



## Infection Control

---

Kathryn Moghadas, RN, CLRM, CHBC, CPCO, CPC  
 Associated Healthcare Advisors, Inc./TopCat Schools  
 PO Box 196717  
 Winter Springs, FL 32719  
 kathym@ahatopcat.com

---

---


---

---

---

---

---



## Infection Control

---

**★Objectives:**

- Identify the most common infecting organisms
- List standard precautions to prevent transmission
- Describe the role of isolation in preventing the spread of certain infections
- Understand significance of correct sequence of donning and removing PPE.
- Identify 6 basics of your facility infection control plan

---

---


---

---

---

---

---



## Infection Control

---

**★Objectives:**

- Understand the significance of antibiotic resistant organisms seen in facilities
- Understand how surveillance for facility hospital acquired (*nosocomial*) infections is performed and the significance of surveillance data
- Describe the ABC's of Infection Control

---

---


---

---

---

---


---



### What is Infection Control?

---

- ★ Identifying and reducing the risk of infections developing or spreading



---

---


---

---

---

---

---



### ABC's of Infection Control

---

- ★ A: Accountability and Awareness
- ★ B: Basics of Infection Control Plan
- ★ C: Counsel Patients

---

---


---

---

---

---

---



### OSHA Compliant 6 Elements of Infection Control Plan

---

1. Employee Classifications
2. Hepatitis B Vaccinations
3. Training and Records
4. Accidental Exposure Plan
5. Implementation Protocols
6. Post-Exposure Plan

---

---

---

---

---

---

---



### ***Employee Classifications***

- ★ Category 1: Primary job responsibilities exposes you to blood and bodily fluid
- ★ Category 2: Secondary job responsibilities exposes you to blood and bodily fluid
- ★ Category 3: No parts of the job lead to exposure

---

---

---

---

---

---

---



### ***Hepatitis B Vaccination***

- ★ All Category 1 & 2 Employees must be offered Hepatitis B Vaccination
- ★ Employee can refuse
- ★ Employee must sign waiver if refused

---

---

---

---

---

---

---



### ***Training and Records***

- ★ Office must document annual training of infection control plan
- ★ All employees must be trained within 90 days of hire
- ★ Employees with new procedures or amended job descriptions must get updated training

---

---

---

---

---

---

---



### ***Accidental Exposure Plan***

- ★ Written plan must document follow-up
- ★ Goal is to confirm disease has not spread
- ★ If disease has spread, plan must show it has been effectively and efficiently treated

---

---

---

---

---

---

---



### ***Implementation of Written Plan***

- ★ Written plan must contain scope of practice
  - Must contain a comprehensive list of all services offered
- ★ Must list work-practice controls
  - Outlines how a procedure will be performed that is consistent with minimizing the spread of disease

---

---

---

---

---

---

---



### ***Post-Exposure Plan***

- ★ This plan re-addresses accidental exposure
- ★ Ensures proper procedures have been followed after exposure
- ★ Documents procedures followed after exposure

---

---

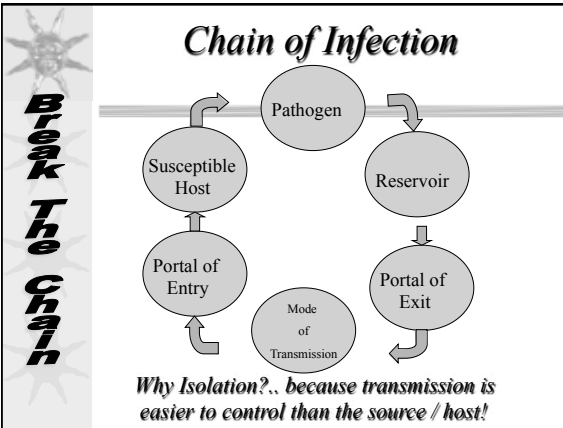
---

---

---

---

---




---

---

---

---

---

---

---

---

### Nosocomial Infections

- ★ Develops when a patient is staying at a healthcare facility **AND** was not present when the patient was admitted to the facility
- ★ At least 5% of patients hospitalized each year in the United States develop nosocomial infections. Many are preventable

---

---

---

---

---

---

---

---

### Standard Precautions

- ★ Guidelines for preventing exposure to blood, body fluids, secretions, excretions (except sweat), broken skin, or mucous membranes
- ★ Based on the concept that body fluids from **ANY** patient can be infectious
- ★ Should be used on every patient
- ★ Use necessary PPE for protection
  - CDC guidelines requires us to use category-specific isolation (ex – TB isolation) in addition to Standard Precautions when a patient is known or suspected to have an infection

---

---

---

---

---

---

---

---



## ***Antibiotic Resistant Microorganisms***

### **normal flora gone bad!**

- ★ Problem exists because of overuse and inappropriate use
- ★ Resistant to multiple antibiotics
- ★ Reduced options for treatment
- ★ Require isolation precautions
- ★ Examples: MRSA, VRE, MDR TB
- ★ Solutions: more appropriate antibiotic use, better infection control and prevention

---

---

---

---

---

---

---



## ***CONTACT ISOLATION***

- ★ used to prevent transmission of microorganisms spread by direct/indirect contact with the source
- ★ examples:
  - MRSA
  - VRE
  - C. diff
  - contagious skin infections... Lice & Scabies

---

---

---

---

---

---

---



## ***CONTACT ISOLATION***

- ★ BASIC COMPONENTS:
  - gloves
  - fluid impervious gown
  - HANDWASHING

---

---

---

---

---

---

---



## ***HAND WASHING***

- ★ Proper hand washing is the single most important way to prevent and reduce infections
- ★ Wash and rinse hands for 15 seconds, using a dry paper towel to turn off faucet
- ★ Alcohol based hand wash is also available in all patient care areas
- ★ Hands should be washed:
  - Before and after patient contact
  - Before putting on gloves and after taking them off
  - After touching blood and body substances (or contaminated patient-care equipment), broken skin, or mucous membranes (even if you wear gloves)
  - Between different procedures on the same patient

---

---

---

---

---

---

---



## ***DROPLET ISOLATION***

- ★ used to prevent transmission of microorganisms spread by large, moist droplets inhaled by or landing on the mucous membranes of the susceptible host
- ★ examples:
  - Influenza
  - *Neisseria meningitidis*
  - some pneumonias
  - vaccine preventable diseases:
    - rubella, mumps, pertussis

---

---

---

---

---

---

---



## ***DROPLET ISOLATION***

- ★BASIC COMPONENTS
  - surgical mask within 3 foot zone
  - HANDWASHING

---

---

---

---

---

---

---



## AIRBORNE ISOLATION

★ used to prevent transmission of microorganisms spread on very small particles that drift on air currents (droplet nuclei, dust)

★ examples:

- pulmonary Tuberculosis
- varicella
- measles

---

---

---

---

---

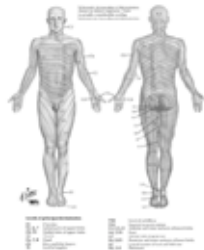
---

---



## Shingles vs. Chicken Pox

- ★ Both are caused by the varicella virus
- ★ Shingles remain along nerve roots and appear on a single dermatome
- ★ Shingles involving multiple dermatomes or an immunocompromised patient (WBC <4.0) consider this to be systemic and isolate just like chicken pox (airborne)



---

---

---

---

---

---

---



## AIRBORNE ISOLATION

★ BASIC COMPONENTS:

- negative air pressure isolation room
- door remains closed
- fit-tested N95 respirator
- yes... HANDWASHING!

---

---

---

---

---

---

---





### ***Further Protection***

- ★ Infection control precautions should also be used when working with clients who have open wounds, lesions and or non-intact skin.
- ★ A health care provider who has non-intact skin, open wounds or lesions must keep them covered at all times when working with clients and must follow infection control procedures.

---

---

---

---

---

---

---



### ***Institutional Safety Culture***

- ★ Refers to a work environment where a shared commitment to safety on the part of management and the workforce is understood and followed.
  - 1) the actions management takes to improve patient and worker safety;
  - 2) worker participation in safety planning;
  - 3) the availability of appropriate protective equipment;
  - 4) influence of group norms regarding acceptable safety practices; and
  - 5) the organization's socialization process for new personnel.

---

---

---

---

---

---

---



### ***In the practice of Audiology***

- ★ Since the involves and requires a notable degree of patient contact, patients and clinicians are exposed to an environment in which a variety of contaminated objects may come into direct or indirect contact with multiple patients (e.g.: headphones, immittance or otoacoustic emissions probe tips, electrodes, otoscope specula, oto-lights, earmold impression syringes, probe tubes for real-ear measurement, earmolds and/or hearing aids).

---

---

---

---

---

---

---



## ***SLP/ OT/PT Out of Hospitals***

- ★ A key part of this effort is ensuring that the instruments we use for patient exams and procedures are clean, prevention starts with:
- ★
  1. Make Staff Education an Ongoing and Dynamic Process
  2. Move to Disposable Wherever Possible
  3. Take into Account Peripheral Equipment Consider Single-Use

---

---

---

---

---

---

---



## ***Ambulatory Settings***

- ★ Signs can be posted at the entrance to facilities or at the reception or registration desk requesting that the patient or individuals accompanying the patient promptly inform the receptionist if there are symptoms of a respiratory infection (e.g., cough, flu-like illness, increased production of respiratory secretions). The presence of diarrhea, skin rash, or known or suspected exposure to a transmissible disease (e.g., measles, pertussis, chickenpox, tuberculosis) also could be added. Placement of potentially infectious patients without delay in an examination room limits the number of exposed individuals, e.g., in the common waiting area.

---

---

---

---

---

---

---



## ***Waiting Areas***

- ★ Signs can be posted at the entrance to facilities or at the reception or registration desk requesting that the patient or individuals accompanying the patient promptly inform the receptionist if there are symptoms of a respiratory infection (e.g., cough, flu-like illness, increased production of respiratory secretions).
- ★ The presence of diarrhea, skin rash, or known or suspected exposure to a transmissible disease (e.g., measles, pertussis, chickenpox, tuberculosis) also could be added. Placement of potentially infectious patients without delay in an examination room limits the number of exposed individuals, e.g., in the common waiting area.

---

---


---

---

---

---

---



## OT/PT Settings

---

All equipment should be cleaned after each use with an antiseptic solution following the manufacture' s recommendation.

Adaptive Equipment

- \*a. All adaptive equipment will be labeled with the person' s name and used individually.
- \*b. All adaptive feeding equipment will be sanitized will be sanitized after washing and dried. They may then be stored in a clean, dry environment.
- \*and All adaptive toothbrushes will be rinsed after each use and air dried before storage.

---

---


---

---

---

---

---



## Residential Settings

---

- \* Wheelchairs should be cleaned after each meal, toileting accidents, and as needed
- \* Bathing facilities should be cleaned after each use.
- \* Bedpans and urinals should be labeled with name, stored and covered accordinly

---

---


---

---

---

---

---



## Activity Materials

---

- \* All activity materials should be checked for cleanliness and proper functioning prior to use.
- \* Activity materials and furnishings should be cleaned after each use with a disinfectant.
- \* Disposables should be discarded in closed trash containers.
- \* Report unsafe, unsanitary conditions and defective equipment to immediate supervisor.
- \* Report inadequacies in ventilation, lighting, temperature, plumbing and heating/cooling to supervisor or maintenance.

---

---

---

---

---

---

---



### ***Common Area Equipment***

- ★ Some items that may come in contact with nonintact skin for a brief period of time are usually considered noncritical surfaces and are disinfected with intermediate-level disinfectants (i.e., phenolic, iodophor, alcohol, chlorine). Since hydrotherapy tanks have been associated with spread of infection, some facilities have chosen to disinfect them with recommended levels of chlorine

---

---

---

---

---

---

---



### ***Have you looked in these areas?***

- ★ Noncritical environmental surfaces include bed rails, some food utensils, bedside tables, patient furniture and floors.
- ★ Noncritical environmental surfaces frequently touched by hand (e.g., bedside tables, bed rails) potentially could contribute to secondary transmission by contaminating hands of health-care workers or by contacting medical equipment that subsequently contacts patients
- ★ Mops and reusable cleaning cloths are regularly used to achieve low-level disinfection on environmental surfaces. However, they often are not adequately cleaned and disinfected, and if the water-disinfectant mixture is not changed regularly (e.g., after every three to four rooms, at no longer than 60-minute intervals), the mopping procedure actually can spread heavy microbial contamination throughout the health-care facility

---

---

---

---

---

---

---



### ***Who cleans the cleaning supplies?***

- ★ In one study, standard laundering provided acceptable decontamination of heavily contaminated mopheads but chemical disinfection with a phenolic was less effective.
- ★ Frequent laundering of mops (e.g., daily), therefore, is recommended. Single-use disposable towels impregnated with a disinfectant also can be used for low-level disinfection when spot-cleaning of noncritical surfaces is needed.

---

---


---

---

---

---

---



### Basic Surveillance Activities

---

- ★ Operative Procedures
- ★ Targeted Surveillance
- ★ Outbreak Investigation

---

---


---

---

---

---

---



### Facility Acquired Infections Benchmarking

---

- ★ CDC’s Facility Infections Program
- ★ Submit monthly data on infections
- ★ Benchmarking with similar facilities
- ★ Networking opportunities
- ★ Annual reports

---

---


---

---

---

---

---



### Surveillance Data

---

- ★ USES
  - Improve patient outcomes by
    - modifying patient care practices
    - reducing length of stay
  - Identify education needs
  - Evaluate new products
  - Identify new opportunities for improvement

---

---

---

---

---

---

---



### ***Latex Allergy***

- ★ Latex can cause allergies in some healthcare workers and patients
- ★ Most non-sterile gloves are latex free
- ★ If you have any type of skin or other reaction to wearing latex gloves, tell the Nurse Manager

---

---

---

---

---

---

---



### ***Key Points About PPE***

- ★ Don before contact with the patient, generally before entering the room
- ★ Use carefully – don't spread contamination
- ★ Remove and discard carefully, either at the doorway or immediately outside patient room; remove respirator outside room
- ★ Immediately perform hand hygiene

---

---

---

---

---

---

---



### ***Sequence for Donning PPE***

- ★ Gown first
- ★ Mask or respirator
- ★ Goggles or face shield
- ★ Gloves

---

---

---

---

---

---

---



### ***How to Safely Use PPE***

- ★ Keep gloved hands away from face
- ★ Avoid touching or adjusting other PPE
- ★ Remove gloves if they become torn; perform hand hygiene before donning new gloves
- ★ Limit surfaces and items touched

---

---

---

---

---

---



### ***Sequence for Removing PPE***

- ★ Gloves
- ★ Face shield or goggles
- ★ Gown
- ★ Mask or respirator

---

---

---

---

---

---



### ***Where to Remove PPE***

- ★ At doorway, before leaving patient room or in anteroom
- ★ Remove respirator outside room, after door has been closed

\* Ensure that hand hygiene facilities are available at the point needed, e.g., sink or alcohol-based hand rub

---


---

---

---

---

---



## Hand Hygiene

- ★ Perform hand hygiene immediately after removing PPE.
  - If hands become visibly contaminated during PPE removal, wash hands before continuing to remove PPE
- ★ Wash hands with soap and water or use an alcohol-based hand rub

\* Ensure that hand hygiene facilities are available at the point needed, e.g., sink or alcohol-based hand rub

---

---


---

---

---

---

---



## Handling Patient Care Equipment

- ★ Handle patient care equipment soiled with blood, other body fluids, secretions, or excretions in a way that prevents contact with skin and mucous membranes
- ★ Handle patient care equipment in a way that prevents contamination of clothing and the spread of microorganisms to other patients
- ★ Appropriately dispose of single use equipment (suction canisters, etc)
- ★ Clean and disinfect reusable equipment. Place clean instruments in biohazard bag for transport to re-sterilization

---

---


---

---

---

---

---



## In addition, contact precautions require that you:

- ★ Don't share non-critical equipment (such as stethoscopes and thermometers) between patients
- ★ If a piece of equipment is used with a patient in contact isolation, then the equipment must be properly cleaned and disinfected prior to use on another patient
- ★ Place a patient on airborne, contact, or droplet precautions in a private room, if possible
- ★ If a private room is not available, the patient may be placed with another patient who has the same (but no other) infection

---

---

---

---

---

---

---





### ***What to do if exposed to blood / body fluids***

- ★ Puncture wounds should be washed immediately and the wound should be caused to bleed
- ★ If skin contamination should occur, wash the area immediately
- ★ Splashes to the nose or mouth should be flushed with water
- ★ Eye splashes require irrigation with clean water, saline, or a sterile irritant
- ★ Complete a Facility Employee Incident Report. Report exposure to immediately

---

---

---

---

---

---

---



### ***Finished!***

- ★ Please complete the Infection Control post-test and evaluations.
- ★ Questions or Comments contact:  
Kathy Moghadas RN  
kathym@ahatopcat.com
- ★ Thank you for your participation!

---

---

---

---

---

---

---