

INFECTION CONTROL AND ISOLATION PRECAUTIONS



ISOLATION PRECAUTIONS



FROM THE HORSE'S MOUTH

The CDC

TYPES OF ISOLATION

- AIR BORNE



- DROPLET



- CONTACT



AIR BORNE ISOLATION



- Tuberculosis
- Requires Negative Air Flow system
- We do not keep residents who require this type of isolation precautions

DROPLET ISOLATION



- Influenza (all types)
- Pertussis (Whooping Cough)
- Rhinovirus
- Measles
- Mumps

*Not required for MRSA in the nares or sputum.

CONTACT ISOLATION



- Vancomycin Resistant Enterococci (V.R.E.)
- Methicillin Resistant Staphylococcus Aureus (M.R.S.A.)
- Multi Drug Resistant Organisms (M.D.R.O.)
- Extended Spectrum Beta Lactamase (E.S.B.L.)
- Clostridium Difficile (C-Dif)
- Klebsiella Pneumoniae Carbapenemase (K.P.C.)
- Shingles

So what is KPC?

- Has been alive and living on the Northeast coast for the last 10 years.
- Recently migrated to Illinois at the end of last year.
- Carbapenemase is an enzyme first found in *Klebsiella pneumoniae* isolates.
- The production of these enzymes results in resistance to all Penicillins, Cephalosporins (i.e. Cefepime), Carbapenems (i.e. Meropenem, Ertapenem) and Aztreonam.
- Treating infections caused by KPC producing organisms is very difficult and very few antibiotics are effective. The antibiotics that do work have significant side effects, are potentially inferior to more conventional therapies and can be costly.
- Strict infection control is absolutely necessary. THESE ORGANISMS ARE EASY TO TRANSFER FROM RESIDENT TO RESIDENT AND ARE VERY DIFFICULT TO TREAT.
- Not all labs test for KPC. May already have someone in your facility with this infection.
- RESIDENTS WITH KPC WILL BE IN ISOLATION FOR THE REST OF THEIR LIFE!**
- Who is at risk for KPC?
 - Residents receiving long courses of broad spectrum antibiotics.
 - Residents with prolonged ICU stays.

ISOLATION PRECAUTIONS

- What's Required?
 - If the resident is being admitted with isolation precautions, you need a copy of the culture reports from the hospital. The culture reports are **needed** to accurately code the MDS.
 - Isolation precaution orders identifying type of isolation precaution needed and for what organism / site. For MDRO and ESBL need to identify the organism specifically, i.e. Pseudomonas ESBL urine.
 - Culture / Re-culture orders.

Cultures & Discontinuation of Isolation Precautions

- Done 72 hours after completion of ABT.
- MRSA – requires 2 negative cultures of the infected site.
- VRE – requires 2 negative cultures **1 week apart**. Cultures must be from the infected site.
- C-Dif – requires 2 negative cultures 1 week apart.

What about Colonization?

- Do we still have to isolate colonized residents?

In a word

YES!

Resident Placement

- For the most part, residents will be in Contact Precautions.
- Cohorting of residents is permitted provided the residents require the same type of isolation and have the same affecting organism.
- So, for example, if you have 2 residents who have MRSA, one resident has MRSA in the sputum and one resident has MRSA in the wound. Both residents *could* be placed in the same room BECAUSE they both have MRSA and both require Contact Precautions.

Resident Placement Always exceptions to the rules!

- Some times there will be extenuating circumstances when you may need to use more clinical judgment in placing residents:
 - Resident with MRSA in the sputum who is **hacking and spewing everywhere**. May want to think about where to put them to have less potential for contamination. And, whereas, residents who have the infected areas contained in a dressing, etc. can be out of their room, you may want to consider requiring this resident to either stay in their room or minimally wear a mask.
 - Residents with KPC will need to be placed together.** Do the best you can with matching the rest of their organisms after the KPC.
 - If KPC is not in the equation but resident has VRE and something else, match the best you can starting with the VRE and working from there.

When There's No Room At the Inn



- Placement decisions should be made on a case by case basis weighing infection risks of all residents in the room.
- When cohorting is not possible, residents must be **physically separated** (> 3 feet apart) and **a curtain used as a barrier between beds**.
- **PROTECTIVE ATTIRE MUST BE CHANGED AND HAND HYGIENE PERFORMED BETWEEN RESIDENTS**

The Isolation Cop Offenders Beware!

- What to watch for:
 - Handwashing
 - Proper use of PPE by EVERYONE.
 - Proper removal of PPE by EVERYONE.
 - Housekeeping practices.
- Worse offenders include:
 - Staff (all of them)
 - Visitors
 - The worse offenders of them all:



DOCTORS

Rub a dub dub You have to sing while you scrub!



- Suggested song while scrubbing; "Happy Birthday" song **sung twice**.
- Surveyors may not watch but they will listen how long you're scrubbing and sing to themselves!

CDC Recommendations for Handwashing



- When hands are visibly dirty or contaminated with blood or body fluids.
- Decontaminate hands before direct contact with residents.
- Decontaminate hands after contact with a resident's intact skin (i.e. when taking a pulse, BP and lifting a resident).
- Decontaminate hands after contact with body fluids, excretions, mucous membranes, non-intact skin, and wound dressings.

More Handwashing Recommendations

- Decontaminate hands if moving from a contaminated-body site to a clean-body site during resident care.
- Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the resident.
- Decontaminate hands after removing gloves.
- Before eating and after using a restroom, wash hands with a soap and water.

Other Aspects of Hand Hygiene

- Do not wear artificial fingernails or extenders when having direct contact with residents at high risk for infection.
- Keep natural nail tips less than 1/4 inch long.
- Wear gloves when contact with blood or other potentially infectious materials, mucous membranes and non-intact skin could occur.
- **REMOVE GLOVES AFTER CARING FOR A RESIDENT!!!**
- Change gloves during resident care if moving from contaminated body site to a clean body site.

Infection Surveillance

- What do we need it for?
 - Monitoring for drug resistant organisms.
 - Capturing infections that are to be reported to IDPH or local Health Departments.
 - Identifying conditions that may require isolation precautions.
 - Monitoring for trends, clusters or changes over time.

AND

IT IS REQUIRED UNDER F 441 – Infection Control

Furthermore . . .



- Isolation Surveillance requires:
 - Site(s) of infection
 - Type of organism(s)
 - Onset date
 - Antibiotic(s) used
 - Type of Precautions
 - HAI vs. Community
 - Culture due date(s)
 - Resolution Date

The Infection Control Committee

- What to report:
 - Types of infections in the facility over the past quarter.
 - How many of those infections were HAI's (Healthcare Acquired Infections) vs. CAI's (Community Acquired Infections).
 - Any trends/patterns noted.
 - Corrective action taken as a result of analyzing the data.
 - How the facility is doing with regards to maintaining or being below set benchmarks for each type of infection.
 - Don't forget to mention about how the facility is doing with isolated residents as well.
 - Brainstorm with Committee Members regarding problem areas.



Final Words on the subject . . .

- Control of infection is incumbent on **EVERYONE** doing their part.
- Preventing infections may add years to the resident's life.
- Not preventing infections causes:
 - Serious illness
 - Death
 - Lawsuits