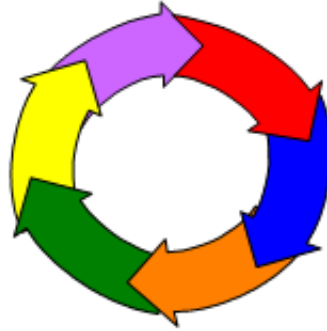


E. Education Module 3 - Infection Prevention Programs

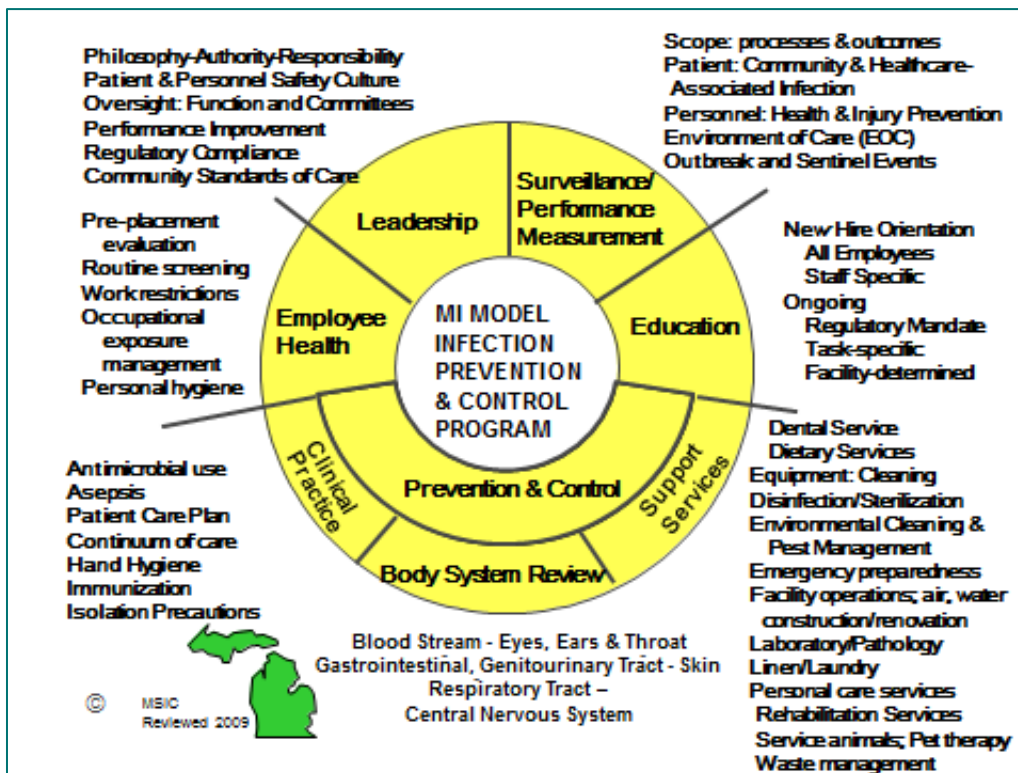
TIP Study Module 3: Infection Prevention Programs



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Mody L, et al. JAMA Intern Med 2015;175(5):714-723



Targeted Infection Prevention (TIP) Study

Infection Prevention & Control Programs

- Definition: Broad-based program that engages all healthcare workers (HCWs) to prevent infections and improve safety and quality of care of the residents they care for.
- Goals:
 1. Protect residents by preventing infection
 2. Protect HCWs who care for residents
 3. Do both 1 & 2 as cost effectively as possible

Leadership

- Allocation of resources, oversight and decision-making
 - Infection Preventionist (IP)
 - Infection Control Committee
 - Administrative Team - IP, Dir. Of Nursing, Administrator, Medical Director
- Performance Improvement – measure performance and continuously improve
- Culture of Safety – improve communication, teamwork and culture to improve outcomes of care

Surveillance (Performance Measurement)

- Definition: To observe residents for signs and symptoms of infection, collect and organize findings using standardized methods, and share them with HCWs to improve care.
- Surveillance is coordinated by the IP
- HCWs in LTCF are key to early awareness and identification of possible infections

Why surveillance/performance measurement?

- Give information about quality of care to consumers = transparency
- Establish baseline rates of infection
- Assess how well the facility staff is helping prevent infections
- Identify potential problems
- Educate staff
- Meet regulatory requirements

Surveillance (Performance Measurement)

- **Outcomes – Measure Infections**
 - Rate of each HAI infection: respiratory, UTI, skin
- **Process - Measure adherence to prevention protocols**
 - Proportion of residents and HCWs who receive influenza vaccine
 - Proportion of HCWs who use hand hygiene before and after providing tube feedings
- **Others uses:**
 - job-related infections in employees
 - cleanliness of the environment

Education

- **New Employee Orientation:**
 - Chain of infection - employee health policies - department-specific (e.g. resident personal care, device insertion and care, cleaning and disinfection, dietary processes)
- **On-going, periodic:**
 - Annual –
 - Bloodborne infectious diseases prevention; others determined by facility
 - Periodic –
 - Influenza vaccination; new procedure/process; safe use of blood glucose monitoring equipment; findings from surveillance data

Prevention & Control

- Prevent infections
 - Prudent use of Antimicrobials
 - Asepsis
 - Hand Hygiene
 - Immunization
 - Resident care
 - Standard Precautions
- Prevent cross transmission of all microorganisms including multidrug-resistant organisms (MDROs)

Preventing Respiratory Tract Infections: Oral Care



- Source of microbes is often the respiratory tract
- Assist residents who are unable to do good oral care.
- Nurse assistants can make sure nursing staff is aware if a resident has difficulty swallowing

“Start flossing so you won’t catch pneumonia in our nursing home”



Preventing Catheter-Associated UTIs (CAUTI)

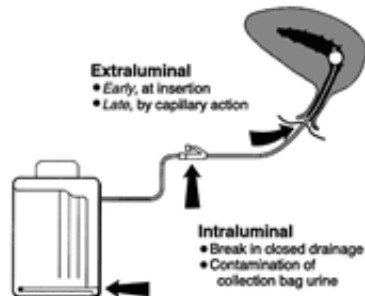
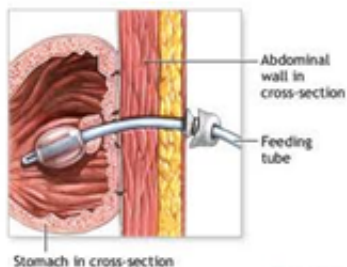


Figure from: Maki DG, Tambyah PA. Emerg Infect Dis 2001;7:1-6

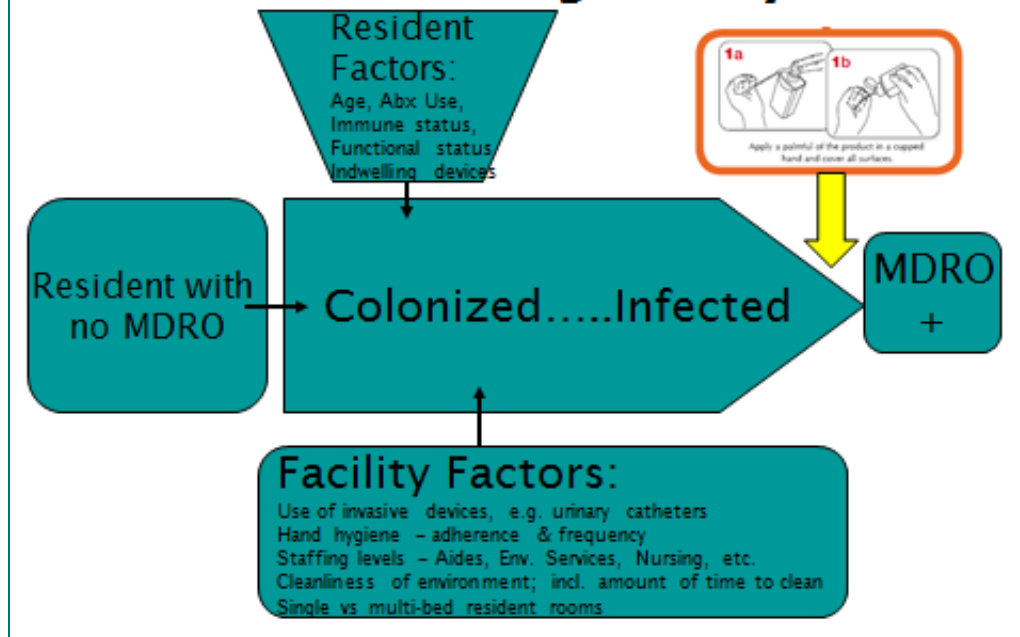
- Frequency of catheter use in residents in skilled nursing facility = 5-10%
- Prevention strategies:
 - Only use for appropriate indications
 - Remove as soon as no longer needed
 - Use aseptic technique for care and maintenance of the catheter
 - Hand hygiene & standard precautions

Preventing Feeding Tube Site Infection



- Prevention Strategies:
 - Keep insertion site clean and dry
 - Use hand hygiene before use
 - Examine skin at site for redness, inflammation, drainage – especially purulent
 - Let nursing know if there are new symptoms in the resident with a feeding tube including abdominal pain, nausea, new onset of diarrhea.

Model of MDRO Transmission in Skilled Nursing Facility



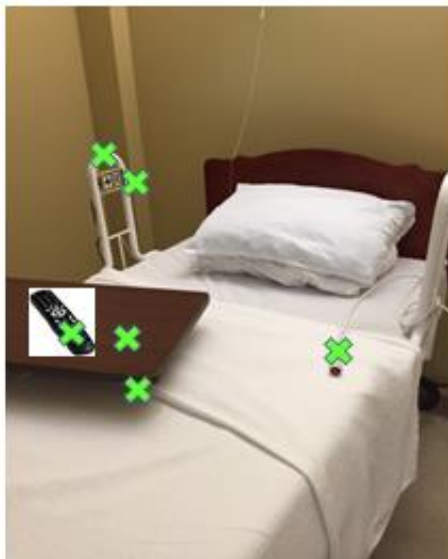
Employee Health

- Work restriction: avoid work if ill with acute infection, e.g. diarrhea, influenza-like illness, conjunctivitis
- Occupational exposure management
- Tuberculin skin testing: at-hire and annually
- Vaccine-preventable disease interventions
 - Influenza
 - Hepatitis B
 - Measles, Mumps, Rubella
 - Tetanus, diphtheria, pertussis: Tdap
 - Varicella (chickenpox)
 - Meningococcal

Support Services & Environment of Care (EOC)

- Environmental Services (Housekeeping) - processes for cleaning, disinfection and schedules, product selection, use of personal protective equipment.
- Used linens / laundry
- Food Services
- Medical waste
- Animals in healthcare
- Water

The Environment Can Facilitate Transmission



✘ = MDRO Culture Positive Sites (MRSA, VRE, Resistant Gram-Negative Bacteria)

Mody L, et al. Pathways Study 2015 – Data collection on-going.

Roles & Responsibilities of Nursing Assistants

Site of Health care-associated Infection	Roles & Responses of Nurse Assistants
CAUTI	<ul style="list-style-type: none"> • Aseptic technique • Notify nurse if resident has new suprapubic tenderness or back pain, fever,
Feeding tube site	<ul style="list-style-type: none"> • Aseptic technique • Notify nurse of new signs of infection: redness, inflammation, drainage
MDRO	<ul style="list-style-type: none"> • Hand hygiene • Standard precautions
Respiratory tract infection, including pneumonia	<ul style="list-style-type: none"> • Encourage resident to perform regular oral care • Notify nurse if resident has difficulty swallowing, new cough, shortness of breath

Targeted Infection Prevention (TIP) Program
Module 3: Infection Prevention Programs

PRE/POST-TEST

DATE: _____

Please check one answer for each of the following questions.

1. Prevention refers to actions that protect residents from getting and spreading infections.
True False

2. The nursing assistant is a member of the infection prevention team.
True False

3. An effective infection prevention program requires every employee to participate.
True False

4. One performance improvement activity is to evaluate actions taken during the work shift.
True False

5. In a nursing home, an employee health program can help prevent infections.
True False

6. Surveillance activities measure (or evaluate) outcomes and processes.
True False

7. Surveillance is most important to:
 - a. Satisfy the person conducting the survey.
 - b. Save money for the long-term care facility.
 - c. Assess how well the HCW's are helping to prevent infections.
 - d. Keep the infection preventionist occupied.

8. Surveillance activities include:
 - a. Observing residents for signs and symptoms of infection.
 - b. Sharing the information with the HCW's.

- c. The responsibility of the infection preventionist.
- d. All of the above.

9. One proven strategy that prevents respiratory infections is to:

- a. Have the resident cough and deep breathe each day.
- b. Assist the resident in a daily walk.
- c. Provide good oral care.
- d. Assure the resident eats a well-balanced diet.

10. To prevent infection in a resident with a urinary catheter which of the following is necessary?

- a. Removing the catheter as soon as possible.
- b. Performing hand hygiene and wearing gloves when touching the catheter.
- c. Using a catheter only when necessary.
- d. All of the above.

Module 3: PRE/POST-TEST ANSWER KEY

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