WELCOME!
PLEASE MUTE YOUR PHONES!
EQUIP FOR LTC WEBINAR WILL BEGIN AT 10:00 AM PST

TODAY’S TOPIC IS
“IMPLEMENTING AN INFECTION CONTROL PROGRAM IN LONG-TERM CARE”
9/27/17
Please...

Mute your phone if you are not speaking

Do not put the phone line on hold

Use the chat box to ask questions during the presentation
IMPLEMENTING AN INFECTION CONTROL PROGRAM IN LONG-TERM CARE

PATTY MONTGOMERY RN, MPH, CIC
OBJECTIVES

Review importance of having an infection prevention program
Describe essential components of an infection prevention program
Review infection prevention fundamentals
ICAR uses a consultative and collaborative approach to evaluate the strength of infection prevention in a variety of healthcare settings so that public health can create tools to improve existing capacity.

Public Health + Healthcare = ICAR
Grant funding from the Centers for Disease Control and Prevention (CDC) supports three ICAR infection prevention consultants, one at the Washington State Department of Health and two at the Local Health Jurisdiction level (Clark and Spokane).

Site Specific Assessments
The CDC has provided setting specific assessment tools for acute care hospitals, long-term care facilities, outpatient settings, and dialysis centers. Visits are consultative and provided at no cost.

Going Back to Basics
The assessment tool will be sent to the participating facilities ahead of time. Topics covered during the visit will range from hand hygiene to antimicrobial stewardship. Visits will take approximately 1/2 day and may involve observations of staff performing hand hygiene or isolation procedures.

Relationship Building
Public Health will make these visits simple and valuable. Assessing overall infection prevention across the state will no doubt result in a stronger healthcare system.

For questions or to schedule your ICAR assessment, contact the Washington State Department of Health’s Healthcare Associated Infections Program at 206-418-5505.
IMPACT OF INFECTIONS IN NURSING HOMES

- 1,600,000 to 3,800,000 infections each year
- ~400,000 deaths
- $673mil to $2billion

American Journal of Infection Control
May 2011, Vol. 39, p.263
The Chain of Infection

- Infectious Agent
- Reservoir
- Portal of Entry
- Portal of Exit
- Mode of Transmission
- Susceptible Host
COMPONENTS OF INFECTION PREVENTION PROGRAM

- Surveillance and Reporting
- Policy and Procedure Review
- Training and Education
- Rounding, Audits and Feedback
- Coordination and Communication
- Leadership and accountability
Facility has written disaster plan: 89%
IP is trained: 14%
Reviews surveillance data and infection activities: 83%
Has written evidence based infection prevention policies: 74%
Policies are reviewed annually: 43%
Facility has an IP: 97%

5/15/2017 n=35
ICAR Assessments by LTC Facility Type (n=35)
Updated 5/30/2017

Program Infrastructure

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Home</td>
<td>100</td>
<td>45-190</td>
</tr>
<tr>
<td>Assisted Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Care</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours per week</th>
<th>Mean</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours per week</td>
<td>11</td>
<td>8</td>
<td>2-30</td>
</tr>
</tbody>
</table>
WHO?

- Initiative
- Flexible
- Self-motivated
- Approachable
- Communication skills
INFECTION PREVENTIONIST

Develop a Job Description
Allocate resources
Provide training
Support development and growth
TRAINING AND EDUCATION

• On-line webinars
• Local Chapter Meetings
• Network
• Equip for Long-Term Care
Association for Professionals in Infection Control (APIC) Training

EPI® in Long-Term Care

Important new opportunity for individuals interested in the LTC Certificate series

EPI® 101 for LTC is offered October 2–3, 2017 at the Infection Prevention Academy in San Antonio, TX. Visit www.apic.org/academy for more details and to register.

Newly published federal regulations will have a significant impact on how long-term care facilities address infection prevention and control. To help prepare these facilities for the change, APIC has launched the “Certificate of Training in Infection Prevention in the Long-Term Care Setting” program as an opportunity for state departments of health to sponsor classes. The objectives of the course are to provide those working in long-term care with a baseline of infection prevention and control (IPC) knowledge, as well as information on handling the infection prevention challenges that are unique to the long-term care (LTC) practice setting.

“With the first revision to the Centers for Medicare and Medicaid Services (CMS) Conditions of Participation for Long-Term Care since 1991, which includes expansion of infection prevention and control conditions, we know that many people will be looking for updated training that helps prepare them for those changes,” said Lisa Tomlinson, vice president of Government Affairs at APIC.

The APIC certificate program gathers baseline IPC content in one series and includes the following required components:

https://apic.org/Education-and-Events/LTC-certificate

Infectious Disease Society of America (ISDA)

Primer on Healthcare Epidemiology, Infection Control & Antimicrobial Stewardship: Online ID Fellows Course

Introduction:

This online educational course offers any Infectious Diseases practitioner an opportunity to learn the basics of healthcare epidemiology, infection control and antimicrobial stewardship. Written by adult and pediatric experts in the field, case-based information is presented in a dynamic and interactive learning environment intended to highlight the role of the healthcare epidemiologist. Topics covered include patient transmission, outbreak management in the healthcare setting, approaches to control of bacterial agents, barrier protective health management, implementing antimicrobial stewardship and the prevention and management of multidrug-resistant organisms including Clostridium difficile, surgical site infections and device-associated infections. This is a product of the membership of this Society of Healthcare Epidemiology of America and is endorsed by the Infectious Disease Society of America (IDS) and Pediatric Infectious Disease Society (PIDS).

Overall Learning Objectives:

At the end of this course, the learner will be able to:

- Describe the role of the healthcare epidemiologist.
- Analyze when to involve the healthcare epidemiologist and infection control experts—specifically during outbreaks, bioterrorism threats and advanced topics in occupational health management.
- Discuss how to implement principles of antimicrobial stewardship.
- Define the epidemiology, surveillance and prevention of healthcare-associated infections including multidrug-resistant organisms including Clostridium difficile, surgical site infections and device-associated infections.

http://www.idsociety.org/Infect_Control_Course/
IT TAKES A TEAM!
INFECTION CONTROL COMMITTEE

Include staff
Providers
Staff development
Employee Health
Environmental Services
Residents and Family
Consultants Lab/Pharmacy/Wound Care
RISK ASSESSMENT

Cornerstone of any infection prevention program

Facility Specific

Performed annually and reviewed when there are significant changes or challenges
RISK ASSESSMENT

Profile of patients at your facility

Community Infection Risks (Influenza)

Invasive lines and devices used

Device associated infection rates and trends

Adherence to hand hygiene

Scope and participation staff and residents with immunization program

Isolation systems

Antibiotic stewardship

Environmental Cleaning and disinfection

Facility readiness to respond to urgent or emergent threats

Washington State Department of Health
The Healthcare System

- Critical Access Hospital
- Assisted Living
- Outpatient Care
- Long Term Acute Care Hospital
- Long-term care
- Home Health
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Likely</td>
<td>Catastrophic Loss (life/limb/function/financial)</td>
<td>Risk of Readmission to High</td>
<td>Minimal Clinical/Financial</td>
</tr>
<tr>
<td></td>
<td>Likely</td>
<td>Serious Loss (function/financial)</td>
<td>Moderate Clinical/Financial</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Maybe</td>
<td>Risk of Transferring to High</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rare</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>ABX Resistant Organisms</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>MRSA</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>C Diff</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>VRE</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ESBL/other Gram</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Negative bacteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevention Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Hand Hygiene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Respiratory Hygiene/Cough Etiquette</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improper Glove Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of ABX</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stewardship Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Resident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza Vaccination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Washington State Department of Health
SURVEILLANCE

Identify infections coming into your facility

- Is the resident on antibiotics
- Does the resident have invasive devices
- Is the resident on precautions?
- Does the resident have open wounds?
- Does the resident have symptoms of an acute illness?
Inter-Facility Infection Prevention and Safety Form

Complete this form and send it with your facility transfer form to the receiving institution. Attach copies of latest culture reports with susceptibilities, if available.

Sending Facility

<table>
<thead>
<tr>
<th>Patient/Resident Last Name</th>
<th>First Name</th>
<th>Date of Birth</th>
<th>Medical Record Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of Sending Facility</th>
<th>Sending Unit</th>
<th>Sending Facility Phone Number</th>
</tr>
</thead>
</table>

Is the patient/resident currently in transmission-based precautions?  
☐ YES  ☐ NO
If yes, check all that apply:
☐ Contact  ☐ Contact Enteric  ☐ Droplet
☐ Airborne Contact  ☐ Airborne Respirator  ☐ Special Precautions (Novel):

Does the patient/resident have MDROs or other organisms of infection control significance?

<table>
<thead>
<tr>
<th>Significant Organisms</th>
<th>Colonization or History</th>
<th>Active Infection, on Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acinetobacter, multidrug-resistant</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Carbapenem resistant Enterobacteriaceae (CRE)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Has the WA State Lab confirmed that CRE is Carbapenemase-producing?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Clostridium difficile</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
SURVEILLANCE AND REPORTING

Track infections in your facility
- Is the resident on antibiotics?
- Does the resident have invasive devices?
- Is the resident on precautions?
- Does the resident have open wounds?
- Can the resident come off precautions?
- Is the infection contagious?
- Does anyone else show symptoms?
- Is this reportable?
### Healthcare Aquired Infections Monthly Report

**For the Month of:** September 2017

<table>
<thead>
<tr>
<th>Total Patient Days</th>
<th>100</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>Total Facility</th>
<th>Infections Rate Per 1000</th>
<th>Last Months Rate</th>
</tr>
</thead>
</table>

#### I. Respiratory

- Common Cold
- Influenza-like Illness
- Pneumonia
- Lower Respiratory (Bronchitis)

#### II. Urinary Trac Infection (Symptomatic)

- Without catheter
- With catheter

#### III. Gastrointestinal

#### IV. Skin

- Cellulitis/tissue/wound
- Fungal
- Herpes Simplex
- Herpes Zoster (shingles)
- Scabies

#### V. Eye Ear, Nose or Mouth

- Conjunctivitis
- Ear
- Mouth or peri-oral

#### VI. Systemic

- Primary Bloodstream
- Unexplained Febrile Episode

#### VII. Other

#### Total Infections

**Infection Rate** per 1000 per Unit
DEVELOPMENT AND REVIEW OF POLICIES AND PROCEDURES

Policies and procedures are written
Evidence based
Available to staff
Reviewed annually
Addresses the needs identified in the risk assessment
TRAINING AND EDUCATION

Hand Hygiene
Standard and Transmission based precautions
PPE
Safe Needle Practices
Antimicrobial Stewardship
Environmental Monitoring
BBP

On hire and annually
WHAT IS COMPETENCY-BASED TRAINING?

The verification of competency through the use of knowledge-based testing and direct observation.

If direct observation is not included, an alternative method to ensure that healthcare personnel possess essential knowledge, skills, and abilities should be used.
## % Compliance (n=35)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Competency based training at hire</th>
<th>Training annually</th>
<th>Audits Practices</th>
<th>Provides Feedback</th>
<th>Supplies Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Hygiene</td>
<td>71</td>
<td>49</td>
<td>31</td>
<td>66</td>
<td>89</td>
</tr>
<tr>
<td>PPE</td>
<td>53</td>
<td>38</td>
<td>20</td>
<td>43</td>
<td>85</td>
</tr>
<tr>
<td>Injection Safety</td>
<td>47</td>
<td>38</td>
<td>12</td>
<td>44</td>
<td>88</td>
</tr>
<tr>
<td>Environment of Care</td>
<td>65</td>
<td>65</td>
<td>20</td>
<td>50</td>
<td>90</td>
</tr>
</tbody>
</table>
ROUNDING, AUDITING, FEEDBACK

• Unnoticed, visual inspection
• Useful to detect process failures
• Essential to coach rather than criticize
• Include staff in process
• Build engagement
• Report results
"HOLD IT! DON’T COME ANY CLOSER! WHAT YOU HAVE IS HIGHLY CONTAGIOUS!"
Your 5 moments for HAND HYGIENE:

1. Before touching a patient
2. Before clean/aseptic procedure
3. After body fluid exposure risk
4. After touching a patient
5. After touching patient surroundings

Based on WHO poster ‘Your 5 Moments for Hand Hygiene’ and reproduced with their kind permission.
## Hand Hygiene Audit

### V.b. Hand hygiene

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplies necessary for adherence to hand hygiene (e.g., soap, water, paper towels, alcohol-based hand rub) are readily accessible to HCP in patient care areas.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>

**Hand hygiene is performed correctly:**

<table>
<thead>
<tr>
<th>B. Before contact with the patient</th>
<th>○ Yes ○ No</th>
<th>Click here to enter text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Before performing an aseptic task (e.g., insertion of IV or preparing an injection, administering eye drops)</td>
<td>○ Yes ○ No ○ Not Applicable</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>D. After contact with the patient</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>E. After contact with objects in the immediate vicinity of the patient</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>F. After contact with blood, body fluids or contaminated surfaces</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>G. After removing gloves</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>H. When moving from a contaminated-body site to a clean-body site during patient care</td>
<td>○ Yes ○ No ○ Not Applicable</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>

[http://www.jointcommission.org/assets/1/18/hh_monograph.pdf](http://www.jointcommission.org/assets/1/18/hh_monograph.pdf)
Standard precautions

All Patients
All the time
All healthcare facilities
Major Article

Exploring inappropriate certified nursing assistant glove use in long-term care

Deborah Patterson Burdsall PhD, RN-BC, CIC a,*, Sue E. Gardner PhD, RN a, Thomas Cox PhD, RN, MSW b,c, Marin Schweizer PhD b,c, Kennith R. Culp PhD, RN a, Victoria M. Steelman PhD, RN, CNOR a, Loreen A. Herwaldt MD d

a The University of Iowa College of Nursing, Iowa City, IA
b Iowa City VA Health Care System, Iowa City, IA
c Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, IA
d Department of Epidemiology, University of Iowa College of Public Health, Iowa City, IA

Key Words:
Glove use
Infection prevention and control
Health care-associated infection
Cross-contamination

Background: Certified Nursing Assistants (CNAs) frequently wear gloves when they care for patients in standard precautions. If CNAs use gloves inappropriately, they may spread pathogens to patients and the environment, potentially leading to health care-associated infections (HAIs).

Methods: Using a descriptive structured observational design, we examined the degree of inappropriate health care personnel glove use in a random sample of 74 CNAs performing toileting and perineal care at 1 long-term care facility.

Results: During the 74 patient care events, CNAs wore gloves for 80.2% (1,774/2,213) of the touch points, failing to change gloves at 66.4% (225/339) of glove change points. CNAs changed gloves a median of 2.0 times per patient care event. A median of 1.0 change occurred at a change point. CNAs failed to change their gloves at a glove change point a median of 2.5 times per patient care event. Most (61/74; 82.4%) patient care events had >1 contaminated touch point. Over 44% (782/1,774) of the gloved touch points were defined as contaminated for a median of 8.0 contaminated glove touch points per patient care event. All contaminated touches were with gloved hands (P < .001).

Conclusions: Inappropriate glove use was frequently observed in this study. Contaminated gloves may be a significant cause of cross-contamination of pathogens in health care environments. Future research
<table>
<thead>
<tr>
<th><strong>Do</strong></th>
<th><strong>Don’t</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ DO wear gloves to reduce the risk of contamination or exposure to blood, other body fluids, hazardous materials, and transmission of infection.</td>
<td>✓ DON’T re-use or wash gloves (except for utility gloves after being properly cleaned).</td>
</tr>
<tr>
<td>✓ DO clean hands before putting on gloves for a sterile procedure (e.g., insertion of catheter or other invasive device).</td>
<td>✓ DON’T substitute glove use for hand hygiene.</td>
</tr>
<tr>
<td>✓ DO clean hands after removing gloves.</td>
<td>✓ DON’T use non-approved hand lotions.</td>
</tr>
<tr>
<td>✓ DO clean hands and change gloves between each task (e.g., after contact with a contaminated surface or environment).</td>
<td>✓ DON’T use gloves if they are damaged or visibly soiled.</td>
</tr>
<tr>
<td>✓ DO make sure that gloves fit you properly before performing any tasks.</td>
<td>✓ DON’T touch your face when wearing gloves.</td>
</tr>
<tr>
<td>✓ DO ensure the correct type of glove is available if you have skin sensitivity or allergy issues.</td>
<td>✓ DON’T wear the same pair of gloves from one patient to another.</td>
</tr>
<tr>
<td>✓ DO wear gloves in hemodialysis settings for any contact with the patient or the patient’s equipment.</td>
<td>✓ DON’T wear gloves in the hall; consult your facility’s policy for exceptions.</td>
</tr>
<tr>
<td>✓ DO follow your facility’s policy on glove use and remember to consult CDC* and WHO* hand hygiene guidance.</td>
<td>✓ DON’T forget to remove and dispose of gloves properly.</td>
</tr>
</tbody>
</table>
Only YOU can stop the spread of infection!
**DROPLET PRECAUTIONS**

**EVERYONE MUST**
- Clean hands when entering and leaving room
- Follow Standard Precautions
- Wear mask
- Wear eye protection if splash/spray to eyes likely

**DOCTORS AND STAFF MUST**
If contact with body fluids likely, use gown, glove, mask and eye protection

**Droplet Precautions**
Display sign outside the door. Remove sign after room is cleaned.

**Family and other visitors to follow precautions.**

**Common Conditions:**
- Seasonal influenza
- Bacterial Meningitis (N. meningitidis)
- Pertussis (whooping cough)
- Mumps

**Dishes/Utensils:**
No special precautions. Kitchenware sanitized in dishwasher.

**Equipment and Supplies:**
- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment including intravenous pumps, cell phone or pagers (if used in room), other electronics, supplies and other equipment prior to removing from patient’s room.
- Ensure blood pressure cuff and stethoscope are cleaned and disinfected between patients.
- Only essential supplies in room.

**Linen Management:**
Bag linen in the patient’s room.

**Personal Protective Equipment:**

Put On in this order:
1. Wash or sanitize hands
2. Gown (if needed)
3. Mask
4. Eye cover
5. Gloves (if needed)

Take OFF & dispose in this order:
1. Gowns (if used)
2. Eye cover
3. Gown (if used)
4. Mask
5. Wash or sanitize hands (gloves if gloves used)

**Private Room:**
If not available, room with patient that has the same organism but no active infection.

**Room Cleaning:**
Routine cleaning procedures with the addition of聒物-containing solutions if visibly soiled.

**Transport:**
Essential transport only and place surgical mask on patient. Clean and disinfect transport vehicle. Alert receiving department regarding patient’s isolation precaution status. Discontinue precautions as per hospital policy or infection preventionist instructions.
CONTACT PRECAUTIONS
(If you have questions, go to Nurse Station)

EVERYONE MUST:
- Clean hands when entering and leaving room
- Follow Standard Precautions

DOCTORS AND STAFF MUST:
- Use patient dedicated or disposable equipment.
- Clean and disinfect shared equipment.

Gown and gloves when entering room

Contact Precautions
Display sign outside the door. Remove sign after room is cleaned.

Family and other visitors to follow precautions.

Common Conditions:
- Methicillin-resistant Staphylococcus aureus (MRSA)
- Vancomycin-resistant Enterococcus (VRE)
- Clostridium difficile infection (diarrhea)
- Scabies
- Wounds or abscesses with uncontaminated dressings

Dishes/Utensils:
No special precautions. Kitchenware sanitized in dishwasher.

Equipment and Supplies:
- Use dedicated or disposable equipment when available.
- Clean and disinfect reusable equipment including IV pumps, cell phone or pagers (if used in room), other electronics, supplies and equipment prior to removing from patient’s room.
- Ensure blood pressure cuff and stethoscope are cleaned and disinfected between patients.
- Only essential supplies in room.

Linen Management:
Bag linen in patient’s room.

Personal Protective Equipment:
Put ON in this order:
1. Wash or sanitize hands
2. Gown
3. Mask (if needed)
4. Eye cover (if needed)
5. Gloves

Take OFF & dispose in this order:
1. Gloves
2. Eye cover (if used)
3. Gown
4. Mask (if used)
5. Gown
6. Wash or sanitize hands (even if gloves used)

Private Room:
If not available, room with patient that has the same organism but no other infection.

Room Cleaning:
Routine cleaning procedures with the addition of extra cleaning changes if visibly soiled.

Transport:
Essential transport only. Place patient in clean gown. Clean and disinfect transport vehicle. Alert receiving department regarding patient’s isolation precaution status.

Discontinue precautions as per hospital policy or Infection Preventionist instructions.
ENVIRONMENTAL CLEANING
Cleaning products have to match with manufacturer guidelines. Might have to contact manufacturer, often instructions are available online.

Link below is to a table you can use to decide which products work best in your facility.


EPI list of products and their effectiveness against specific microbes and viruses updated January 2017.

https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants
Surfaces can remain contaminated for months

<table>
<thead>
<tr>
<th>Type of bacterium</th>
<th>Duration of persistence (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acinetobacter spp.</td>
<td>3 days to 5 months</td>
</tr>
<tr>
<td>Clostridium difficile spores</td>
<td>5 months</td>
</tr>
<tr>
<td>E. Coli</td>
<td>1.5 hours to 16 months</td>
</tr>
<tr>
<td>VRE</td>
<td>5 days to 4 months</td>
</tr>
<tr>
<td>Klebsiella species</td>
<td>2 hours to 30 months</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa</td>
<td>6 hours to 16 months; 5 wks on dry floor</td>
</tr>
<tr>
<td>Staph aureus including MRSA</td>
<td>7 days to 7 months</td>
</tr>
</tbody>
</table>
Shared Equipment
SAFE INJECTION PRACTICES

Recommended Practices for Preventing Bloodborne Pathogen Transmission during Blood Glucose Monitoring and Insulin Administration in Healthcare Settings

- Fingerstick Devices
  - Restrict use of fingerstick devices to individual persons. They should never be used for more than one person. Select single-use lancets that permanently retract upon puncture. This adds an extra layer of safety for the patient and the provider.
  - Dispose of used lancets at the point of use in an approved sharps container. Never reuse lancets.

- Blood Glucose Meters
  - Whenever possible, blood glucose meters should be assigned to an individual person and not be shared.
    - If blood glucose meters must be shared, the device should be cleaned and disinfected after every use, per manufacturer’s instructions, to prevent carry-over of blood and infectious agents. If the manufacturer does not specify how the device should be cleaned and disinfected then it should not be shared.

- General
  - Unused supplies and medications should be maintained in clean areas separate from used supplies and equipment (e.g., glucose meters). Do not carry supplies and medications in pockets.

Insulin Administration

- Insulin pens should be assigned to individual persons and labeled appropriately. They should never be used for more than one person.
- Multiple-dose vials of insulin should be dedicated to a single person whenever possible.
  - If the vial must be used for more than one person it should be stored and prepared in a dedicated medication preparation area outside of the patient care environment and away from potentially contaminated equipment.
  - Medication vials should always be entered with a new needle and new syringe.

CDC toolkit glucose monitoring
https://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html

POC devices
https://www.youtube.com/watch?v=dddSVOTu_AE
# INJECTION SAFETY Checklist

The following Injection Safety checklist items are a subset of items that can be found in the CDC Infection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care.

The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare personnel to safe injection practices. (Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.)

<table>
<thead>
<tr>
<th>Injection Safety</th>
<th>Practice Performed?</th>
<th>If answer is No, document plan for remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>The rubber septum on a medication vial is disinfected with alcohol prior to puncturing</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Single dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medication administration tubing and connectors are used for only one patient.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Multidose vials are dated by HCP when they are first opened and discarded within 28 days, unless the manufacturer specifies a different (shorter or longer) date for that opened vial.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Multidose vials are dedicated to individual patients whenever possible.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Multidose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room, cubicle).</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

## Resources


7 CORE ELEMENTS OF AMS FOR NURSING HOMES

- Leadership commitment
- Accountability
- Drug expertise
- Action
- Tracking
- Reporting
- Education

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Area for improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility can demonstrate leadership support for efforts to improve antibiotic use (antibiotic stewardship).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. The facility has identified individuals accountable for leading antibiotic stewardship activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. The facility has access to individuals with antibiotic prescribing expertise (e.g. ID trained physician or pharmacist).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. The facility has written policies on antibiotic prescribing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. The facility has implemented practices in place to improve antibiotic use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. The facility has a report summarizing antibiotic use from pharmacy data created within last 6 months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Report could include number of new starts, types of drugs prescribed, number of days of antibiotic treatment from the pharmacy on a regular basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. The facility has a report summarizing antibiotic resistance (i.e., antibiogram) from the laboratory created within the past 24 months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. The facility provides clinical prescribers with feedback about their antibiotic prescribing practices.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: If yes, facility should provide documentation of feedback reports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Opportunities for improvement in AMS in LTCF (n=44)

- **A.** Demonstrates leadership: 45%
- **B.** Individual accountable: 27%
- **C.** Access to prescribing expertise (MD, Pharmacist): 27%
- **D.** Written policies: 45%
- **E.** Improvement practices implemented: 50%
- **F.** ABO use summary report (6MOS): 43%
- **G.** ABO resistance summary report (Antibiogram) lab within past 24 MOS: 50%
- **H.** Providing prescriber feedback? 64%
- **I.** AMS training for all nurses past 12 MOS: 64%
- **J.** AMS training all prescribers past 12 MOS: 86%
RESOURCES

UNC Antimicrobial Stewardship Training Modules for Nurses
https://nursinghomeinfections.unc.edu/nurses/

Register for DOH EQuIP for Long-term Care
https://attendee.gototraining.com/r/4057723852532727554

EQuIP for Long-term care website
http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections/EQuIP/LTC
COORDINATION

Facilities Management
Environmental Services
Construction projects
Nutrition Services
Pharmacy
Laboratory
External consultants
COMMUNICATION

• Report back findings to staff
• Engage staff, build a team
• Quality and Safety
• Local Health Jurisdiction
• DSHS
• Resident follow-up
TAKE HOME POINTS

Every staff member has a responsibility to prevent and control infections.

Developing and implementing an effective infection prevention and AMS program is a team effort.

Measurement is key to evaluating the effectiveness of your interventions to improve care.
"The patient in the next bed is highly infectious. Thank God for these curtains."
RESOURCES AND WORKS CITED

Agency for Healthcare Research and Quality (AHRQ) Nursing Home Antimicrobial Stewardship Guide
https://www.ahrq.gov/nhguide/index.html

Centers for Disease Control and Prevention (CDC) Core Elements of Antimicrobial Stewardship for Nursing Homes:

Federal Register Reform of Requirements for Long-Term Care Facilities (10/4/16):
Qualis Health Infection Prevention resource page:


Washington State Department of Health (DOH) Education, Quality and Infection Prevention (EQuIP)
http://www.doh.wa.gov/YouandYourFamily/IlnessandDisease/HealthcareAssociatedInfections/EQuIP/LTC
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