control Practices Advisory Committee (HICPAC) Guidelines for the Prevention of Intravascular Catheter-Related Infections, prior to accessing the catheter hub it should be disinfected with an appropriate antiseptic (greater than 0.5% chlorhexidine with alcohol, 70% alcohol, or 10% povidone-iodine). There is not enough evidence to recommend one antiseptic over the others. Generally, antiseptics should be allowed to dry for maximal effect.

If using 70% alcohol, sterile antiseptic pads should be used (sterile pads are labeled sterile and packaging for nonsterile pads often does not state whether the pads are sterile or nonsterile). For practical reasons, pads or similar products might be preferred over other forms of antiseptics (e.g., swabsticks) for disinfecting the catheter as they are malleable and allow for vigorous cleaning of small spaces.

If using an antiseptic that leaves a residue (e.g., chlorhexidine), avoid allowing large amounts of antiseptic to enter the lumen of the catheter to avoid potential toxicities to the patient.

If using chlorhexidine, removing all blood residue is particularly important to maximize the effect of the antiseptic.

Soaking Caps

The role of soaking caps in an antiseptic prior to removing them is not clear. It is not a CDC/HICPAC recommendation. This procedure is described in the 2000 National Kidney Foundation's Kidney Disease Outcomes Quality Initiative (KDOQI) Vascular Access Guidelines but was not included in the 2006 update.

Handling Catheter Hubs

Catheter hubs should always be handled aseptically. Once disinfected, the catheter hubs should not be allowed to touch nonsterile surfaces. This might be best performed by holding them until the antiseptic dries. During this time, the staff member performing the procedure should also ensure that the catheter remains clamped.

When disinfecting catheter hubs, clean, nonsterile gloves can be used if aseptic technique is maintained.

Bloodline Disinfection

When accessing the line, disinfecting the ends of the sterile blood lines is not required if care has been taken not to contaminate the ends of the blood lines (i.e., through careful aseptic technique). Blood lines can become contaminated during connections and disconnections, as well as during the priming process. Contact with contaminated prime waste in prime buckets that have not been properly cleaned and disinfected or through backflow from waste handling ports must be avoided. Disinfecting the bloodlines does not address this issue.

Disconnection and Line Reversals

Catheter hubs should be disinfected again after disconnecting from bloodlines and before replacing a new cap at the end of a treatment. This should be done in a manner similar to that used when disinfecting the hub prior to accessing. Disinfecting the catheter hub and the end of the extracorporeal blood line should also be performed if, during a treatment, a patient must be disconnected and their blood is re-circulated. Anytime a patient's circuit is disconnected this should be done aseptically and the number of times a patient's catheter is disconnected from the blood lines should be minimized to the extent possible.

Securing Caps with Tape

Caution should be used if taping caps on to hubs between treatments. Tape can leave residue on the hubs that might make disinfecting them more difficult.

Use of Masks

Although data supporting the use of masks during catheter accessing/deaccessing to prevent vascular access infections is lacking, this practice is recommended for patients and staff in the 2000 KDOQI guidelines and is included in the Centers for Medicare and Medicaid Services (CMS) End Stage Renal Disease Program Conditions for Coverage Interpretive Guidance.

Personal Protective Equipment (PPE)

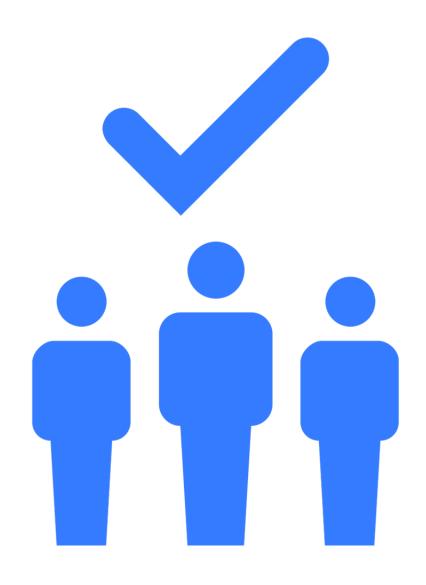
Proper PPE should always be worn by staff to avoid exposure to potentially infectious blood and body fluids when connecting/disconnecting catheters.

Aseptic Technique

This includes practices that prevent the contamination of clean/sterile items and surfaces. Once tasks requiring aseptic technique have been started, care must be taken to avoid contamination of gloves and other clean/sterile items that can occur when touching dirty surfaces (e.g., positioning patient, using computer keyboard).

Selected References:

- National Kidney Foundation. KDOQI Clinical Practice Guidelines and Clinical Practice Recommendations for 2006 Updates: Hemodialysis Adequacy, Peritoneal Dialysis Adequacy and Vascular Access. Am J Kidney Dis 2006; 48 (suppl 1):S1-S322.
- 2. National Kidney Foundation. KDOQI Clinical Practice Guidelines for Hemodialysis Adequacy, 2000. *Am J Kidney Dis* 2001; 37 (suppl 1):S7-S64.
- 3. O'Grady NP, Alexander M, Burns LM, et al. Guideline for the prevention of intravascular catheter-related infections. *Clin Infect Dis* 2011; 52:e162-e193.



AUDIT TOOL RESOURCES

Survey on Patient Safety

Instructions

This survey asks for your opinions about patient safety issues, medical error, and event reporting in your facility and will take about 10 to 15 minutes to complete.

If you do not wish to answer a question, or if a question does not apply to you, you may leave your answer blank.

- An "<u>event</u>" is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.
- "<u>Patient safety</u>" is defined as the avoidance and prevention of patient injuries
 or adverse events resulting from the processes of health care delivery.

SECTION A: Your Work Area/Unit

In this survey, think of your work area as the unit, department, or clinical area of your facility where you spend *most* of your work time or provide *most* of your clinical services.

What is your primary work area or unit in your facility? Select ONE answer.						
a. Many different units/No specific unit						
☐ b. Medicine (non-surgical)	h. Psychiatry/mental health	n. Other	, please s	pecify:		
☐ c. Surgery	i. Rehabilitation					
d. Obstetrics	j. Pharmacy					
e. Pediatrics	k. Laboratory					
f. Emergency department	I. Radiology					
g. Intensive care unit (any type)	m. Anesthesiology					
Please indicate your agreement or d	isagreement with the following st	atements a	bout vou	r work ar	ea/unit.	
,		Strongly	Disagree		Agree	Strongly Agree
Think about your work area/unit		▼	▼	▼	▼	▼
1. People support one another in this	unit	🔲 1	\square_2	\square_3	П.	
			— 2	— 3	L 4	\square_5
2. We have enough staff to handle the	e workload	_	\square_2	□ ₃	□4 □4	□ ₅
3. When a lot of work needs to be dor		D ₁				
3. When a lot of work needs to be dor	ne quickly, we work together as a		□ ₂	□ ₃	· □4	\square_5

SECTION A: Your Work Area/Unit (continued)						Ctronalı	
Th	ink about your work area/unit	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼	
6	. We are actively doing things to improve patient safety	□ 1	\square_2	\square_3	\square_4	\square_5	
7	. We use more agency/temporary staff than is best for patient care	\square_1	\square_2	\square_3	\square_4	\square_5	
8	. Staff feel like their mistakes are held against them	□ 1	\square_2	\square_3	\square_4	\square_5	
9	. Mistakes have led to positive changes here	□ 1	\square_2	\square_3	\square_4	\square_5	
10	. It is just by chance that more serious mistakes don't happen around here	□ 1	\square_2	\square_3	□ 4	\square_5	
11	. When one area in this unit gets really busy, others help out	□ 1	\square_2	\square_3	\square_4	\square_5	
12	. When an event is reported, it feels like the person is being written up, not the problem	□ 1	\square_2	Пз	\square_4	\square_5	
13	. After we make changes to improve patient safety, we evaluate their effectiveness	□ 1	\square_2	\square_3	□ 4	\square_5	
14	. We work in "crisis mode" trying to do too much, too quickly	\square_1	\square_2	\square_3	\square_4	\square_5	
15	. Patient safety is never sacrificed to get more work done	\square_1	\square_2	\square_3	\square_4	\square_5	
16	. Staff worry that mistakes they make are kept in their personnel file	□ 1	\square_2	\square_3	□ ₄	\square_5	
17	. We have patient safety problems in this unit	□ 1	\square_2	\square_3	\square_4	\square_5	
18	. Our procedures and systems are good at preventing errors from happening	□ 1	\square_2	\square_3	□ ₄	\square_5	
<u>SE</u>	ECTION B: Your Supervisor/Manager						
Please indicate your agreement or disagreement with the following statements about your immediate supervisor/manager or person to whom you directly report.							
		Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼	
1.	. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	\square_1	\square_2	\square_3	\square_4	\square_5	
2	. My supervisor/manager seriously considers staff suggestions for improving patient safety	□ 1	\square_2	\square_3	□ ₄	\square_5	
3	. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts	□ 1	\square_2	\square_3	□ 4	\square_5	
4	. My supervisor/manager overlooks patient safety problems that happen over and over	□ 1	\square_2	Пз	\square_4	\square_5	

SECTION C: Communications

Ho	w often do the following things happen in your work area/unit?					
Thi	ink about your work area/unit…	Never ▼	Rarely ▼	Some- times ▼	Most of the time ▼	Always ▼
1.	We are given feedback about changes put into place based on event reports	□ 1	\square_2	\square_3	\square_4	\square_5
2.	Staff will freely speak up if they see something that may negatively affect patient care	□ 1	\square_2	\square_3	□ 4	\square_5
3.	. We are informed about errors that happen in this unit	□ 1	\square_2	\square_3	□ 4	\square_5
4.	Staff feel free to question the decisions or actions of those with more authority	□ 1	\square_2	\square_3	\square_4	\square_5
5.	In this unit, we discuss ways to prevent errors from happening again	□ 1	\square_2	\square_3	\square_4	\square_5
6.	Staff are afraid to ask questions when something does not seem right	□ 1	\square_2	\square_3	□ 4	□ ₅
	CTION D: Frequency of Events Reported					
In y	your work area/unit, when the following mistakes happen, <i>how often</i>	are they	reported?			
		Never ▼	Rarely ▼	Some- times ▼	Most of the time ▼	Always ▼
1.	When a mistake is made, but is <u>caught and corrected before affecting</u> <u>the patient</u> , how often is this reported?	□ 1	\square_2	\square_3	□ 4	\square_5
2.	When a mistake is made, but has <u>no potential to harm the patient</u> , how often is this reported?	□ 1	\square_2	\square_3	\square_4	\square_5
3.	When a mistake is made that <u>could harm the patient</u> , but does not, how often is this reported?	□ 1	\square_2	\square_3	\square_4	\square_5
SE	CTION E: Patient Safety Grade					
Ple	ease give your work area/unit an overall grade on patient safety.					
	Excellent Very Good Acceptable Poor		E Failing			
SE	CTION F: Your Facility					
Ple	ease indicate your agreement or disagreement with the following state		bout you	r facility		
Thi		Strongly Disagree	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
	Management in this facility provides a work climate that promotes patient safety	□ 1	\square_2	\square_3	□ 4	\square_5
2.	Units in this facility do not coordinate well with each other	□ 1	\square_2	\square_3	□ 4	□ ₅
3.	Things "fall between the cracks" when transferring patients from one unit to another	□ 1	\square_2	\square_3	□ 4	\square_5
4.	There is good cooperation among units that need to work together	□ 1	\square_2	\square_3	\square_4	\square_5

SECTION F: Your Facility (continued)		Strongly				Strongly
Think about your facility	Think about your facility			Neither ▼	Agree ▼	Agree •
5. Important patient care information is	s often lost during shift changes	□ 1	\square_2	□ ₃	 4	\square_5
6. It is often unpleasant to work with s	taff from other units in this facility	1	\square_2	\square_3	 4	\square_5
7. Problems often occur in the exchan this facility	ge of information across units in	□1	\square_2	Пз	□ 4	\square_5
8. The actions of management in this top priority	facility show that patient safety is a	1	\square_2	Пз	□ 4	\square_5
Management in this facility seems in after an adverse event happens	nterested in patient safety only	□1	\square_2	Пз	□ ₄	\square_5
10. Units in this facility work well togeth patients	er to provide the best care for	1	\square_2	\square_3	\square_4	\square_5
11. Shift changes are problematic for pa	atients in this facility	- □1	\square_2	\square_3	□ 4	\square_5
SECTION G: Number of Events Re	eported eported					
In the past 12 months, how many eve	ent reports have you filled out and	submitte	d?			
a. No event reports	d. 6 to 10 event reports					
☐ b. 1 to 2 event reports	a. 11 to 20 event reports					
C. 3 to 5 event reports	f. 21 event reports or more					
SECTION H: Background Informa	<u>tion</u>					
This information will help in the anal	ysis of the survey results.					
1. How long have you worked in this	s <u>facility</u> ?					
a. Less than 1 year	☐ d. 11 to 15 years					
☐ b. 1 to 5 years	☐ e. 16 to 20 years					
☐ c. 6 to 10 years	☐ f. 21 years or more					
2. How long have you worked in you	ur current work area/unit?					
a. Less than 1 year	☐ d. 11 to 15 years					
☐b. 1 to 5 years	☐ e. 16 to 20 years					
☐ c. 6 to 10 years	f. 21 years or more					
3. Typically, how many hours per w	eek do you work in this facility?					
☐a. Less than 20 hours per wee	ek 🔲 d. 60 to 79 hours per we	eek				
☐ b. 20 to 39 hours per week	e. 80 to 99 hours per we	eek				
☐c. 40 to 59 hours per week	f. 100 hours per week of	or more				

SECTION H: Background Information (continued)

4.	What is your staff position in this	facility? Select O	NE an	swer that best describes your staff position.
	a. Registered Nurse		☐ j.	Respiratory Therapist
	☐ b. Physician Assistant/Nurse P	ractitioner	□ k.	Physical, Occupational, or Speech Therapist
	☐ c. LVN/LPN		□ I.	Technician (e.g., EKG, Lab, Radiology)
	☐ d. Patient Care Asst/Aide/Care	Partner	☐ m.	Administration/Management
	e. Attending/Staff Physician		□n.	Other, please specify:
	☐ f. Resident Physician/Physicia	n in Training		
	☐ g. Pharmacist			
	☐ h. Dietician			
	☐ i. Unit Assistant/Clerk/Secreta	ry		
5.	In your staff position, do you typic	ally have direct in	nteract	ion or contact with patients?
	a. YES, I typically have direct in	nteraction or conta	ct with	patients.
	☐ b. NO, I typically do NOT have	direct interaction	or conta	act with patients.
6.	How long have you worked in you	r current specialt	y or pr	ofession?
	☐a. Less than 1 year	☐ d. 11 to 15 ye	ars	
	☐ b. 1 to 5 years	☐ e. 16 to 20 ye	ars	
	☐ c. 6 to 10 years	☐ f. 21 years or	more	
٥-	COTION I Value O amanganta			
	ECTION I: Your Comments Passe feel free to write any comment	s about natient s	afety <i>e</i>	error, or event reporting in your facility.
	ase feet free to write any comment	3 about patient 3	arcty, c	in your radiity.

Infection Control Assessment Tool for Hemodialysis Facilities

This tool is intended to assist in the assessment of infection control programs and practices in dialysis facilities. In order to complete the assessment, direct observation of infection control practices will be necessary. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

Dialysis facilities that report to NHSN complete an *Outpatient Dialysis Center Practices Survey* each year. The survey responses can be accessed in NHSN or the facility can be asked to retrieve and print their completed NHSN survey in advance of the site visit. The elements included on this assessment tool are intended to complement the NHSN survey. For facilities that do not report to NHSN, consider asking the facility to complete the practice elements of the survey.

Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices

Section 4: Infection Control Guidelines and Other Resources

Infection Control Domains for Gap Assessment

- I. Infection Control Program and Infrastructure
- II. Infection Control Training, Competency, and Audits
- III. Healthcare Personnel (HCP) Safety
- IV. Surveillance and Disease Reporting
- V. Respiratory Hygiene/Cough Etiquette
- VI. Personal Protective Equipment (PPE)
- VII. Environmental Cleaning
- VIII. Dialyzer Reuse and (if applicable) Reprocessing
- IX. Hand Hygiene
- X. Catheter and other Vascular Access Care
- XI. Injection Safety

Section 1: Facility Demographics					
Facility Name (for health department use only)					
NHSN Facility Organization ID (for health department use only)	☐ N/A because not CMS-certified or other reason, specify:				
State-assigned Unique ID					
Date of Assessment					
Type of Assessment	☐ On-site ☐ Other (specify):				
Rationale for Assessment (Select all that apply)	 ☐ Outbreak ☐ Input from ESRD Network or state survey agency ☐ NHSN data Specify: ☐ BSI ☐ Other NHSN data, specify: ☐ Other reason (specify): 				
Is the facility affiliated with a hospital?	 ☐ Yes (specify): (for health department use only) ☐ No If yes, who provides staffing for the facility? ☐ Hospital staff ☐ Contract with a dialysis company ☐ Other (specify): 				
Does the facility belong to a dialysis chain?	☐ Yes (specify chain below) ☐ DaVita ☐ Fresenius Medical Care ☐ Dialysis Clinic, Inc. (DCI) ☐ Other (specify): ☐ No				
What services are offered at the facility? (Select all that apply)	 □ Adult in-center hemodialysis □ Pediatric in-center hemodialysis □ Home hemodialysis □ Nocturnal hemodialysis □ Peritoneal dialysis □ Inpatient hemodialysis (in addition to outpatient hemodialysis) 				
What is the typical patient census? (include all dialysis patients cared for by the facility)	□ 1-25 □ 76-100 □ >200 □ 26-50 □ 101-150 □ 51-75 □ 151-200				

Section 2: Infection Control Program and Infrastructure

I.	I. Infection Control Policies and Infrastructure				
	Elements to be assessed	Assessment	Notes/Areas for Improvement		
1.	What training does the person in charge of infection control at the facility have?	O Certified in Infection Control (CIC)			
	Select the best answer	O Other training in infection control (specify):			
		O No specific training in infection control			
		O Not Applicable (no person in charge of infection control at the facility)			
2.	Is the facility participating in their ESRD Network Healthcare-Associated Infection (HAI) Quality Improvement Activity (QIA)?	O Yes O No			
3.	Has the facility participated in the CDC Dialysis BSI Prevention Collaborative?	O Yes O No			
4.	In the past 2 years, has the facility participated in any other intensive program focused on HAI prevention? (e.g., clinical	O Yes (specify):			
	trial, company-led quality improvement project)	O No			
5.	Does the facility have a system for early detection and management of potentially	O Yes (specify):			
	infectious persons at initial points of patient encounter?	O System applies at (or prior to) point of facility check-in			
No	ote: System may include taking a travel history, assessing for diarrhea or draining infected wounds, and elements described	O System applies when patient arrives in dialysis treatment area			
	under respiratory hygiene/cough etiquette.	O No			
6.	Does the facility have a policy/protocol for implementing Contact Precautions when warranted?	O Yes O No			
No	ote: CDC does not routinely recommend Contact Precautions for multidrug resistant organisms (MDROs) in dialysis clinics.				
	However, in certain circumstances (e.g., known or suspected MDRO transmission),				
	Contact Precautions may be necessary.				

l.	. Infection Control Policies and Infrastructure, continued					
	Elements to be assessed	Assessment	Notes/Areas for Improvement			
7.	Are there signs posted in the facility that encourage patients to take an active role in and express their concerns about facility infection control practices?	O Yes O No	O Visually confirmed			
	Visual confirmation suggested. Consider if the facility encourages this in other ways.					
8.	Facility provides standardized education to all patients on infection prevention topics: i. Vascular access care ii. Hand hygiene iii. Risks related to catheter use iv. Recognizing signs of infection v. Instructions for access management when away from the dialysis unit Facility should be able to provide examples of education materials.	i. O Yes O No ii. O Yes O No iii. O Yes O No iv. O Yes O No v. O Yes O No				
9.	What is the distance separating adjacent dialysis treatment stations? Involves observation. Select 2 adjacent and representative stations. Measure the closest distance between machine/chair/objects in one station and the next. If computer terminals are embedded in and shared between stations, the distance is zero.	 O < 3 feet O Embedded/shared computer terminal O ≥ 3 feet and <6 feet O ≥ 6 feet 	O Visually confirmed			
	a. If embedded/shared computer terminal, what is the policy/protocol for routinely cleaning the embedded/shared computer terminal? Select the best answer	 Computer terminal is cleaned after each patient Computer terminal is cleaned after each shift Computer terminal is cleaned at the end of each day Other (specify): N/A, facility does not have a policy/protocol for routinely cleaning the computer terminal 				

I. Infection Control Policies and Infrastructure, continued Notes/Areas for Elements to be assessed **Assessment Improvement** 10. Does the facility have an isolation room that is O Yes O No O Visually confirmed available for isolation of conditions other than hepatitis B? (i.e., not currently in use for hepatitis B patients)? Visual confirmation suggested. 11. Does the facility use hemodialysis machine O Yes O No Waste Handling Option (WHO) ports? Note: The WHO port is a machine port used for prime waste. a. If **Yes**, does the facility have a policy/protocol O Yes O No in place for disinfecting the WHO port? O Not Applicable (WHO ports If Yes, consider how is the policy implemented are not used at the facility) and enforced. 12. Are patients in the facility ever "bled onto the O Yes O No machine" (i.e., where blood is allowed to reach or almost reach the prime waste receptacle or WHO port)? Note: This practice is discouraged because it can result in patient blood loss and blood contamination of the environment.

II. Infection Control Training, Competency, and Audits Notes/Areas for Elements to be assessed **Assessment Improvement** Facility provides job-specific training to healthcare personnel (HCP) on infection prevention policies and procedures: i. O Yes O No i. Upon hire, prior to provision of care ii. Annually ii. O Yes O No Note: This includes those employed by outside agencies and available by contract or on a volunteer basis to the facility. If Yes, facility should be able to provide examples of training. Facility assesses and documents competency with job-specific infection prevention policies and procedures: i. Upon hire, prior to provision of care i. O Yes O No ii. Annually ii. O Yes O No Does the facility routinely conduct O Yes (facility should be able to show audits of staff infection control results of these audits) practice? O No a. If Yes, does the facility provide O Yes (facility should be able to feedback on adherence to clinical provide examples of feedback) staff? O No O Not applicable (no audits conducted) Does the facility routinely use O AHRQ/CMS Checklist Tools standardized tools for educating staff and/or assessing practice? O CDC Tools O Corporate Tools (Select all that apply) O No standardized tools used Should be able to view tools in the facility.

II. Infection Control Training, Competency, and Audits Notes/Areas for Assessment Elements to be assessed Improvement O CDC Video: Preventing BSIs in a. If CDC tools, indicate the tool(s) used Outpatient Hemodialysis Patients: **Best Practices for Dialysis Staff** (Select all that apply) O CDC Approach to BSI Prevention in Dialysis Facilities (i.e., Core Interventions for Dialysis BSI Prevention) O CDC Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol CDC Dialysis audit tools: O Hand hygiene O Catheter connection & disconnection O Catheter exit site care O Arteriovenous fistula & graft cannulation and decannulation O Injectable medication preparation & administration O Routine disinfection of dialysis station CDC Dialysis checklists: O Catheter connection & disconnection O Catheter exit site care O Arteriovenous fistula & graft cannulation and decannulation O Injectable medication preparation & administration O Routine disinfection of dialysis station

O Other (specify):

O N/A, no CDC tools used

Selements to be assessed Assessment Notes/Areas for Improvement	III.	Healthcare Personnel (HCP) Safety			
up, including prophylaxis as appropriate, to healthcare personnel (HCP) at no cost following an exposure event? 2. Does the facility track HCP exposure events, evaluate event data and develop/implement corrective action plans to reduce incidence of such events? 3. Does the facility offer hepatitis B vaccine to personnel who may be exposed to blood or body fluids through their job duties? 4. Does the facility offer influenza vaccine to all personnel? 5. Does the facility conduct baseline tuberculosis (TB) screening of HCP? 6. Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? 7. Does the facility educate HCP on prompt reporting of illness or		Elements to be assessed	Asses	sment	Notes/Areas for Improvement
data and develop/implement corrective action plans to reduce incidence of such events? 3. Does the facility offer hepatitis B vaccine to personnel who may be exposed to blood or body fluids through their job duties? 4. Does the facility offer influenza vaccine to all personnel? 5. Does the facility conduct baseline tuberculosis (TB) screening of HCP? 6. Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? 7. Does the facility educate HCP on prompt reporting of illness or	1.	up, including prophylaxis as appropriate, to healthcare	O Yes	O No	
be exposed to blood or body fluids through their job duties? 4. Does the facility offer influenza vaccine to all personnel? 5. Does the facility conduct baseline tuberculosis (TB) screening of HCP? 6. Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? 7. Does the facility educate HCP on prompt reporting of illness or	2.	data and develop/implement corrective action plans to reduce	O Yes	O No	
5. Does the facility conduct baseline tuberculosis (TB) screening of HCP? 6. Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? 7. Does the facility educate HCP on prompt reporting of illness or	3.	•	O Yes	O No	
HCP? O Yes O No Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? Does the facility educate HCP on prompt reporting of illness or O Yes O No	4.	Does the facility offer influenza vaccine to all personnel?	O Yes	O No	
reporting of illnesses and do not penalize with loss of wages, benefits, or job status? 7. Does the facility educate HCP on prompt reporting of illness or	5.		O Yes	O No	
	6.	reporting of illnesses and do not penalize with loss of wages,	O Yes	O No	
· · · · · · · · · · · · · · · · · · ·	7.	· · · · · · · · · · · · · · · · · · ·	O Yes	O No	

IV.	IV. Surveillance and Disease Reporting						
	Elements to be assessed	Assessment	Notes/Areas for Improvement				
1.	Does someone <i>in the facility</i> know the facility's bloodstream infection (BSI) rate in NHSN or BSI standardized infection ratio (SIR)?	O Yes O No O Not Applicable (Data are not reported to NHSN)					
	a. If Yes , does the facility share rate data with front-line clinical staff?	O Yes O No O Not Applicable (Data are not reported to NHSN)					
2.	Does the facility have a policy that mandates blood culture collection <i>before</i> antimicrobial administration any time a BSI is suspected?	O Yes O No					
	If yes, consider how is the policy implemented and enforced						
3.	Does the facility conduct routine screening of hemodialysis patients for hepatitis C antibody at the recommended interval?	O Yes, on admission and every 6 months thereafter for susceptible patients O No					
4.	Does the facility know how to report clusters of infections, adverse events, or a new hepatitis B/C case to public health?	O Yes, knows what to report and how O No					
5.	Does the facility have a system in place to communicate infection or colonization with a multidrug resistant organism (MDRO) to other healthcare facilities upon transfer?	O Yes O No					

	Elements to be assessed	Assessment	Notes/Areas for Improvement
ln ı	non-clinical areas:		
1.	Does the facility have signs posted at entrances with instructions to patients with symptoms of respiratory infection to: • cover their mouth/nose when coughing or sneezing? • use and dispose of tissues? • perform hand hygiene after contact with respiratory secretions?	O Yes O No	O Visually confirmed
2.	Does the facility provide a means for patients to perform hand hygiene in or near waiting areas?	O Yes O No	O Visually confirmed
3.	Does the facility provide space and encourage persons with symptoms of respiratory infection to sit as far away from others as possible?	O Yes O No	O Visually confirmed
4.	Does the facility provide tissues and notouch receptacles for disposal of tissues?	O Yes O No	O Visually confirmed
	Applies during periods of increased respiratory infections in the community	O Not Applicable (Not a period of increased respiratory infections)	
5.	Does the facility offer facemasks upon facility entry to patients with symptoms of respiratory infection?	O Yes O No	O Visually confirmed
	Applies during periods of increased respiratory infections in the community	O Not Applicable (Not a period of increased respiratory infections)	
In o	clinical areas:		
6.	Does the facility have the ability to separate symptomatic patients (by at least 6 feet) from other patients and their stations during dialysis treatment?	O Yes O No	O Visually confirmed

VI.	VI. Personal Protective Equipment (PPE)					
	Elements to be assessed	Assessment	Notes/Areas for Improvement			
2.	Facility provides job-specific training to HCP on proper selection and use of PPE: i. Upon hire, prior to provision of care ii. Annually Does the facility validate HCP competency with use	i. O Yes O No ii. O Yes O No				
	of PPE?	O Yes O No				
3.	Supplies necessary for adherence to PPE recommendations are available and located near point of use: i. Gloves ii. Gowns iii. Face Shields/Eye Protection iv. Face Masks Visual confirmation suggested.	i. O Yes O No ii. O Yes O No iii. O Yes O No iv. O Yes O No O Not Applicable (facility	O Visually confirmed			
4.	Does the facility have a policy/protocol for staff to routinely change/launder gowns (in the absence of soilage)? te: This question applies to patients in the general treatment area, not patients in isolation.	O Yes O At the end of the shift O At the end of the day O Other (specify): O No				
VII.	Environmental Cleaning					
	Elements to be assessed	Assessment	Notes/Areas for Improvement			
1.	Does the facility have written policies and procedures for routine cleaning and disinfection of environmental surfaces, including clearly defining responsible personnel? e: Policy and procedures should identify staff	O Yes O No				
	responsible for performing cleaning and disinfection as well as those responsible for selection and preparation of disinfectant solution(s).					
2.	Does the facility provide job-specific training to responsible personnel on environmental cleaning and disinfection upon hire, at least annually, and when policies/procedures change?	O Yes O No				
Not	e: If environmental cleaning is performed by contract personnel, facility should verify this is provided by contracting company.					

	Environmental Cleaning, continued	Notes / Augus for June 1	
3.	Does the facility regularly audit (monitor and	Assessment	Notes/Areas for Improvement
5.	document) adherence to cleaning and disinfection procedures?	O Yes (facility should be able to show results of these audits)	
		O No	
4.	Does the facility have a policy/procedure for decontamination of spills of blood or other body fluids?	O Yes O No	
	a. If Yes , are supplies necessary to clean the blood spill (e.g., proper disinfectant or spill kit) readily available and located near point of	O Yes O No	O Visually confirmed
	use?	O Not Applicable (facility does not have a policy for decontamination	
	Visual confirmation suggested.	of spills of blood or other body fluids)	
5.	Does the facility have a policy/procedure for routinely emptying AND cleaning reusable waste containers (e.g. leakproof containers used for disposal of used dialyzers and tubing)?	i. O Yes O No	
	i. Emptyingii. Cleaning	ii. O Yes O No	
6.	Does the facility have policies and procedures to ensure reusable medical devices (e.g.,	O Yes O No	
	thermometers, stethoscopes, blood pressure cuffs) are cleaned appropriately between patients?	O Not Applicable (no reusable medical devices are used at the facility)	
7.	Does the facility have policies and procedures for routinely cleaning and disinfecting the following	i. O Yes O No	
	items: i. Dialysis Clamps	O Not Applicable (facility does not use dialysis clamps)	
	ii. Blood Glucose Monitor(s)	ii. O Yes O No O Not Applicable (facility does not use blood glucose	
	iii. Dialysate Conductivity/pH meter(s)	monitor(s)) iii. O Yes O No O Not Applicable (facility does not use dialysate conductivity/pH meter(s))	

VIII. Dialyzer Reuse and Reprocessing			
Elements to be assessed	Assessment	Notes/Areas for Improvement	
Does the facility reuse dialyzers? Note: If the facility reprocesses dialyzers onsite, consider performing observations of dialyzer reprocessing.	O Yes (specify): O Dialyzers are reprocessed on-site O Dialyzers are reprocessed off-site O No *If No, skip to Hand Hygiene*		
A. If Yes, complete the following section. Que or off-site.	estions 2 & 3 apply to all facilities that reuse dialy	zersreprocessing can be on-	
Does the facility document informed consent for patients who participate in dialyzer reuse? Visual confirmation suggested.	O Yes (facility should be able to provide informed consent document) O No O Not Applicable (Facility does not reuse dialyzers)	O Visually confirmed	
3. Does the facility have policies and procedures to ensure that dialyzers are cleaned and reprocessed appropriately prior to reuse? Note: If reprocessing is performed off-site, facility policies and procedures should address safe handling of used dialyzers prior to reprocessing and assessment of disinfection process after reprocessing.	O Yes O No O Not Applicable (Facility does not reuse dialyzers)		
B. If answered Yes to Question 1 and dialyzer	rs are reprocessed on site, complete the following g on-site. *Consider performing observations of c		
Does the facility train personnel responsible for reprocessing dialyzers on proper selection and use of PPE and recommended steps for reprocessing equipment?	O Yes O No O Not Applicable (Facility does not reuse dialyzers or dialyzer reprocessing performed off-site)	, , ,	
5. Does the facility test the competency of personnel responsible for reprocessing dialyzers upon hire and at least annually?	O Yes O No O Not Applicable (Facility does not reuse dialyzers or dialyzer reprocessing performed off-site)		
6. Does the facility regularly audit (monitor and document) adherence to reprocessing procedures and provide feedback to personnel regarding their performance?	O Yes (facility should be able to show results of these audits) O No O Not Applicable (Facility does not reuse dialyzers or dialyzer reprocessing performed off-site)		
7. Does the facility perform routine maintenance for reprocessing equipment (e.g., automated reprocessors) by qualified personnel in accordance with manufacturer instructions? Confirm maintenance records are available.	O Yes O No O Not Applicable (specify): O Only manual reprocessing methods used O Facility does not reuse dialyzers or dialyzer reprocessing performed off-site		

IX. Hand Hygiene			
Elements to be assessed	Assessment	Notes/Areas for Improvement	
Supplies necessary for adherence to hand hygiene recommendations are available and located near point of use.		O Visually confirmed	
i. Alcohol-based hand gel	i. O Yes O No		
ii. Handwashing sinks	ii. O Yes O No		
iii. Soap	iii. O Yes O No		
iv. Paper Towels	iv. O Yes O No		
Visual confirmation suggested.			
Does the facility perform observations of staff hand hygiene opportunities monthly (or more frequently)?	O Yes (facility should be able to show results of these observations) O No		
a. If Yes , does the facility provide feedback on adherence to clinical staff?	O Yes (facility should be able to provide examples of feedback) O No		
	O Not Applicable (No observations conducted)		

Х.	Catheter and other Vascular Access Care		
	Elements to be assessed	Assessment	Notes/Areas for Improvement
1.	Does the facility provide training specific to catheter/vascular access care and aseptic technique for staff handling catheters and/or vascular accesses?	O Yes (facility should be able to provide examples of training) O No	
2.	Does the facility perform observations of staff vascular access care and catheter accessing practices quarterly (or more frequently)?	O Yes (facility should be able to show results of these observations) O No	
	a. If Yes , does the facility provide feedback on adherence to clinical staff?	O Yes (facility should be able to provide examples of feedback) O No O Not Applicable (No observations conducted)	

X. Catheter and other Vascular Access Care, continued Elements to be assessed **Assessment** Notes/Areas for Improvement Facility performs staff competency assessments for vascular access care and catheter accessing: i. O Yes O No Upon hire, prior to provision of care ii. Annually ii. O Yes O No Does the facility use an alcohol-based O Yes O No O Visually confirmed chlorhexidine (>0.5%) solution as the first line skin antiseptic agent during dressing changes of catheters? Visual confirmation suggested. Does the facility routinely apply an antibiotic O Yes O Visually confirmed ointment or povidine-iodine ointment to catheter exit sites during dressing changes? O No (Specify:) Visual confirmation suggested. O No ointment used, but Note: CDC recommends using povidone iodine chlorhexidine dressing ointment or bacitracin/gramicidin/polymyxin used B ointment (not currently available in the United States). Triple antibiotic ointment O Neither ointment nor (bacitracin/neomycin/polymyxin B) is chlorhexidine dressing available and might have a similar benefit. used Mupirocin ointment is not recommended due to concerns about development of antimicrobial resistance. Does the facility routinely scrub catheter O Yes O No O Visually confirmed hubs with appropriate antiseptic after the caps are removed and before accessing the O Not Applicable (Facility uses catheter? needleless connector devices) Visual confirmation suggested. If N/A (facility uses needleless O Yes O No connector devices), does the facility O Not Applicable (Facility does routinely scrub the catheter hubs when not use needleless connector the needless connectors are removed? devices)

XI. Injection Safety		
Elements to be assessed	Assessment	Notes/Areas for Improvement
Supplies necessary for adherence to safe injection practices are available and located near point of use.		O Visually confirmed
Visual confirmation suggested.		
i. Sharps containers	i. O Yes O No	
ii. Needles/cannulae with safety feature	ii. O Yes O No	
2. Does the facility have policies/procedures to ensure sharps containers are emptied and/or changed on a regular basis and when needed?	O Yes O No	
3. Does the facility use a clean room that is physically separate from the treatment area for storage and preparation of injectable medications? Visual confirmation suggested.	O Yes O No	O Visually confirmed
a. If No , is there a room available in the facility that could be used for storage and preparation of injectable medications?	O Yes O No	
4. Does the facility have a policy/procedure for routinely cleaning surface(s) where injectable medications are prepared?	O Yes O No	
5. Does the facility use manufacturer pre- filled saline syringes or single-use saline vials for flushes?	O Yes O No (specify):	O Visually confirmed
Visual confirmation suggested.	O Flushes are drawn from the patient's designated saline bag used for dialysis	
	O Flushes are drawn up from the patient's dialysis line	
	O Flushes are drawn from a common saline bag used for all patients	
	O Other (specify):	

Section 3: Direct Observation of Facility Practices

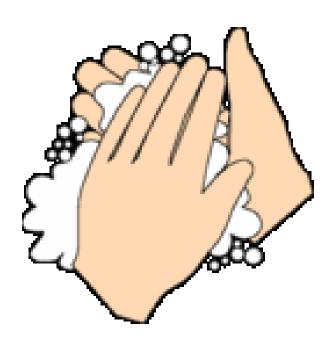
Certain infection control lapses (e.g., reuse of syringes on more than one patient or to access a medication container that is used for subsequent patients; reuse of lancets) can result in bloodborne pathogen transmission and should be halted immediately. Identification of such lapses warrants appropriate notification and testing of potentially affected patients.

*National Healthcare Safety Network (NHSN) minimum plan requirements for each audit type are included as a number of minimum observations to consider.

Infection Control Observations			
Infection Control Observations	Adherence: num/denom	Gaps Identified	Comments
(i) Hand hygiene		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-Hand-Hygiene-Observations.pdf *NHSN minimum requirement = 30 observations		O No	
(ii) Catheter connection and disconnection		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/Cat heter-Connection-Disconnection-Observations.pdf *NHSN minimum requirement = 10 observations		O No	
(iii) Catheter exit site care		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/Cat heter-Exit-Site-Care-Observations.pdf *NHSN minimum requirement = 5 observations		O No	
(iv) Arteriovenous fistula & graft cannulation		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/AV- Fistula-Graft-Can-Decannulation-Observations-AT.pdf *NHSN minimum requirement = 10 observations		O No	
(v) Injectable medication preparation		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-InjectionSafety-Observations.pdf *NHSN minimum requirement = 5 observations		O No	
(vi) Injectable medication administration		O Yes	
http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-InjectionSafety-Observations.pdf *NHSN minimum requirement = 5 observations		O No	
(vii) Routine disinfection of dialysis station		O Yes	
http://www.cdc.gov/dialysis/PDFs/dialysis-Station- Disinfect-Tool-7-2015.pdf *NHSN minimum requirement = 10 observations		O No	

Section 4: Infection Control Guidelines and Other Resources

Che	cck the box(es) next to the guidelines/resources recommended for the facility as a result of this assessment.
	Infection prevention resources for dialysis settings: http://www.cdc.gov/dialysis/
	Relevant guidelines: http://www.cdc.gov/dialysis/guidelines/index.html
	CDC Recommendations for Preventing Transmission in Chronic Hemodialysis Patients: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm
	Prevention tools, including checklists and audit tools: http://www.cdc.gov/dialysis/prevention-tools/index.html
	CDC Approach to BSI Prevention in Dialysis Facilities (i.e., the Core Interventions for Dialysis BSI Prevention): http://www.cdc.gov/dialysis/prevention-tools/core-interventions.html
	CDC hemodialysis central venous catheter Scrub-the-Hub Protocol: http://www.cdc.gov/dialysis/PDFs/collaborative/Hemodialysis-Central-Venous-Catheter-STH-Protocol.pdf
	Environmental surface disinfection in dialysis facilities: Notes for clinical managers: http://www.cdc.gov/dialysis/PDFs/collaborative/Env notes Feb13.pdf
	Provider education: http://www.cdc.gov/dialysis/clinician/index.html
	Best practices video: http://www.cdc.gov/dialysis/prevention-tools/training-video.html
	Infection prevention in dialysis continuing education course: http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html
	NHSN Outpatient Dialysis Center Practices Survey: http://www.cdc.gov/nhsn/forms/57.500 outpatientdialysissurv blank.pdf
	NHSN Dialysis Prevention Process Measures: http://www.cdc.gov/nhsn/dialysis/process-measures/index.html



HANDWASHING

Hand Hygiene: Why, How & When?

WHY?

- Thousands of people die every day around the world from infections acquired while receiving health care.
- Hands are the main pathways of germ transmission during health care.
- Hand hygiene is therefore the most important measure to avoid the transmission of harmful germs and prevent health care-associated infections.
- This brochure explains how and when to practice hand hygiene.

WHO?

 Any health-care worker, caregiver or person involved in direct or indirect patient care needs to be concerned about hand hygiene and should be able to perform it correctly and at the right time.

HOW?

- Clean your hands by rubbing them with an alcohol-based formulation, as the preferred mean for routine hygienic hand antisepsis if hands are not visibly soiled. It is faster, more effective, and better tolerated by your hands than washing with soap and water.
- Wash your hands with soap and water when hands are visibly dirty or visibly soiled with blood or other body fluids or after using the toilet.
- If exposure to potential spore-forming pathogens is strongly suspected or proven, including outbreaks of Clostridium difficile, hand washing with soap and water is the preferred means.

HOW TO HANDRUB?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Ouration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.

HOW TO HANDWASH?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Ouration of the entire procedure: 40-60 seconds



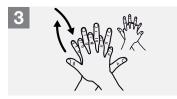
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



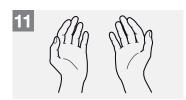
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

Hand care

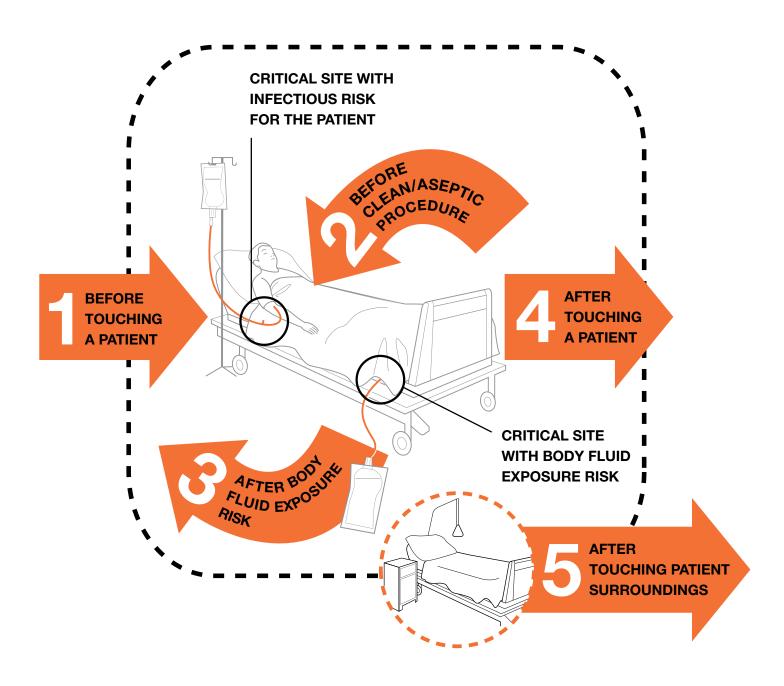
- Take care of your hands by regularly using a protective hand cream or lotion, at least daily.
- Do not routinely wash hands with soap and water immediately before or after using an alcohol-based handrub.
- Do not use hot water to rinse your hands.
- After handrubbing or handwashing, let your hands dry completely before putting on gloves.

Please remember

- Do not wear artificial fingernails or extenders when in direct contact with patients.
- · Keep natural nails short.

WHEN?

YOUR 5 MOMENTS FOR HAND HYGIENE*



*NOTE: Hand hygiene must be performed in all indications described regardless of whether gloves are used or not.

Before touching a patient

WHY? To protect the patient against colonization and, in some cases, against exogenous infection, by harmful germs carried on your hands

WHEN? Clean your hands before touching a patient when approaching him/her*

Situations when Moment 1 applies:

- a) Before shaking hands, before stroking a child's forehead
- b) Before assisting a patient in personal care activities: to move, to take a bath, to eat, to get dressed, etc
- Before delivering care and other non-invasive treatment: c) applying oxygen mask, giving a massage
- Before performing a physical non-invasive examination: c) taking pulse, blood pressure, chest auscultation, recording ECG

Before clean / aseptic procedure

WHY? To protect the patient against infection with harmful germs, including his/her own germs, entering his/her body

WHEN? Clean your hands immediately before accessing a critical site with infectious risk for the patient (e.g. a mucous membrane, non-intact skin, an invasive medical device)*

Situations when Moment 2 applies:

- a) Before brushing the patient's teeth, instilling eye drops, performing a digital vaginal or rectal examination, examining mouth, nose, ear with or without an instrument, inserting a suppository / pessary, suctioning mucous
- b) Before dressing a wound with or without instrument, applying ointment on vesicle, making a percutaneous injection / puncture
- Before inserting an invasive medical device (nasal cannula, nasogastric tube, endotracheal tube, urinary probe, percutaneous catheter, drainage), disrupting / opening any circuit of an invasive medical device (for food, medication, draining, suctioning, monitoring purposes)
- d) Before preparing food, medications, pharmaceutical products, sterile material

After body fluid exposure risk

WHY? To protect you from colonization or infection with patient's harmful germs and to protect the health-care environment from germ spread

WHEN? Clean your hands as soon as the task involving an exposure risk to body fluids has ended (and after glove removal)*

Situations when Moment 3 applies:

- a) When the contact with a mucous membrane and with non-intact skin ends
- b) After a percutaneous injection or puncture; after inserting an invasive medical device (vascular access, catheter, tube, drain, etc); after disrupting and opening an invasive circuit
- After removing an invasive medical device
- After removing any form of material offering protection (napkin, dressing, gauze, sanitary towel, etc)
- After handling a sample containing organic matter, after clearing excreta and any other body fluid, after cleaning any contaminated surface and soiled material (soiled bed linen, dentures, instruments, urinal, bedpan, lavatories, etc)

After touching a patient

WHY? To protect you from colonization with patient germs and to protect the health-care environment from germ spread

WHEN? Clean your hands when leaving the patient's side, after having touched the patient *

Situations when Moment 4 applies, if they correspond to the last contact with the patient before leaving him / her:

- a) After shaking hands, stroking a child's forehead
- b) After you have assisted the patient in personal care activities: to move, to bath, to eat, to dress, etc
- c) After delivering care and other non-invasive treatment: changing bed linen as the patient is in, applying oxygen mask, giving a massage
- After performing a physical non-invasive examination: taking pulse, blood pressure, chest auscultation, recording ECG

After touching patient surroundings

WHY? To protect you from colonization with patient germs that may be present on surfaces / objects in patient surroundings and to protect the health-care environment against germ spread

WHEN? Clean your hands after touching any object or furniture when living the patient surroundings, without having touched the patient*

This Moment 5 applies in the following situations if they correspond to the last contact with the patient surroundings, without having touched the patient:

- a) After an activity involving physical contact with the patients immediate environment: changing bed linen with the patient out of the bed, holding a bed trail, clearing a bedside table
- b) After a care activity: adjusting perfusion speed, clearing a monitoring alarm
- After other contacts with surfaces or inanimate objects (note ideally try to avoid these unnecessary activities): leaning against a bed, leaning against a night table / bedside table

*NOTE: Hand hygiene must be performed in all indications described regardless of whether gloves are used or not.

HAND HYGIENE AND MEDICAL GLOVE USE

- The use of gloves does not replace the need for cleaning your hands.
- Hand hygiene must be performed when appropriate regardless of the indications for glove use.
- Remove gloves to perform hand hygiene, when an indication occurs while wearing gloves.
- Discard gloves after each task and clean your hands gloves may carry germs.
- Wear gloves only when indicated according to Standard and Contact Precautions (see examples in the pyramid below) otherwise they become a major risk for germ transmission.

The Glove Pyramid – to aid decision making on when to wear (and not wear) gloves

Gloves must be worn according to STANDARD and CONTACT PRECAUTIONS. The pyramid details some clinical examples in which gloves are not indicated, and others in which clean or sterile gloves are indicated. Hand hygiene should be performed when appropriate regardless of indications for glove use.

STERILE GLOVES INDICATED

Any surgical procedure; vaginal delivery; invasive radiological procedures; performing vascular access preparing total parental nutrition and chemotherapeutic agents.

EXAMINATION GLOVES INDICATED IN CLINICAL SITUATIONS

Potential for touching blood, body fluids, secretions, excretions and items visibly soiled by body fluids.

DIRECT PATIENT EXPOSURE: Contact with blood; contact with mucous membrane and with non-intact skin; potential presence of highly infectious and dangerous organism; epidemic or emergency situations; IV insertion and removal; drawing blood; discontinuation of venous line; pelvic and vaginal examination; suctioning non-closed systems of endotrcheal tubes.

INDIRECT PATIENT EXPOSURE: Emptying emesis basins; handling/cleaning instruments; handling waste; cleaning up spills of body fluids.

GLOVES NOT INDICATED (except for CONTACT precautions)

No potential for exposure to blood or body fluids, or contaminated environment

DIRECT PATIENT EXPOSURE: Taking blood pressure, temperature and pulse; performing SC and IM injections; bathing and dressing the patient; transporting patient; caring for eyes and ears (without secretions); any vascular line manipulation in absence of blood leakage.

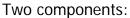
INDIRECT PATIENT EXPOSURE: Using the telephone; writing in the patient chart; giving oral medications; distributing or collecting patinet dietary trays; removing and replacing linen for patient bed; placing non-invasive ventilation equipment and oxygen cannula; moving patient furniture.

Glossary

Alcohol-based formulation	An alcohol-containing preparation (liquid, gel or foam) designed for application to the hands for hygienic hand antisepsis.
Body fluids	Blood; excretions like urine, faeces, vomit; meconium; lochia; secretions like saliva, tears, sperm, colostrum, milk, mucous secretions, wax, vernix; exudates and transudates like lymphatic, pleural fluid cerebrospinal fluid, ascitis fluid, articular fluid, pus (except sweat); organic samples like tissues, cells, organ, bone marrow, placenta.
Clean / aseptic procedure	Any care activity that implies a direct or indirect contact with a mucous membrane, non-intact skin, an invasive medial device. During such a procedure no germs should be transmitted.
Critical site	Critical sites are associated with risk of infection. They either correspond to body sites or medical devices that have to be protected against harmful germs (called critical sites with risk of infection for the patient), or body sites or medical devices that potentially lead to hand exposure to body fluids and bloodborne pathogens (called critical sites with body fluid exposure risk).
Hand care	Actions to prevent skin irritation.
Hand hygiene	Any action of hygienic hand antisepsis in order to reduce transient microbial flora (generally performed either by handrubbing with an alcohol-based formulation or handwashing with plain or antimicrobial soap and water).
Indication for hand hygiene	Moment during health care when hand hygiene must be performed to prevent harmful germ transmission and/or infection.
Invasive medical device	Any medical device that enters the body either through a body opening or through a skin or mucous membrane breaking.

How It Works: Cleaning Hands with Waterless Hand Sanitizer

Components:



- 1. Waterless hand sanitizer
- 2. Friction

Technique:

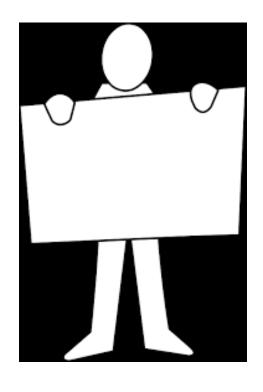
Four steps:

- Make sure all organic matter is removed from hands.
 All visible organic matter (for example: dirt) must be removed from hands prior to applying waterless hand sanitizer.
- 2. Apply a dime sized amount of waterless hand sanitizer to the palm of one hand or use a waterless hand sanitizer wipe.
- 3. Rub hands together covering all surfaces of hands and fingers.
- 4. Rub until waterless hand sanitizer is absorbed.

How it works:

- Waterless hand sanitizer provides several advantages over hand washing with soap and water. However, they are not effective if organic matter (dirt, food, or other material) is visible on hands.
- Benefits of waterless hand sanitizer: require less time than hand washing
 - act quickly to kill microorganisms on hands
 - are more accessible than sinks
 - reduce bacterial counts on hands
 - do not promote antimicrobial resistance
 - are less irritating to skin than soap and water
 - some can even improve condition of skin





POSTERS, INFORMATIVE TOOLS

Patients with Catheters



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



www.cdc.gov/ckd www.cdc.gov/dialysis/patient

Dialysis

Infections





TIP 3

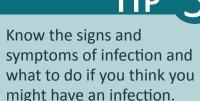
Catheters have a higher risk of infection. Ask your doctor about getting a fistula or graft instead.

Learn how to take care of the catheter at home. Do not get it wet.

Wash your hands often, especially before and after dialysis treatment.



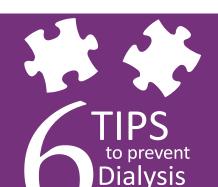
Know the steps your healthcare providers should take when using the catheter for treatment.





Know what to do if you have any problem with the catheter.

Patients with Fistulas or Grafts



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



Infections

Take care of your dialysis access site at home. Avoid scratching or picking it.

TIP

Know the steps your healthcare providers should take when using your dialysis access for treatment.

Know the signs and symptoms of infection and what to do if you think you might have an infection.

Wash or cleanse your dialysis access site prior to treatment.

Wash your hands often,

dialysis treatment.

especially before and after

TIP

any problem with your dialysis access site.

www.cdc.gov/dialysis/patient www.cdc.gov/ckd

Know what to do if you have



PUT TOGETHER THE PIECES TO PREVENT INFECTIONS

IN DIALYSIS PATIENTS

Engage Patients

Discuss important infection prevention practices like hand hygiene with your patients and their caregivers.

Reduce Catheters

Identify and address barriers to fistula/graft placement and catheter removal.

Perform Hand Hygiene and Change Gloves

Know when it is necessary to perform hand hygiene and change your gloves; put this knowledge into practice.

Catheter Care, Scrub the Hubs

Scrub the catheter hubs and allow them to air dry. Use chlorhexidine with alcohol at the catheter exit site and apply an antimicrobial ointment.

Vaccinate Dialysis Staff and Patients

Make sure staff and patients are up-to-date for influenza and hepatitis B vaccinations and patients have received pneumococcal vaccination.

Disinfect the Dialysis Station

Ensure the station is empty before disinfecting. Visibly wet all surfaces with disinfectant.

Track Infections

Know your facility's rates for important infections like access site and bloodstream infections.

Follow Safe Injection Practices

Never reuse needles or syringes or administer medications from a single-dose vial or IV bag to multiple patients. Use single-dose vials whenever possible and dispose of them immediately after use.

Use Aseptic Technique

Take care to not contaminate the access, bloodlines or hemodialysis circuit. Scrub injection ports prior to use.







How does this facility involve patients and their families in infection control activities? Are patients encouraged to speak up when they see a concerning

conversation. We hope this guide can be a starting point to improve awareness

Dialysis centers should educate and empower patients to help prevent infections and support a safe care environment. Talk to your social worker or facility administrator for ideas on how you can get involved.

practice (for example, a staff member who does not wash her hands)?

How does this facility make sure that all patients receive necessary vaccines to prevent illness (such as Hepatitis B, seasonal flu, and pneumococcal vaccines)?



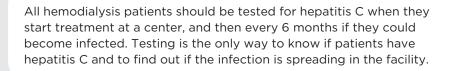
Patients on dialysis have weakened immune systems and should get certain vaccines to keep from getting sick.



How does this facility make sure that dialysis center staff are vaccinated against the flu every year?

Sick staff members can spread the flu to patients. Requiring dialysis center staff to get vaccinated each year can help prevent this spread. Dialysis centers should also have policies that support staff to stay home when they are sick.









Does this facility prepare medications in a separate room away from dialysis stations to avoid contamination?

Medications for injection should be prepared away from patient treatment areas to keep them safe from germs. One way to do this is to prepare them in a separate room.

More information about injection safety can be found at: www.oneandonlycampaign.org/







Does this facility use the CDC recommendations to help prevent infections?

Regular use of CDC resources and recommendations can keep patients from getting serious infections. These recommendations include monitoring staff hand hygiene and vascular access care, training staff, and assisting patients in learning about these practices. Facilities should be using these recommendations and giving their staff feedback to know how they are doing. More information can be found at: www.cdc.gov/dialysis/prevention-tools

How does this facility handle cleaning dialysis stations in between patient treatments - specifically, are dialysis stations cleaned while a patient is still in the chair?



Dialysis stations need proper cleaning to prevent spread of germs between patients. CDC has steps for facilities to follow to make sure every station is safe for the next patient. Some steps should not start until the patient has completed their dialysis treatment and left the station.

More information can be found at: www.cdc.gov/dialysis/prevention-tools



Does this facility use a new, disposable dialyzer (artificial kidney) with each dialysis treatment? If not, can a patient opt out of reusing the dialyzer?

Reused dialyzers must be thoroughly cleaned and disinfected after each use, and mistakes can occur. Talk to your doctor about whether you could use a disposable dialyzer instead of a reused one.

How does this facility support patients to use a fistula instead of a catheter as early in their treatment as possible?



Sometimes it is medically necessary to use a catheter for dialysis. However, catheters can lead to serious infections and other problems. Fistulas and grafts are safer for most patients. Talk to your care team about what is right for you.

More information can be found at: www.aakp.org/store/item/understanding-your-hemodialysis-access-options.html



If there was an outbreak in this facility how would the facility communicate with patients? How would the facility partner with others such as the health department?

Contagious germs can spread through dialysis centers. Finding an outbreak (a sudden increase in numbers of sick persons) early and alerting public health can help to stop the spread of infection.





HELPFUL LINKS
CULTURE OF SAFETY AND INFECTION
CONTROL

CULTURE OF SAFETY LINKS

This is a CDC link on Core Interventions for safety and infection control in ESRD dialysis patients. Resources include Infection control tools & videos, staff competencies and infection control assessment tools. There is also a resource section for patients.

https://www.cdc.gov/dialysis/patient/conversation-starter.html

The ESRD Toolkit was created to help end-stage renal disease clinics prevent healthcare-associated infections in dialysis patients. The toolkit helps dialysis center clinicians make care safer by following clinical best practices, creating a culture of safety, using checklists and other audit tools, and engaging with patients and their families. The toolkit has science-based, practical resources that reflect the real-world experiences of the frontline providers who participated in the toolkit's development.

http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/index.html

This is a great reference article from Duke University on the meaning of a Culture of safety and how to establish that environment in a facility by implementing tools and safety processes and consciously choosing the means of developing and maintaining the organization's culture, the outcome will be as intended: a culture of safety.

http://patientsafetyed.duhs.duke.edu/module c/culture saftey/assessing culture.html

This website provides information on TeamSTEPPS – a system for improving a safe environment for your patients. It contains educational materails and ready to use tools. Developed by the Department of Defense's Patient safety Program in collarboration with the Agency for Healthcare research and Quality.

http://www.ahrq.gov/teamstepps/about-teamstepps/indexhttps://jeopardylabs.com/play/culture-of-safety2.html

This video shows a fictional scenario in which a positive culture of safety overcomes multiple commonly seen barriers to infection prevention in dialysis facilities. Practicing hand hygiene, , wearing protective equipment, and following a checklist are just three important ways you can foster a culture of safety. See how these techniques, which can reduce adverse outcomes like central line-associated blood stream infections (CLABSIs), are put into action.

https://www.youtube.com/watch?v=TLeHkU34 Ho

INFECTION CONTROL LINKS

This link is to an excellent Power point presentation by Dr. Priti Patel in conjunction with the CDC. It is on prevention of bloodstream infections in dialysis patients. It includes case studies, interventions, and recommendations along with resources such as posters, best demonstrated practices and audit tool.

http://www.esrdnetwork8.org/dialysis-transplant-providers/quality-improvement/Ql-assets/9-19-webinar-handouts.pdf

This site from the Center for Disease Control coalition provides tools and resources for patients and staff on infection prevention.

https://www.cdc.gov/dialysis/coalition/resource.htm

This site contains a printable poster on 5 common ways germs are spread/Handwashing. It is presented by the Minnesota Dept. of Health.

http://www.health.state.mn.us/handhygiene/why/5ways.html

This is a link to a site from NHSN that explains how the Standardized Infection Ratio (SIR) is calculated for Blood Stream Infections (BSI).

https://www.cdc.gov/nhsn/pdfs/dialysis/understanding-the-de-bsi-sir.pdf

This is a link for a tool intended to assist in the assessment of infection control programs and practices in dialysis facilities. It looks at facilities demographics, policies and procedures along with direct observation of infection control practices. Provided by the Center for Disease Control.

http://www.cdc.gov/HAI/pdfs/IC/Infection-Control-Assessment-Tool-for-Hemodialysis-Facilities.pdf

This you tube video by the AHRQ demonstrates catheter exit site care and initiating dialysis with a CVC.

https://www.youtube.com/watch?v=ubxX9ZUJz68This

This link is a toolkit developed by the Forum of ESRD Networks Medical Advisory Committee. It provides a comprehensive overview of infection control assessment and interventions.

 $\underline{http://esrdnetworks.org/resources/toolkits/mac-toolkits-1/catheter-reduction-toolkit/catheter-reduction-toolkit/view}$