Name of Policy: Management of HBV and Other Blood Borne Pathogens in the Dialysis Unit-**Infection Control** THE UNIVERSITY OF TOLEDO **Policy Number:** 3364-118-20 **Department:** End Stage Renal Disease Program/ Hemodialysis (Nursing Service) Approving Chief Nursing Officer & Clinical Director End Stage Officer: Renal Disease Program Responsible Effective Date: 6/1/2022 Clinical Director, End Stage Renal Disease Program Agent: Initial Effective Date: July, 1975 Scope: The University of Toledo Medical Center New policy proposal Minor/technical revision of existing policy Major revision of existing policy Reaffirmation of existing policy

(A) Policy Statement

All persons working in or associated with the Hemodialysis Unit shall comply with the approved policy Standard Precautions (Policy 3364-109-ISO-404).

(B) Purpose of Policy

To prevent the nosocomial transmission of blood borne pathogens to patients and staff.

(C) Procedure

- 1. Hemodialysis Risk Classifications
 - a. The assistant nursing director and all staff nurses are identified as performing Category I tasks. All tasks involving patient care and machine cleaning may result in exposure to blood.
- 2. Standard precautions will be followed with all patients to reduce the risk of transmission of bloodborne pathogens. Refer to the UTMC Bloodborne Pathogen Exposure Control Plan.
 - a. All dialysis nurses will assist with enforcement and surveillance of infection control policies.
 - c. Personnel will wear protective clothing in the dialysis unit. Refer to the Hemodialysis Personal Protection Equipment Guideline for use of PPE.
 - d. Patients in isolation may be brought to the dialysis unit for treatment, except those diagnosed with TB and other airborne spread organisms.
- 3. To reduce contamination of the inanimate environment in the dialysis unit.
 - a. The number of the machines used for each dialysis treatment should be recorded on the flow sheet (for future reference).
 - b. Linen will be used on chairs and beds and must be changed between patients. Chairs, beds, and bedside units will be cleaned with disinfectant PDI purple top Saniwipes.
 - c. Blood spills must be attended to immediately using the hospital approved spill kit. Blood should not be allowed to remain on floors, walls, equipment or other surfaces. Gloves should be worn during cleaning. Cleaning procedures as outlined on the outside of the spill kit and the Standard Precautions Policy No. 3364-109-ISO-404 will be used.

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- d. Disposable equipment will be used where practical, especially where contact with blood or blood products occur. Non-disposable equipment should be appropriately cleaned, disinfected or sterilized after each dialysis. Special attention should be given to control knobs on the machines and to other surfaces touched and contaminated with blood during the dialysis procedure. Any contaminated equipment sent for servicing or repair must be identified with a biohazard label.
- e. All lab specimens from all patients will be enclosed in a plastic biohazard bag for transport to the Lab. The request form will not be placed in the bag with the specimen, but is to be attached to the outside of the bag.
- f. Needles and syringes must be discarded in proper containers placed within the unit. When 3/4 full, these will be sealed before placement into infectious waste containers.
- g. Cleaning of the dialysis machines will be done following manufacturer's recommendations.
- h. Separate sinks must be used for handwashing and equipment cleaning.
- i. All grossly bloody contaminated waste will be disposed of in designated red liner containers for proper identification by housekeeping personnel. Trash bags should be strong enough to prevent leakage. Bags should not be overfilled to avoid breakage and spillage and tied securely to prevent leakage of contents upon transfer.

4. Education of staff and patients.

- a. Hemodialysis staff will complete annual safety/infection prevention training. New employees will receive training. Additional training will occur when recommendations are changed and/or the employees risk category changes.
- b. The dialysis unit's infection prevention policy will be reviewed and/or revised annually, or more often if necessary, to comply with current recommendations from Center for Medicare and Medicaid.
- c. Any visitors allowed in the unit will be instructed in standard precautions (see Policy3364-109-ISO-404).
- d. The dialysis unit will be included in the surveillance rounds of the Infection Preventionist at a minimum of twice a year.
- e. Appropriate patient teaching regarding hepatitis control shall be the responsibility of the hemodialysis staff. All ESRD patients will be instructed in hepatitis and its precautions and this teaching documented.

5. Routine serologic surveillance of hemodialysis patients will be performed

- a. Candidates for dialysis will be screened for HBsAg: Patients from chronic dialysis facilities will have their current months HBsAg status verified by contacting the dialysis facility. New patients will have their HBsAg status determined by laboratory analysis.
- b. HBsAg specimens will be sent to the lab

Each seronegative patient will be considered highly susceptible to infection and will be screened monthly for evidence of HBsAg or rise in liver enzyme activity. Seronegative patients will be referred to their physician for Hepatitis B vaccination.

6. Isolation and Care for a Hepatitis B positive (HBV+) patients

a. A separate isolation room with a door must be used for a Hepatitis B (HBV) positive patient.

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- b. HBV patients cannot be placed in this space during the same time as a positive HBV+. This room cannot be used for a HBV-patient until the HBV + patient is no longer on census and the room is terminally cleaned and disinfected.
- c. Separate dedicated supplies and equipment must be used to provide care for the HBV+ patient. These supplies and equipment must be dedicated to the isolation room. When the HBV+ patient is no longer on census, all items that cannot be disinfected must be thrown out
- d. Refillable concentrate containers must be surface disinfected at the completion of each treatment. Refillable concentrate containers may be kept in the isolation area and refilled at the door or removed for cleaning and disinfection. In the disinfection area, the "isolation" container(s) and pick-up tube(s) must be segregated in a dedicated, designated area away from all other containers and pick-up tubes. If the container/pick-up tube is to be rotated out of the isolation area, it must be bleached before subsequent use.
- e. Separate gowns should be used in the isolation area and removed before leaving the isolation area/room. Anyone entering the isolation area/room during the patient's treatment must wear a protective gown.
- f. HBV+ patients must undergo dialysis on dedicated machines. Because of the risk of cross-contamination, facilities should avoid switching equipment used for HBV+ patients for use with HBV- patients.
- g. Equipment used for HBV+ patients should be reserved for the HBV+ patients unless repair or maintenance is needed, or until all HBV+ patients have been discharged.
- h. When the machine is no longer dedicated to an HBV+ patient, internal pathways of the machine can be disinfected using conventional protocols, external surfaces cleaned and disinfected and the machine returned to general use.
- i. One staff person may care for one or more HBV+ patients and one or more immune patients at the same time, but may not simultaneously care for Hepatitis B susceptible patients.
- j. Hepatitis B status should be considered when patients are assigned to stations nearest the isolation area. If a staff member assigned to care for an HVB+ patient must concurrently care for someone other than another HBV+ patient, the additional patient(s) must be HBV immune.
- k. Patients who require a booster dose of the HBV vaccine should not be assigned to a staff member concurrently caring for HBV+ positive patients.
- 1. When possible, only HBV immune staff should be assigned to care for HBV+ patients.

Approved by:		Review/Revision Date:		
•		7/76	3/95	6/2022
		4/18/79	4/96	
/s/		9/9/81	12/96	
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		12/84,	11/98,	
		9/85	2/00	
		1/86	7/02	
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/s/		12/87	7/05	
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Program		12/89,	1/23/2008	
Tiogram		3/90	8/2011	
		9/91	8/2014	
		3/93	10/2015	

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Review: Policy & Standard Committee, 8/11, 8/2014, 6/2022		
Revision Completed By: Trish Carter, ND, RN 5/15	Next Review Date	: 6/2025

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.