

ENVIRONMENT OF CARE ENVIRONMENTAL HYGIENE: BEST PRACTICES

The Frontline Workers in Infection Prevention

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Expert care with a personal touch

Environment of Care Definition

The safe, functional and supportive setting used to service patients.

Environment of Care Focus

The main focus of the Environment of Care is to provide a safe environment for our patients, visitors and staff.

PROVIDING A SAFE ENVIRONMENT:

Building:

A. Life Safety

- NFPA Codes for Fire Safety
 - Fire suppression system/processes:
 - ✓ Fire alarms, fire pull stations, extinguishers, sprinklers, smoke detectors, smoke doors, evacuation routes, staff training (Code Red, RACE & PASS).
- HVAC-R & humidity control
- Water supply – tested & safe (legionella)
- Working conditions of: Lighting, elevators, exit signs, doors, power sources (electrical)

B. Construction/Renovation Projects

- Dust control, re-routes/exits, fire watch, areas/services affected

PROVIDING A SAFE ENVIRONMENT:

C. Environmental Surfaces

- Condition: Free of damages
- Appropriate material (i.e. non-absorbent, cleanable)
- Environmental hygiene: Proper cleaning and disinfecting of environmental surfaces.

ENVIRONMENTAL SURFACES: Environmental Hygiene

Contaminated surfaces play a significant role in the transmission of dangerous pathogens that is easily spread.

Environmental cleaning is an important principle of infection prevention in the healthcare setting.

- Infections can spread through a facility if not prevented.
- Improperly cleaned or disinfected facilities can lead to infections amongst staff, visitors and patients.

ENVIRONMENTAL SERVICES OBJECTIVES

- Proper disinfection of environmental surfaces and equipment that patients and healthcare workers touch is necessary to reduce exposure.
- Implement proper cleaning procedures for ensuring disinfection efficiency.
- Continuous monitoring and assessing – CQI goals.
- Working in conjunction with IP measures.

ENVIRONMENTAL SERVICE TECHNICIANS (EVS)

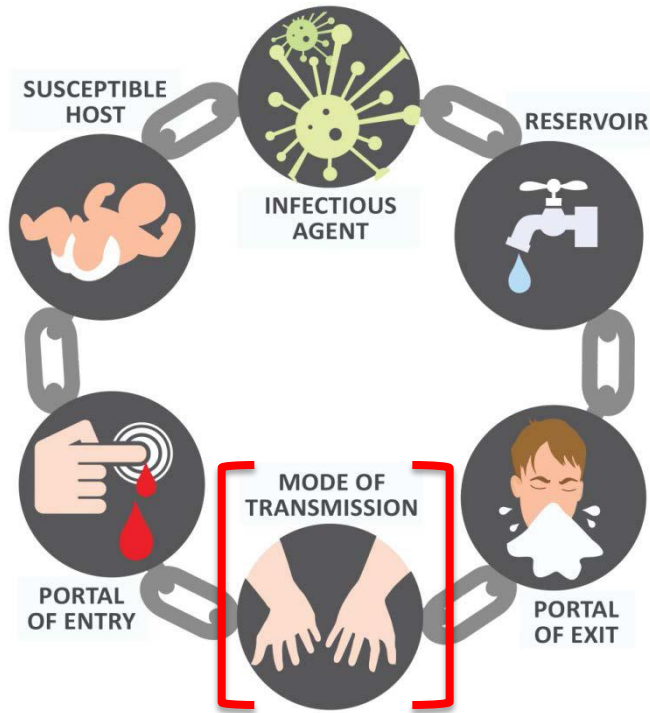
- EVS Techs are the frontline workers in defense against the spread of pathogens and HAIs.
- EVS Techs must be competent:
 - Properly trained
 - Receive continuous education and engagement
 - Understand the difference of cleaning vs. disinfecting
 - Understand the importance of their role

BEST PRACTICES: EVS EDUCATION

EVS staff understanding their role in Infection Prevention:

- **EVS Education & Training:**
 - **Knowledge of the Chain of Infection**
 - ✓ Understanding how the chain is created
 - ✓ Learning how to break the chain
 - **Cleaning vs. Disinfection**
 - ✓ Cleaning - Physical removal of organic matter or bio-burden: dust, soil, blood and bodily fluids (surface preparation for disinfection).
 - ✓ Disinfecting – focuses on killing/deactivation of the microorganisms/pathogens.
 - **Cleaning Process: Following a standard process**
 - ✓ Clean clock or counterclockwise
 - ✓ Clean to Dirty
 - ✓ Top to bottom
 - ✓ Wipe in one direction (unidirectional wiping)

TOPIC: CHAIN OF INFECTION - How it begins



Stress hand hygiene

Infectious agent: Infectious agents are the pathogens to cause infection.

Reservoir: The 'reservoir' is where microbes live and where the microorganisms can survive, thrive and reproduce.

Portal of exit: A place of exit providing a way for a microorganism to leave the reservoir (*sneezing, coughing, body excretions*)

Mode of transmission: The way in which the organism moves or is carried from one place to another (*touching/poor hand hygiene*).

Portal of entry: An entry or opening allowing the microorganism to enter the host.

Susceptible host: Person carrying the pathogen. People who are susceptible hosts lack the immunity to overcome invasion by microorganisms.

HOW MANY LINKS TO BREAK THE INFECTION?

ONE LINK will break the chain of Infection!

TOPIC: MODES of TRANSMISSION

- **Contact**

- **Clostridium difficile (C-Diff)**
- Noravirus
- MRSA
- VRE

- **Droplet**

- Influenza (Flu)
- Meningitis
- Pertussis (whooping cough)

- **Airborne**

- Tuberculosis (TB)
- Measles

TOPIC: PATHOGEN RESISTANCE TO DISINFECTANTS

Pathogens	Example	Disinfectants		
		Low-level Disinfection	Intermediate-level Disinfection	High-level Disinfection
Prions	Mad Cow Disease			
Bacterial Spores	Clostridium difficile			Peracetic acid / hydrogen peroxide blends
Mycobacteria	Tuberculosis		Quat / alcohol	Bleach and Hydrogen peroxide
Nonlipid or small viruses	Norovirus		Quat / alcohol blends	
Fungi	Athletes foot	Quats		
Vegetative bacteria	MRSA, VRE			
Lipid or medium viruses	HIV			

C-Diff spores survive up to 5 months on inanimate surfaces.

Patients, both asymptomatic & symptomatic, can shed spores to the environment.

Certified Healthcare Environmental Services Technician

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DISINFECTION STRATEGIES

- Approved disinfectants
 - Best selection for type of pathogen and environment.
 - Proper solution mix, application & dwell time.
- “No-touch” disinfection enhancement systems
 - Ultraviolet (UV) light
 - Hydrogen Peroxide Fog (H₂O₂)
- Proper disinfectant usage by the frontline workers.

BEST PRACTICES: EVS EDUCATION PROGRAM

Establish & implement a training program that works best to meet your facility needs.

- **Determine training guidelines: Implement a standard process**
 - AHE CHEST GUIDELINES – training sections
 - 7-Step cleaning process for patient rooms & support areas.
 - IP practices
 - Disinfectant usage
- **Establish training methods:**
 - Classroom lectures, Q&A sessions
 - Training modules: presentations and quizzes
 - Demonstrations, shadowing qualified staff

BEST PRACTICES: EVS EDUCATION PROGRAM

- **Establish training timelines and scheduling.**

- Example:

- ✓ Week 1: Orientation covering listed topics, classroom lecture with Q&A, Facility tour including location of disinfectants & cleaning supplies.
 - ✓ Week 2: 7-step demonstrations, cleaning procedures demos, proper disinfectant usage.
 - ✓ Week 3: Shadowing out on floors.
 - ✓ Week 4: Observation, follow-up training, evaluate.
 - ❖ Establish checkpoint goals during probationary period.

- **Competency checks/evaluations.**

- Documented training, testing, feedback from Trainers.
 - Establish PI goals to overcome deficiencies.
 - Meet and follow up with new staff.
 - Ensure staff meeting established goals.

BEST PRACTICES: EVS EDUCATION PROGRAM

- **Coordinate regular training and in-service topics.**
 - ✓ Schedule regular meetings, daily in-services, pick a weekly topic.
 - ✓ Schedule regular presentations with quizzes to test knowledge.
 - ✓ Schedule guest presenters.
- **Engage EVS staff positively**
 - ✓ Implement a contest, drawings for gift cards, pizza party, etc.
 - ✓ Recognize staff who consistently meet competencies by ATP scores, observation, recognition cards.
 - ✓ Involve staff on decisions: get staff buy-in with their weigh-in (i.e. testing and evaluating new equipment).
 - ✓ Coordinate round tables meetings.

ENVIRONMENTAL SERVICE TECHNICIANS (EVS)

- Efficiencies should be monitored & evaluated:
 - Observation of cleaning process.
 - Visual inspections and/or utilizing “white glove” test.
 - Fluorescent powder testing
 - Adenosine Tri Phosphate (ATP) Clean Trace System
 - Best method for testing EVS cleaning efficiency.
 - Immediate results provide on-the-spot correction & education.
 - Provides quantifiable scores.
 - Identifies Performance Improvement (PI) goals.

EVS EDUCATION/PATIENT SIMULATION ROOM

Window/shutter

Patient closet

Tele bed

LDRP Birthing Bed

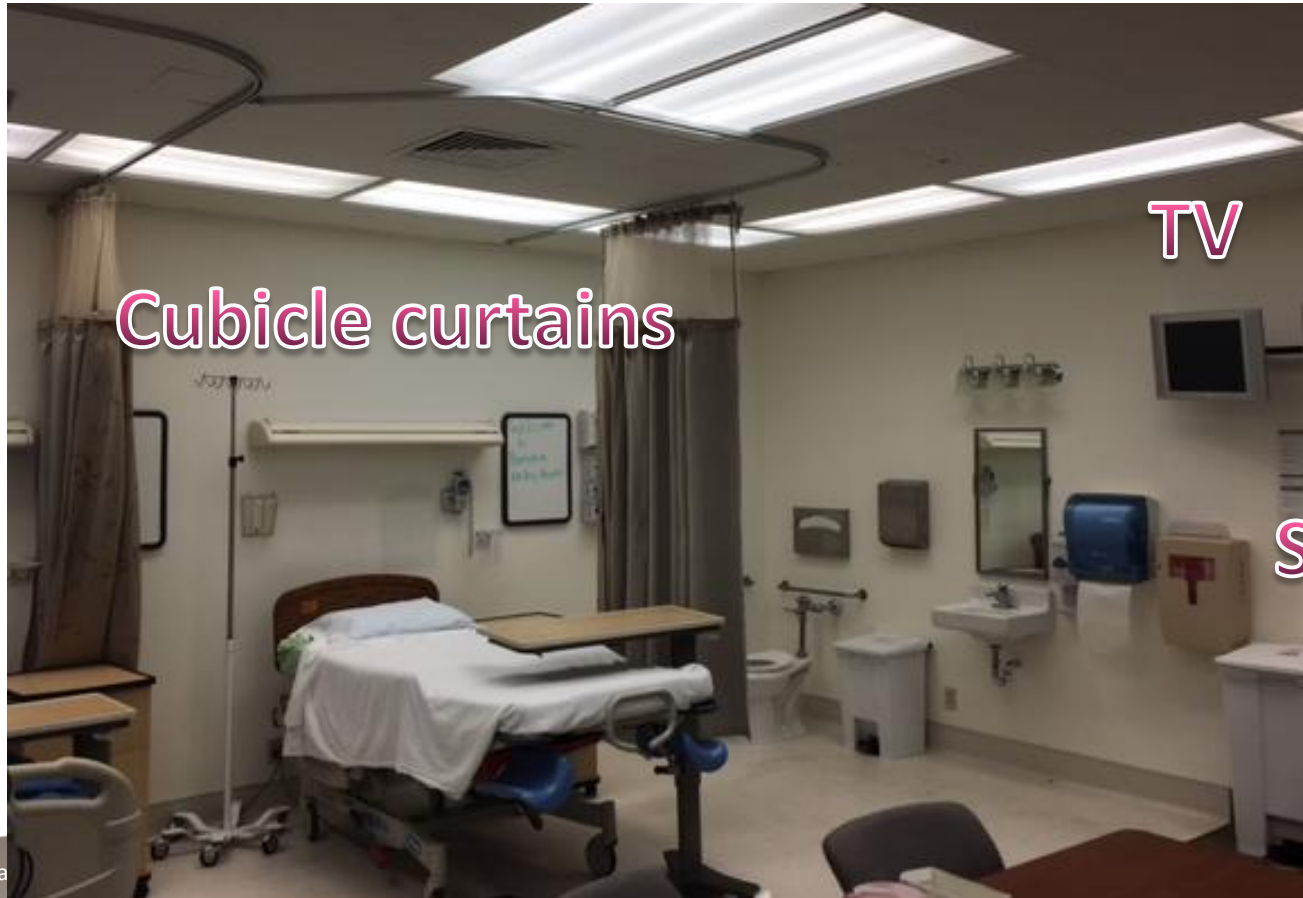


EVS EDUCATION/PATIENT SIMULATION ROOM



Restroom

EVS EDUCATION/PATIENT SIMULATION ROOM



Cubicle curtains

TV

Sharps

Questions?