HEMODIALYSIS INFECTION PREVENTION & CONTROL AUDIT

Facility: _____ Name of Unit: _____

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
FIRST AUDIT SESSION DATE:_____ AUDITORS:_____				
HEMODIALYSIS INFECTION PREVENTION & CONTROL AUDIT INSTRUCTIONS 1. The audit is to be conducted in collaboration between the site ICP and a dialysis CRN. It is understood this may not be possible in all geographic locations. 2. The audit tool is divided into four sections, with the intent that one section will be completed each quarter. 3. Complete each question/assessment item.				
GENERAL				
The Infection Prevention and Control Manual (IP&C) is easily accessible				
There is 4 feet (1.22m) between beds or loungers, totaling 80 square feet (7.44 square m) per station				
Adverse events related to IP&C are reported according to facility policy				
Staff do not eat, drink, smoke, handle contact lenses, or apply cosmetics in patient care areas				
There is a routine schedule for cleaning refrigerators and ice machines according to manufacturers' guidelines				
Refrigerators are clean and clear of frost				
There is a routine schedule for cleaning blanket warmers according to manufacturers' guidelines				
EQUIPMENT				
There are written policies and procedures/protocols for cleaning and disinfecting surfaces and equipment in the unit				
Single-use equipment is not reused				
Staff wear PPE during cleaning/disinfecting procedures				
Patient bed spaces, including all machine surfaces are cleaned & disinfected between patients with facility approved disinfectant				
Non-critical patient equipment is disinfected between patients with facility-approved disinfectant. This includes				
• Glucometers				
• Pulse oximeters				

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
• Stethoscopes				
• BP cuffs				
• Commodes				
• Thermometers				
• Scales				
• Sharps containers				
Patient equipment having contact with vascular access must undergo ***at least*** high-level disinfection, or is disposed after use				
Equipment to be repaired/serviced is cleaned and sterilized/ disinfected prior to being serviced or leaving the facility				
Service and maintenance is performed with gloves, masks and eye/face protection when contamination is likely				
PATIENT EDUCATION				
There is evidence of an ongoing education program for patients and families reviewing:				
• Personal hygiene				
• Hand hygiene				
• Respiratory hygiene				
• Foot care				
• Care of fistula or Central Line				
• Blood borne pathogens				
• Antibiotic Resistant Organisms (ARO)				
• Early indicators of infection				
• Who to report to regarding complications				
STAFF EDUCATION				
All staff members receive orientation and education in:				
• Hand Hygiene				
• Personal Protective Equipment				
• Routine Practices				
• Accessing catheters and fistulas				
• Water treatment and distribution systems				
All staff receive re-education regarding IP&C practices				

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
according to outlined facility IP& C Guidelines				
All staff receive education and training when new equipment or processes are instituted				
Staff education and training regarding IP&C practices (hand hygiene, RP, etc.) are documented and tracked				
All staff receive education and training in management of blood/body fluid exposures (focus: workplace exposure)				
All staff are educated regarding cleaning and disinfection of blood and body fluid spills (focus: environment)				
HAND HYGIENE				
There are adequate hand hygiene sinks present: 1 sink/3 patients with no more than 6 m between any patient station and the nearest sink				
Hand hygiene sinks are dedicated to hand hygiene				
Antimicrobial soap is available for hand hygiene				
There is a dedicated hand hygiene sink in each procedure room				
Alcohol based hand rub (ABHR) is readily available				
ABHR is available at point-of-care				
ABHR available for patients/visitors in public areas of the unit				
PERSONAL PROTECTIVE EQUIPMENT (PPE)				
PPE is readily available when needed (long- sleeved gowns, gloves, masks, eye/face protection)				
Clean PPE is located away from sinks and other splash areas				
There is a supply of non-sterile gloves placed at each station				
PPE applied, removed, & disposed of according to facility policy				
Gloves are single use and are not reused				
PPE is available and accessible in appropriate sizes				
Staff do not leave procedure room wearing used PPE				
Gloves are worn when splattering of blood or soiling of hands is likely (e.g., during initiation and termination of dialysis, centrifugation of blood, accessing fistula, contact with contaminated items/equipment)				
Gloves are used for one task only, and removed after contact with a patient and/or equipment				
Gown and facial protection are worn when splattering of blood or soiling of clothing is likely (e.g., during dialysis initiation/				

ITEM	COMPLIANCE			COMMENTS
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termination, centrifugation of blood, accessing fistula)				
PPE is not worn outside the treatment area				
RESPIRATORY AND GASTROINTESTINAL				
Patients are screened for Influenza-like Illness and GI symptoms at each visit to the dialysis unit				
Patients likely to contaminate the environment (e.g., diarrhea, vomiting) are managed with Contact Precautions per facility guidelines				

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	YES	NO	N/A	

SECOND AUDIT SESSION DATE:_____ AUDITORS:_____

HEMODIALYSIS INFECTION PREVENTION & CONTROL AUDIT INSTRUCTIONS

1. The audit is to be conducted in collaboration between the site ICP and a dialysis CRN. It is understood this may not be possible in all geographic locations.
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3. Complete each question/assessment item.

HEPATITIS				
All patients are screened for Hepatitis B and Hepatitis C prior to start of the 1st dialysis treatment				
All patients' Hepatitis screening results are recorded in:				
• The patient's hemodialysis patient record				
• A designated logbook				
HbsAg susceptible patients are vaccinated for HBV and reported to WRHA Public Health/CDC				
All susceptible chronic hemodialysis patients are routinely tested for HBV every 6 months, including unvaccinated patients and non-responders				
Annual testing of HbsAg-positive patients is done to determine the patient's ongoing Hepatitis B virus status				
HbsAg-positive patients:				
• Undergo dialysis in a separate room and				
• Use separate machines, equipment, instruments, supplies and medications				
Staff members caring for HbsAg-positive patients do not care for susceptible patients during the same shift				
Staff caring for Hbs-Ag positive patients gown and glove prior to entering isolation area				
Anti-HCV negative patients are tested monthly for ALTs				
Anti-HCV negative patients are tested every 6 months for anti-HCV				
HCV positive patients are not segregated or isolated during hemodialysis. Routine Practices are used				
HBV susceptible patients who return from travel to countries where HBV is highly endemic are tested for HBV on their return at 0, 3 and 6 months post-return				
Staff are aware of the Blood and Body Fluid Exposure Protocol				
All staff are offered Hepatitis B vaccine				

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	YES	NO	N/A	
AROs				
All new patients to the hemodialysis program are screened for MRSA				
Patients known to be positive for MRSA or *C. difficile* are managed on Contact Precautions				
TB				
Known positive/suspect TB patients are managed on Airborne Precautions in an area separate from the main treatment area				
Known positive/suspect TB patients wear a procedure or surgical mask if Airborne Infection Isolation Room (AIIR) is not available while receiving their treatment				
Staff are aware of MRP Policy # 60.30.07 re: management of isolation rooms				
Mantoux testing is completed for all patients:				
• On admission to program				
• Annually				
• Two-step testing used				
IMMUNIZATION				
Influenza vaccine is offered to all patients annually				
Pneumococcal vaccine is offered to all patients				
INFECTION SURVEILLANCE				
There is an active surveillance program for infections				
Surveillance performed for:				
• Blood stream infections				
• Vascular access related infections				
RECORD-KEEPING				
There is centralized record-keeping for:				
Patient vaccination status				
• Hepatitis B vaccination				
• Influenza				
• Pneumococcal				
Results of serological testing:				

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
• HIV				
• HBV				
• HCV				
• HBV AND HCV co-infection				
Results of diagnostic tests:				
• TB Mantoux Testing				
• AFB				
Results of monthly ALT testing				
Episodes of bacteremia				
Loss of vascular access caused by infection				
Adverse events, e.g., blood leaks and spills, machine malfunctions				
Calculate the percentage of each access device based on the total number of dialysis patients in the unit:				
• Total number of dialysis patients				
• Number of patients with temporary central venous catheters				
• Number of patients with permanent tunneled central venous catheters				
• Number of patients with AV fistula				
• Number of patients with AV graft				

Number of Patients	Number	Percent
HBV +		
HCV +		
HBV & HCV co-infection		
HIV +		
MRSA +		
CPE +		
AMR GNB +		
Other		
There is Dialysis patient health record-keeping for:	Auditor is to randomly choose ___# of charts to review	
Status of vascular assess including		
• Insertion of access		

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
• Location of access				
• Change of site and reason for change				
• Change of access type and reason for change				
The location of each treatment including:				
• Dialysis station and machine number used for each dialysis treatment				
• Names of staff members who connect and disconnect the patient to and from a machine				
	Yes	**No**		**Compliance Score:**
Total number of 'YES'				
Total number of 'NO'				
Total number of items ('YES' and 'NO', exclude 'N/A')				

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	YES	NO	N/A	

THIRD AUDIT SESSION DATE:_____ AUDITORS:_____

HEMODIALYSIS INFECTION PREVENTION & CONTROL AUDIT INSTRUCTIONS

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DIALYSIS MACHINES

All dialysis machines are numbered, and the machine number recorded for every dialysis treatment				
There is an appropriate written procedure for rinsing and disinfection of dialysis machines including:				
• Disinfection agent used				
• Contact time				
• Frequency				
Routine bacteriologic assays and endotoxins of dialysis fluids are performed monthly and records are kept				
There is an appropriate written procedure to be followed in the event microbiologic assays are outside the normal range for dialysate (i.e. >2000 cfu/ml)				
Venous pressure transducer protectors are changed between patients and not reused				
If a transducer protector becomes wet, it is replaced immediately and inspected for the source of contamination				
Waste from dialysis machines is not permitted to back-flow into the machine, e.g., drain hose and drain are not in contact with each other				
In the event of a blood leak, the dialysis machine is subject to cleaning and disinfection for internal and external pathways before use on another patient				
There is an on-going preventative maintenance program for each machine				
There is an appropriate written procedure for the disinfection of the wands outlining:				
• Disinfection				
• Agent used				
• Contact time				
• Frequency				

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
There is a protocol in place for dealing with a breach of the transducer protector				
List products used as well as cleaning/disinfection schedule for:				
• External hemodialysis machine				
• Internal hemodialysis machine				
• Environmental surfaces				
WATER TREATMENT- RO WATER				
There are appropriate written procedures regarding the cleaning and disinfection of the water treatment and distribution system				
The main RO water system is disinfected monthly and records are kept				
The portable RO water systems are disinfected at least weekly				
RO water				
• Is tested for bacteria and endotoxins monthly				
• Records are kept				
There is an appropriate written procedure to be followed:				
• In the event microbiologic assays are outside the normal range for water (i.e. >200 cfu/ml)				
• When the RO water system is disrupted				
WATER TREATMENT				
Post water treatment is monitored and recorded through:				
• Bacterial counts				
• Endotoxin testing				
PROCEDURE ROOM				
General appearance is clean and tidy				
Soiled linen bag is present				
Appropriate biohazard receptacles are present if required				
Appropriate sharps containers are readily available and not over-filled				
There are policies and procedures for cleanup of room following invasive procedures				

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Staff does not leave procedure room wearing PPE				
Supplies in procedure room are limited to what is needed				
There is clear separation between sterile, clean, and dirty equipment/ items				
CLEAN SUPPLIES/MEDICATIONS				
Clean supplies and medications are stored away from waste or soiled equipment and supplies				
There is no evidence of dust or dampness in the clean area				
Clean supplies and medications are only delivered to a cleaned bed space after the patient has vacated space				
Clean supplies are stored above the floor				
Storage of medical equipment/devices (including boxes or totes that contain medical equipment/devices) at least:				
• 25 cm/10 inches off the floor (10 cm/4 inches if shipping pallets used)				
• 45 cm/18 inches from the ceiling				
• 5 cm/2 inches from walls				
Sterile supplies or opened trays are kept away from possible sources of contamination				
Soiled items are not brought into the clean area				
Chemicals are stored separately & apart from food/drug items				
Single-use items are not re-used				
There is a refrigerator reserved for medication only				
There is a refrigerator reserved for staff food				
Refrigerators containing pharmaceuticals have temperature recorded and maintained between 2°C and 8°C				
There are documented procedures for how to deal with items when temperatures are outside of the prescribed range (lower than 2°C or greater than 8°C)				
Unused supplies and medications taken to one patient's station are discarded or reprocessed before use on another patient				
Carts and trays/bins used to transfer start-up equipment to dialysis stations are cleaned and disinfected on a routine basis (e.g., weekly)				
Carts and trays/bins are stored in a clean area				

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Medications are prepared in a clean, designated medication area separated from the patient bed space				
Medications are delivered separately to each patient (e.g., not from a common cart/caddy)				
Intravenous medication vials labeled for single use are not punctured more than once				
Pooling of residual medication from two or more vials does not occur				
Multi-dose vials are single-patient use & labeled with patient name				
Flush solutions used for each patient treatment are placed on a clean surface at the patient bedside				
Central lines and solutions are handled in an aseptic manner				
WASTE & SHARPS DISPOSAL				
There is a documented procedure for dealing with blood spills				
Blood spills are cleaned immediately with a facility- approved intermediate-level disinfectant				
Waste is removed according to facility policy schedule:				
• Lines are disposed of as regular waste				
• Lines with large amounts of blood/body fluids are disposed of as biomedical waste in appropriate biomedical waste containers				
The size and number of waste receptacles is adequate				
Waste receptacles are not over-filled				
Waste receptacles are emptied when 2/3 full				
Large waste receptacles are covered (this does not include bedside waste receptacles)				
Leakage of body fluids from waste bags does not occur				
Used needles are not re-capped				
Sharps are discarded into puncture-resistant leak-proof containers				
Sharps are discarded at point of use				
Sharps containers are not over-filled				

ITEM	COMPLIANCE			COMMENTS
	YES	NO	N/A	
LINEN				
Soiled linen is contained in leak-proof bags that are not overfilled (e.g., closed off when 2/3 full)				

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FOURTH AUDIT SESSION DATE:_____ AUDITORS:_____

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HEMODIALYSIS ACCESS MANAGEMENT				
List antiseptic product used to clean:				
• Skin prior to needling				
• Skin around central line				
• The catheter				

CVC INSERTION AND CARE				
There are written procedures for the care of hemodialysis catheters				
Staff receive annual training in care of hemodialysis catheters				
Uncuffed catheters remain in place no longer than 4-6 weeks before being replaced by a cuffed catheter or a fistula/graft				
Catheter insertion site is prepared with 2% Chlorhexidine gluconate (CHG) with 70% alcohol, or 10% povidone iodine if CHG allergy and allowed to dry at least 2 minutes, or sterile saline if povidone iodine allergy				
The catheter exit site is:				
• Examined at each treatment for signs of infection				
• Documented in patient's chart				
Gauze dressings are:				
• Only used if the exit site is bleeding or oozing				
• Changed at every treatment				
Transparent dressings are used and changed weekly				
When dressing is changed, skin is cleansed with 2% Chlorhexidine gluconate (CHG) with 70% alcohol, 2% aqueous CHG or 10% povidone iodine if CHG allergy, and allowed to dry at least 2 minutes				
Breaks in technique are:				
• Documented				
• Reported according to facility policy				

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Following treatment, an approved antibiotic ointment is applied to the exit site (e.g., PI) if appropriate for the catheter type (e.g., not to be used with Palindrome™ catheters)				
FISTULA MANAGEMENT				
The fistula exit site:				
• Is examined at each treatment for signs of infection				
• Results are noted in hemodialysis health record				
Patient is instructed to wash fistula arm prior to treatment with antimicrobial soap (2% CHG antimicrobial soap)				
Fistula port is swabbed with 2% Chlorhexidine gluconate (CHG) with 70% alcohol or 2% aqueous CHG prior to accessing				
Breaks in technique are documented and reported in hemodialysis health record				
BLOOD CULTURES				
There is a policy for blood culture collection				
Blood culture policy indicates collection of 2 sets: one from the central vascular catheter site, and one from a peripheral site				
When collecting blood cultures, skin and site prep is done in accordance with facility laboratory policy.				
Breaks in technique are documented and reported according to facility policy				
ANTIBIOTIC USE				
Nasal decolonization for *Staphylococcus aureus* or MRSA carriage is not routinely done				
Antimicrobial stewardship is practiced within the unit (e.g., vancomycin usage is minimal and monitored)				