

# Prevention of infections in Dialysis Settings

- Infection as a cause of hospitalization for HD patients has increased
- Hospitalization for infections rose 34% between 1993-2006
- Hospitalizations for access infections doubled
- Infection is the second most common cause of death in HD patients

- Why are patients on HD more vulnerable to infection?
- --Immunosuppressed
- --DM
- --Exposure to patient population tiw
- --Frequent Hospitalizations
- --Invasive procedure

- Other infections common to HD patients include:
- Pneumococcal pneumonia
- MDRO=multidrug resistant organisms
- MRSA
- C. difficile
- Influenza
- Hepatitis B/C

- HD centers are unique
- Treatment is in the same center for months or years
- 3-4 shifts per day so that the staff have intense activity terminating treatments and initiating treatments
- Design is open with stations in proximity to each other

- What is a patient zone?
- Surfaces that the patient can touch or can touch the patient
- What is the maximum allowable level for dialysate bacteria ?
- What is the action level for this?
- What is aseptic technique?

- Gloves should be changed when moving from a dirty to a clean site/task on the same patient
- After prepping the venipuncture site do not touch the cleansed site again before placing the needles

- Hepatitis B can persist on surfaces and equipment and remain infectious at room temp for up to 7 days
- Hepatitis B has been detected on clamps, machine control surfaces, doorknobs and other surfaces
- Hepatitis B infection from an exposure occurs at a rate of up to 30%

- MRSA is the most common pathogen causing death in HD patients
- Infection is usually caused by the strain the patient carries in their nose and other body sites.
- Patients on HD have twice the rate of staph carriage as the general population.
- The in-hospital mortality rate from MRSA bacteremia is 13.5%