

Welcome

Strategies for Infection Control

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Disclaimer

The opinions in this presentation are the private views of the author and should not be construed as official or reflecting the views of the Centers for Medicare and Medicaid Services (CMS)

Objective

- Survey tasks involved in the assessment of a facility's ongoing program for infection control
- The most frequent infection control practice violations observed and cited in CMS surveys across the nation
- Overview of the best recommended infection control practice and precautions as laid out in CMS regulations

Mission

- To improve health and patient safety.
- Reduce risk of infection and other adverse outcomes.
- To provide evidence-based guidance in prevention of healthcare-associated infections in hemodialysis settings

Infection Control as a Condition tag

- Consists of tags V110- V148.
- Surveyed through observations of care delivery.
- Interviews with staff and patients.
- Review of medical records.
- Review of facility logs, policies and procedures.
- Review of quality assessment and performance improvement documentation.

Determination of Non-compliance

- Deficient infection control practice observed among direct care staff.
- Frequency of breach in infection control practices
- Pervasiveness of the deficient practice
- The extent of the deficient practice in presenting a risk to health and safety of the patients.

Citation Frequency

- Among 25 most cited tags, infection control is the first
- The order of most cited infection control tags is:
 1. V113- Wear gloves/ hand hygiene.
 2. V122- Clean/disinfect surfaces and equipment
 3. V116- Items taken towards stations disposed/dedicated or disinfected.

Citation Frequency Continued...

- V143- Aseptic techniques for IV Meds.
- V117- Clean/dirty areas/med prep areas, no common Med. Carts
- V115- Wear gowns, shields/masks
- V111- Sanitary environment
- V114- Sinks available
- V142- Oversight monitor activities and implement policies.

Hand Hygiene/Wearing Gloves (V113- V115)

- According to CDC, hand washing is the most important measure to prevent contaminant transmission.
- To improve hand hygiene adherence, hand sanitizers must be accessible to each patient station within a dialysis unit.
- Sinks with soap dispensers and paper towels must be available as well.

Continued...

- Hand Hygiene must be performed:
 1. After gloves are removed
 2. Before touching a patient
 3. And before leaving a patient station
- Fingernails should be kept short and clean.
- CDC states that artificial nails are prohibited for direct patient care providers.

Continued...

- Gloves must be changed:
 1. Whenever moving from one patient to another.
 2. After Cannulation
 3. And when moving from one machine to another
 4. Or before leaving a patient station.

Clean/Dirty Areas, Med Prep Area (V117- V119)

- Clean areas should be clearly designated for the preparation and handling and storage of medications.
- Medication preparation area must be away from individual patient stations.
- Medications must be delivered separately to each patient.
- Multiple dose medication vials must not be carried from station to station.
- Use of common medication carts to deliver medications to patients are prohibited.

Continued...

- Single use vials must be used only for one patient.
- Residual medication from two or more vials should not be pooled into a single vial.
- Staff should only enter Vials with a new syringe and needle.
- Patient areas should have designated clean and dirty areas and staff must remain aware of the separation to prevent cross contamination

Cleaning and disinfection (V122)

- Cleaning and disinfection of contaminated items and surfaces.
- Facility must have written protocols for cleaning and disinfecting surfaces and equipment.
- Using friction, clean and disinfect high-touch surfaces in patient care areas(ex. HD chairs, HD machines, tables, carts, etc.)
- Items taken into a patient station should be disposed off after use, dedicated for use on a single patient, or cleaned and disinfected before taken to a common clean area or used on another patient.

Continued...

- Non-disposable items that can not be comprehensively clean and disinfected (e.g. adhesive tape, cloth covered blood pressure cuffs) should be dedicated for use on a single patient.
- External pressure transducer or filters must be changed after each patient treatment
- Internal transducer filters must be inspected whenever a strike through of blood or fluid from an external pressure transducer filter is suspected.
- In the event of a blood leak, disinfection of the internal HD machine pathway must be performed prior to being used on a successive patient

Hepatitis Status of Patients (V124)

- HBV susceptible patients- patients anti-HBs is <10 mIU/mL
- HBV infected patients- Patients that are tested positive for Hepatitis B surface Antigen
- HBV immune patients- patients having sufficient Hepatitis B Surface Antibody levels to achieve immunity (>10 mIU/mL).

Hepatitis B: HBV: Why is it important in dialysis?

- Transmitted via percutaneous or permucosal exposure to blood/body fluids from infected/HBV+ person
- Virus remains stable/infectious on surfaces for 7 days
- 1974: 6.2% newly acquired HBV in HD patients- some facilities had 30% infection rates
- CDC recommendations in 1977

Prevention of Transmission Of Hepatitis B (V124)

- Serological testing required and status must be known prior to admission for treatment.
- Susceptible patients must begin receipt of Hepatitis B vaccine immediately upon admission. (test susceptible patients monthly for HBsAg)

Prevention of Transmission Of Hepatitis B

V124....continued....

- HBV immune patients must be tested annually to ensure the protective levels of antibody remain at normal levels (more than 10 IU-mL)

Seroconversions (V125)

- Review all patients routine laboratory test result promptly.
- Investigate potential sources for infection to determine the cause and location of transmission.
- Evaluate unit practices and procedures.
- Seroconversions must be reported to the state or the health department as required by law regulation.
- Newly identified HBsAg positive patients must be informed and evaluated for the need for counseling, medical evaluation, and vaccination of contacts.

New Seroconversion V125...continued...

- Have systems in place for communicating these test results to other units or hospitals when patients are transferred for care.

Hepatitis B Screening Patients and Staff (V127)

- All vaccinees (patients and staff) must be tested for anti-HBsAg one to two months after the last primary vaccine dose.
- If anti-HBs is <10 mIU/mL, consider patient or staff susceptible and revaccinate with additional three doses.
- If anti-HBs are ≥ 10 mIU/mL, retest patients annually.
- Vaccinate with booster dose of vaccine to patients whose anti-HBs decreases to <10 mIU/mL and retest annually.

Isolation of HBV+ Patients (V128-V130)

- Effective **Feb. 9, 2009**, all new facilities **MUST** have an isolation room for treatment of HBV+ patients, unless the facility has obtained a waiver from CMS for this requirement.
- For existing facilities in which a separate room is not possible, there must be a separate “area” for HBV+ patients

Isolation of HBV+ Patients (V128-V130)....continued....

- Isolation room/area may be used only for HBV+ patients until no HBV+ patient is on census
- Isolation station in existing facilities could be “end of row” station and must be separated by other stations by a space at least equivalent to the width of one hemodialysis station.

Additional Precautions (V130)

- Separate dedicated supplies and equipment including blood glucose monitors must be provided for the care of HBV+ patient.
- Separate protective gowns must be used by staff while entering the isolation area/room.
- HBV+ patients must undergo dialysis treatment on dedicated machines.

Additional Precautions (V130) Continued...

- Dialyzers for HBV+ patients must not be reused
- Refillable concentrate containers used in the isolation area must be surface disinfected at the completion of each treatment.
- Refillable concentrate containers can be refilled at the door and /or removed for cleaning and disinfection.
- In the disinfection area, the “isolation” container(s) must be segregated, in a designated area away from all other containers.

Staff Assignment for HBV+ patient

- One staff member may care for one or more HBV+ patients or one or more immune patients at the same time.
- HBV susceptible patients must not be seated in close proximity to an isolation area and must not be assigned to the staff member concurrently caring for HBV+ patients.

Infection control training and education

- OSHA mandates dialysis staff receive blood borne pathogen training annually
- CDC recommends infection control training initially on employment and annually.
- Staff ,must demonstrate knowledge of infection control policies/procedures & practices.
- Personal records must reflect staff having received appropriate infection control training.

Quality Improvement Process (V142)

- Facilities must have an ongoing program for monitoring a patient using specific and defined indicators.
- Facilities must collect and analyze data seeking trends.
- Develop corrective or improvement actions based on data results.
- Report to appropriate clinical staff and leadership.

Summary

- Infection Control is an Everyday Challenge
- Prevention is Primary!
- Hand Hygiene saves lives

Thank You

- The two important information sites:
For Q&A's is the mailbox
ESRDSurvey@cms.hhs.gov
- And the surveyor tools/regs/guidance website
http://www.cms.gov/GuidanceforLawsAndRegulations/05_Dialysis.asp