The Importance of Infection Control and Prevention in the Personal Care and Assisted Living Environment

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Why Are We Here?

- Background
  1. Large scale outbreaks in PC/AL facilities that affected resident care and business practice
     - MRSA
     - NeuroVirus/C Diff
     - Legionella
  2. Admission bans
  3. Loss of Census
  4. Press coverage affecting reputation
<table>
<thead>
<tr>
<th>Disease</th>
<th>Precautions</th>
<th>Symptoms</th>
<th>Incubation Period</th>
<th>Treatment</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDRO (Multi-drug resistant organisms) Examples: MRSA, VRE, ESBL</td>
<td>Contact and Standard</td>
<td>Bumps, blisters, swelling reddening of the skin, skin tenderness, white or yellow pus-filled heads. Internal/surgical site usually associated with health-care acquired</td>
<td>1 to 10 days Personal contact with contaminated items such as dressings or other infected materials, also via health care providers’ hands and medical objects.</td>
<td>Appropriate antibiotic treatment</td>
<td>• Wash hands soap/water 20 sec. or use enough alcohol based hand rub and rub hands for 15 sec. • Dedicated resident equipment (stethoscopes, thermometers, BP cuffs, etc.) If not available clean/disinfect each item between residents • Able to survive for long periods – clean and disinfect environmental surfaces with an approved disinfectant</td>
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<tr>
<td>C-Diff (Clostridium Difficile)</td>
<td>Contact and Standard</td>
<td>Usually appear 5-10 days after starting antibiotic. Watery diarrhea, abdominal pain/tenderness, fever, nausea, loss of appetite.</td>
<td>CDC average: 3 days Bacterium and spores are spread in fecal matter and can be transmitted via surfaces such as counter tops/toilets/ and equipment. MOST common - hands of health care workers</td>
<td>Appropriate antibiotic treatment Anti-diarrheal medications SHOULD not be used.</td>
<td>• Wash Hands with soap and water (20 sec). Alcohol based sanitizers should not be used as they may not effectively destroy C-Diff spores. • Clean surfaces with a bleach type disinfectant or an EPA approved disinfectant • Use antibiotics only as necessary and only after confirmation of an infection. • Probiotics may be helpful</td>
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<tr>
<td>Norovirus (Norwalk agent Gastroenteritis)</td>
<td>Contact and Standard</td>
<td>Nausea/vomiting, diarrhea, headache, stomach cramps, fever/chills</td>
<td>12-48 hours post exposure Fecal matter via mouth. (Food transmission, hand exposure)</td>
<td>No treatment available Anti-diarrheal medications SHOULD not be used.</td>
<td>• Wash hands soap/water 20 sec. or use enough alcohol based hand rub and rub hands for 15 sec. • Clean and disinfect contaminated surfaces with chlorine based solution</td>
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<tr>
<td>Influenza</td>
<td>Droplet and Standard</td>
<td>Fever, cough, sore throat, runny/stuffy nose, chills, fatigue. RARE: Vomiting/diarrhea</td>
<td>24 hours to 4 days</td>
<td>Antiviral medication within 2 days of getting sick for best results</td>
<td>• Yearly Flu Vaccine for anyone over 6 mos. of age • Avoid contact with sick people • Stay home until 24 hours after fever is gone without the use of a fever reducing agent • Cover nose/mouth with tissue for cough or sneeze. Dispose of post use • Wash hands (20 sec) with soap and water</td>
</tr>
</tbody>
</table>

**Type of Use**

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<tr>
<th>Type</th>
<th>Use When</th>
<th>Why</th>
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</thead>
<tbody>
<tr>
<td>Standard (Universal Precautions)</td>
<td>Follow with ALL residents ALL of the time</td>
<td>When you are close to or handling blood, bodily fluid, bodily tissues, mucous membranes, or areas of open skin, you must use personal protective equipment (PPE). Depending on exposure types of PPE required include, gloves, masks or goggles, aprons, gowns, and shoe covers.</td>
</tr>
<tr>
<td>Contact</td>
<td>May be needed for germs that are spread by touching</td>
<td>Contact precautions help keep staff and visitors from spreading the germs after touching a person or an object the person has touched. Anyone entering the room who may touch the person or objects in the room should wear a gown and gloves.</td>
</tr>
<tr>
<td>Droplet</td>
<td>Used to prevent contact with mucus and other secretions from the nose/sinus, throat, airways and lungs.</td>
<td>When a person talks, sneezes, or coughs, droplets that contain germs can travel about 3 feet. Anyone who goes into the room should wear a surgical mask.</td>
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</table>
Infection Control—Regulatory Compliance

- 2600.16 (A)(7) Reportable Incidents and Conditions
  - Outbreak of a serious communicable disease as defined in 28 PA Code and 27.2 (relating to specific identified reportable diseases, infections and conditions.)

28 PA Code -27.2”

Reportable within **24 hours** after being identified by symptoms, appearance or diagnosis

- Animal bite
- Rabies
- Anthrax
- Smallpox
- Arboviruses
- Typhoid fever
- Botulism
- Cholera
- Diphtheria
- Enterohemorrhagic
- E. Coli
- Food Poisoning outbreak
- Haemophilus influenzae invasive disease
- Hantavirus pulmonary syndrome
- Hemorrhagic fever

- Lead poisoning
- Legionellosis
- Measles (rubeola)
- Meningococcal invasive disease
- Plague
- Poliomyelitis
Reportable within 5 **work days** after being identified by symptoms, appearance or diagnosis (listing those that may pertain to PC/AL)

- Chickenpox (varicella)
- Creutzfeldt-Jacob Disease
- Encephalitis
- Guillain-Barre syndrome
- *Influenza*
- Lyme Disease
- Meningitis
- Mumps
- Pertussis (whooping cough)
- Rubella (German Measles)
Other Applicable Regulations/Notifications

- **2600.18 Applicable Heath and Safety Laws**
  - Influenza Awareness Act - Requires the preparation and publication of information relating to the influenza vaccine for individuals residing in assisted living residences and personal care homes; and imposing duties on the Department of Health and Human Services.
  - Requires facilities to post state mandated information on Influenza year-round.
- **2600.65(d) Direct Care Staff Training**
  - Requires education on Universal Precautions, Infection Control within 40 hours of hire date.
- **2600.65(f)**
  - Requires yearly inservice for direct care staff on Infection Control and general principles of cleanliness and hygiene and areas associated with immobility, such as prevention of decubitus ulcers, incontinence, malnutrition and dehydration.
- **2600.141 (a)(2)(6) Immunization History (part of DME)**
  - Requires history to be placed in the resident’s initial and yearly DME
- **Q&A April 2015**
  - Anti-coagulation device cannot be shared
- **Letter - March 17, 2015**
  - Dedicated single-use auto-disabling finger stick device / glucometer

Best Practice--Prevention

- Prevention is Key
  - Hand washing, hand washing, hand washing
  - As technology increases, think about Infection Control and Prevention
Best Practice—Employee Health

• Encourage your staff to be healthy.
  • Infecting residents does not equal dedication or loyalty
• Physicians release to return to work
• Encourage or (if possible) Mandate yearly Flu Shots

Best Practice—Ongoing Education

• Education begins with new employee orientation and needs to be ongoing
• Re-educate staff on universal precautions, hand washing, preventing spread with EVERY possible outbreak
  • Education needs to include unannounced observation and annual competencies
• Educate support staff especially housekeeping/laundry on prevention techniques during an outbreak
• Visit education for infection control and prevention—Especially during peak seasons (flu)
• Use approved cleaning agents that will kill the bacteria/virus that is being spread.
Best Practice—Person Centered Care

- Isolate the Illness; not the resident
  - Group Activities
  - Dining
  - Community Living

Why is Infection Control and Prevention Important?
Impact on Census

- Residents cease to breath as a result of complications from acute infections.
  - PA had 148 Influenza related deaths last year and 120 were 65+
  - Of 29,000 deaths related to healthcare associated C-diff in the US in a single year 80% were 65+
- Acute illnesses lead to hospital admissions = empty beds
- Acute illnesses exacerbate Comorbidities causing a need for a higher level of care = empty beds
- A need to isolate residents due to an acute illness can result in a reduction of available beds.

Public Relations

- An educated consumer will not tolerate high infection rates and poor infection control practices.
- In house acquired infections are not a result of good care.( reportable incident, Quality Management)
- Dissatisfied consumers Talk
- Legal Action
- Look who is in the News!
Take Away

- Prevention is the KEY to Infection Control which includes effective diagnosis and treatment and the diagnose and prevention of transmission
  - Challenging populations include our dementia residents
- Education (and re-education) is the KEY to Prevention
  - Staff—direct care and support staff
  - Residents
  - Families
- Infection Control is Everyone’s responsibility

Resources

- Center for Disease Control and Prevention  
  [www.cdc.gov](http://www.cdc.gov)
- Regulatory references  
  [dhs.pa.gov](http://dhs.pa.gov)
- PA Chapter 27 Communicable and Noncommunicable Diseases
- PA Subchapter B “Reporting of Diseases, Infections and Conditions
- PA Department of Health
  - [https://sais.health.pa.gov/commonpoc/content/FacilityWeb/attachment.asp?messageid=3393&filename=ABHRmemo+8+14+17+FINAL+Approved%2Epdf&attachmentnumber=1](https://sais.health.pa.gov/commonpoc/content/FacilityWeb/attachment.asp?messageid=3393&filename=ABHRmemo+8+14+17+FINAL+FINAL+Approved%2Epdf&attachmentnumber=1)
- PA Department of Health and Human Services
  - [http://www.dhs.pa.gov/provider/longtermcareservices/PersonalCareHomesPolicyRegulationsandInterpretationInformation/index.htm](http://www.dhs.pa.gov/provider/longtermcareservices/PersonalCareHomesPolicyRegulationsandInterpretationInformation/index.htm)
POLICY: It is the policy of Quality Life Services to practice hand washing that will prevent the transmission of infections.

PROCEDURE:
1. All care partners are to wash their hands with soap and water when their hands are visibly dirty, contaminated or soiled. The use of hand sanitizer is encouraged when hands are not visibly soiled to reduce bacterial counts.

2. Hand washing is to be done as follows:
   2.1 Wet hands with water, apply soap, rub hands together for at least 15-20 seconds
   2.2 Rinse and dry with disposable towel
   2.3 Use towel to turn off faucet

3. Hand sanitizers are to be used as follows:
   3.1 Depress the wall mounted dispenser twice to obtain the appropriate amount of solution to the palm of one hand.
   3.2 Rub your hands together covering all surfaces until dry

4. Hand washing is to be done before
   4.1 Contact with residents
   4.2 Donning gloves when inserting a central venous catheter
   4.3 Inserting urinary catheters, peripheral vascular catheters, or other invasive devices that don’t require surgery.

5. Hand washing is to be done after
   5.1 Contact with a residents skin
   5.2 Contact with body fluids or excretions, non-intact skin, and wound dressings
   5.3 Removing gloves

6. The recommended time for effectively cleaning the hands with soap and water for 20 seconds.

7. The recommended time for effectively cleansing the hands with a hand sanitizer is until hands are dry.

8. After using hand sanitizer three times in a row between medication pass, it is recommended that hand washing with soap and water be done prior to using any more hand sanitizer

9. It is recommended that lotion be used to moisturize dry hands and prevent cracking – wash hands with soap and water prior to applying

10. Natural nail tips should be kept to approximately a ¼ inch in length

11. Wear gloves when contact with blood or other potentially infectious materials is possible.
   11.1 Remove gloves after caring for a resident and dispose of immediately
   11.2 Do not wear the same pair of gloves for the care of more than one resident
   11.3 Gloves are intended for one-time use and must be disposed of immediately.

12. When caring for residents with c-diff the hand sanitizer is ineffective against the clostridium difficile. Hand washing with soap and water is required before, after and during the provision of care to those residents.
Hand Washing – CU4.6

POLICY: Staff will wash hands as frequently as needed throughout the day following proper hand washing procedures (and surrogate prosthetic devices washing procedures as appropriate). Hand washing facilities should be readily accessible and equipped with hot and cold running water, paper towels, soap, trash cans and signage notifying employees to wash hands. Encourage hand washing instead of the use of chemical sanitizing gels or lotions. If chemical sanitizing gels are used, staff must first wash hands as stated below.

PROCEDURE:

Clean hands and exposed portions of arms (or surrogate prosthetic devices) immediately before engaging in food preparation including working with exposed food.

1. When to Wash Hands:
   - After touching bare human body parts other than clean hands and clean, exposed portions of arms.
   - After using the restroom.
   - After caring for or handling service animals or aquatic animals.
   - After coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating or drinking.
   - After handling soiled equipment or utensils.
   - During food preparation, as often as necessary to remove soil and contamination and to prevent cross contamination when changing tasks.
   - When switching between working with raw food and working with ready to eat food.
   - Before donning gloves for working with food.
   - After engaging in other activities that contaminate the hands.

2. How to Wash Hands:
   - Turn on the faucet using a paper towel to avoid contaminating the faucet.
   - Wet hands and forearms with warm water (minimum 110°F) and apply an antibacterial soap.
   - Scrub well with soap and additional water as needed, scrubbing all areas thoroughly. Pay close attention to the fingernails using a brush as needed. Scrub for a minimum of 10 to 15 seconds within the 20-second hand washing procedure. Apply vigorous friction between the fingers and fingertips. Rinse with clean, running warm water.
   - Rinse thoroughly.
   - Dry hands with paper towel. Turn the faucet off with the paper towel. Or use a hand blow drier.
   - Use the towel to open the door if needed, and then discard the towel.
3. Application of hand lotion is not advised because of the frequency of bacterial contamination found in this solution.
4. Staff is educated on the importance of hand washing and retrained and reminded as necessary on the above philosophy/guidelines.
5. Hand washing procedures are posted by each hand washing sink.