Environmental Services

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Role in the Physical Environment

• The physical environment plays a role in the spread of infection

• Environmental Services’ role is to reduce the spread of infection in the physical environment by properly and thoroughly cleaning and disinfecting the physical environment
Inpatient Daily Cleaning

• Top-down, plus circular approach; from cleanest to dirtiest
  • Patient’s room then patient’s restroom
• Ask permission to enter personal space- especially bed rails
• High touch areas especially important:
  Door knob (room and RR) Light switches
  Overbed table Phone
  Call button Faucet handles
  Toilet flush handles Chair arms
• Mop floor last- start in patient room then mop restroom; OR use separate mops in room and restroom
• Donskey study: sanitizing floors is best practice since pathogens do move from floor to patient- not widely believed previously
Inpatient Terminal Discharge Cleaning

- Same theory as Daily Cleaning but more intensive
- High Dust the entire room
- Spot clean walls
- Move furniture to mop
- Spray curtains with AHP to disinfect
Disinfectant

- Accelerated Hydrogen Peroxide, Quaternary Ammonium Compounds, or any of the same category of disinfectants are effective against most pathogens
- Many facilities still using Quats and microfiber wipers
- At UNC Hospitals we are now using AHP in Ready-to-Use wipes
  - Dwell time on label for previous chemical = 10 minutes
  - Dwell time on label for AHP = 1 minute
  - HMIS rating: 0 Health, 0 flammability, 0 reactivity
  - No PPE required to use chemical, but suggested for patient safety
  - No preparation of wipers, no testing of concentration after mixing
Disinfectant

• AHP, Quats, etc. not effective against spores (AHP has 1-minute norovirus kill claim)

• C. Difficile, a spore, must use a stronger disinfectant that has a specific kill claim as a sporicide

• Most popular choice is Bleach with a 4-minute dwell time
  • 1:10 bleach to water mixture, or
  • RTU bleach wipes
Ultraviolet Disinfection

• In addition to the Environmental Cleaning with bleach, UV Disinfection can help reduce the spread of infection

• Benefits of Enhanced Terminal Room-Disinfection (BETR-D) study showed 11% reduction in C. Diff infections across the 9 hospitals in the study.

• Many types of UV Devices on the market including:
  • Pulsed xenon
  • Dose-measuring devices
  • Broad-spectrum UV
  • Short-wavelength UV-C

• Pros and Cons to different types
Ultraviolet Disinfection

- Open all cabinets
- Raise bed rails
- Leave bed unmade
- Run on far side of bed
Ultraviolet Disinfection

- Flip and move call button
- Flip and move telephone (if possible)
- Run on opposite side of bed
Ultraviolet Disinfection

- Place in Restroom and run device
Fluorescent Marking

• Measuring effectiveness of cleaning, ensuring that surfaces wiped down
• Invisible fluorescent marker that can be seen with UV flashlight
• Mark high touch surfaces:
  Light Switches  Bed Rails  Bed Footboard
  Bed Headboard  Door knobs  Chair rails
  Faucet handles  Toilet flush handle  Toilet Seat
  Phone  Call button  Overbed Table
  Soap Dispensers  Toilet Paper Dispenser
• After cleaning, use UV flashlight to check for presence of marker on surfaces
Feedback/Training/Monitoring

- Regular feedback and training is essential to the success of the Environmental Services colleague.
- Monitor individual routinely (weekly/monthly)
- Training Annually on job-specific topics
  - More frequently as trends emerge with Quality checks