Environment of Care

Building Infrastructure

Disclaimer

- For educational purposes only

- No endorsement of products, software, or tools

Target Audience

Administration

Infection Preventionist

Maintenance

Clinical Staff

Environmental Services / Housekeeping

Objectives

Identify water intrusion and the risks to health and safety

Explain why performing routine room inspections is necessary

Demonstrate how to assess a sink's splash zone

Describe fire and electrical safety

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Environment of Care

- What is it?
  - Creating a safe physical environment for staff, visitors, and residents.

- Incorporates areas of:
  - Safety
  - Security
  - Hazardous Materials and Waste
  - Fire Safety
  - Medical Equipment
  - Utilities
  - Infection Prevention and Control

Safety First

The Joint Commission (2020) Environment of Care Plan. Retrieved from: https://store.jcrinc.com/assets/1/7/POLHsample_pages.pdf
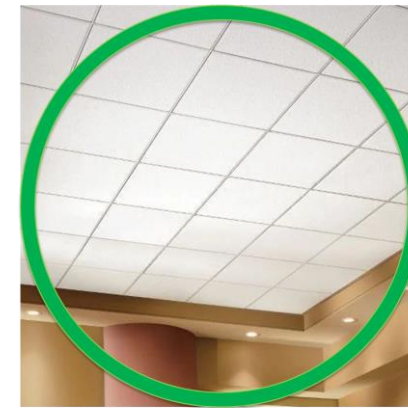
Building Infrastructure

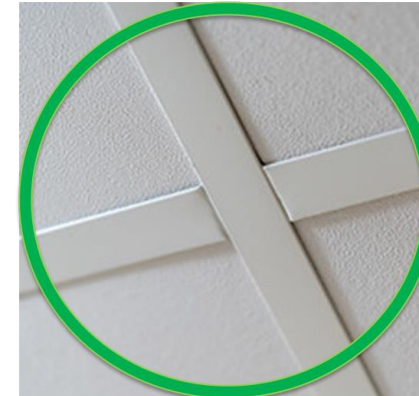- Assessing walls and ceilings for:
  - Damage
  - Water intrusion
  - Dust

Building Infrastructure-Ceilings

- Assess for signs of water damage
  - Concerns for roof, plumbing, or HVAC issues
  - Concern for mold growth

- Assess for damage
  - No holes, cracks, penetrations
  - No gaps in seams

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Building Infrastructure-Walls

- Assess for water intrusion
  - Flooding
  - Humidity
  - Discoloration, peeling paint, crumbling, or cracks
  - Leaking water heater, pipes, HVAC condensate pump
  - Mold
  - Rotting, warped wood

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Fire Safety

Fire Codes

- Posting signs
  - Informational signs shall be permitted to be installed on the surfaces of fire doors in accordance with 4.1.3.1 through 4.1.3.4 or in accordance with the manufacturer's published listing.

  - 4.1.3.1
    - Signage comprising of combustible materials shall not exceed 5 percent of the area of the face of the fire door

  - 4.1.3.4
    - Signs shall not be installed on the surface of fire doors in such a way that impairs or other wise interferes with the proper operation of the fire door

NFPA Chapter 4 General Requirements

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Fire Codes

- Means of Attachment
  - 4.1.3.2.1
    - Signs shall be attached to fire doors by use of an adhesive

NFPA Chapter 4 General Requirements

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Fire Codes

VA Fire Code

- **808.3 Signs.**
  - Foam plastic signs that are not affixed to interior building surfaces shall have a maximum heat release rate of 150 kW when tested in accordance with UL 1975, or when tested in accordance with NFPA 289 using the 20-kW ignition source.

- What does it mean?
  - Paper items should be laminated or placed in a sheet protector to reduce its flammability.

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Life Safety

a) Environment
- Life Safety from Fire
  - Minimum of battery-operated smoke detectors
  - Routine inspection, maintenance, and battery replacement
  - Test, inspect, maintain sprinkler system

b) Building Safety
- Facility must comply with requirements set forth by the Health Care Facilities Code
  - Provides guidance on protecting facility from fire, electrical, and related hazards

c) Emergency Power
- System must provide power adequate for at minimum entrance lights, fire detection, alarms, extinguishing systems, and life support systems.
  - Facility must have a generator when using life support systems

CMS State Operations Manual 483.90

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Electrical Safety

- Avoid the use of portable electrical space heaters in resident areas

- Extension cords should not be used

- Power strips may not be used as a substitute for adequate outlets
  - Power strips are not meant to be used for medical equipment
  - May be used for computer, monitor, and printer

- If used, must be properly secured
  - Must not be placed overhead, under carpets or rugs, or anywhere that can result in trips, falls, or overheating

CMS State Operations Manual §483.25(d)

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Environment of Care

Utilities

Utilities

- **Water Management**
  - Reducing the spread of organisms
  - Practices to reduce splashes and contamination

    CMS State Operations Manual §483.80

- **Ventilation**
  - Allowing proper airflow
  - Reducing sources of potential illness

    CMS State Operations Manual §483.90(i)(2)

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Water Management

- Potable water = safe to drink =/= sterile

- Water can contain pathogenic organisms

- Pathogenic organisms may thrive in drains

- Water splashes can contaminate surfaces or items

- Pathogenic organisms can be transmitted to residents through contaminated objects

CDC, (2019, September 11) Healthcare-Associated Infections (HAIs): Reduce Risk from Water. Retrieved from: https://www.cdc.gov/hai/prevent/environment/water.html

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Water Management

- Clean and disinfect sinks, faucets, handles, and surrounding area
  - At least daily

- Offset faucets from drains
  - to avoid splashes

- Install splash guards
  - if storing items within 3 feet of sink

- Close toilet seats when flushing
  - Reduce chance of splashing/aerosolizing

- Do not use sinks for discarding bodily fluids

- Do not discard nutritional supplements in sinks or toilets

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Water Management

Assessing a Sink's Splash Zone

Clear an area of at least three (3) feet from sink

Place paper towels around sink and three (3) feet outward

Turn faucet on to highest setting

Perform a task such as hand washing

Assess splash zone and install markers

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Water Management

ATP Swabs
Only

No Food or
Drinks

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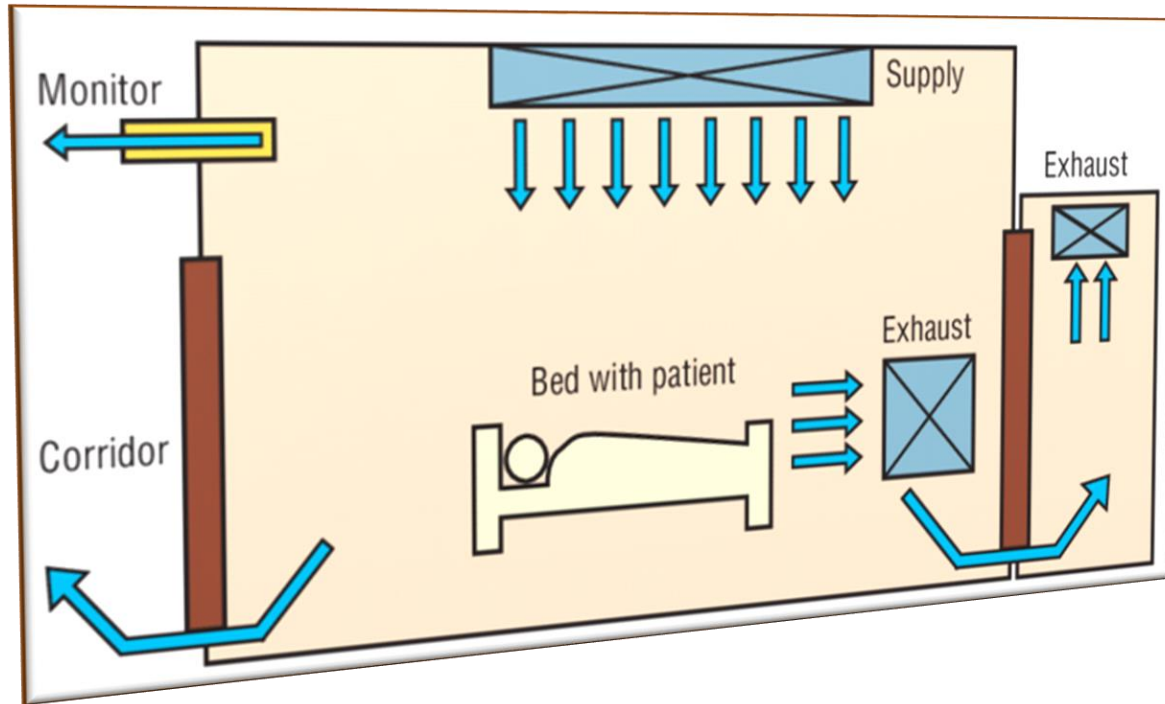
Ventilation

- Vents may be overlooked with routine cleaning of rooms

- Vents can harbor dust

- Dust can harbor pathogenic organisms
  - Fungus
  - Bacteria

- Build up of dust can reduce air flow

CMS State Operations Manual §483.90(i)(2)

Ventilation

Conclusion

Thank you for your time and attention!

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