ICAR Tool Review

Infection Prevention and Control Assessment Tool for Long-Term Care Facilities
ICAR Tool Review: LTCF

Infection Control Domains for Gap Assessment

1. Infection Control Program and Infrastructure
2. Health Care Personnel and Resident Safety
3. Surveillance and Disease Reporting
4. Hand Hygiene
5. Personal Protective Equipment (PPE)
6. Respiratory/Cough Etiquette
7. Antibiotic Stewardship
8. Injection Safety and Point of Care Testing
9. Environmental Cleaning
Facility Demographics
Facility Demographics

1. Facility Name
2. NHSN ID
3. State-Assigned ID
4. Date of Assessment
5. Type of Assessment
6. Rationale for Assessment
7. Is the facility licensed by the state?
8. Is the facility certified by CMS?
9. Facility Type
10. Number of licensed beds
11. Total staff hours per week dedicated to ICP activities
12. Is the facility affiliated with a hospital?
ICAR for LTCF: Section 2

Infection Control Program and Infrastructure

Domain 1: Infection Control Program and Infrastructure
## Infection Control Program and Infrastructure

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has specified a person (e.g., staff, consultant) who is responsible for coordinating the IC program.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The person responsible for coordinating the infection prevention program has received training in IC</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Examples of training may include: Successful completion of initial and/or recertification exams developed by the Certification Board for Infection Control &amp; Epidemiology; Participation in infection control courses organized by the state or recognized professional societies (e.g., APIC, SHEA).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. The facility has a process for reviewing infection surveillance data and infection prevention activities (e.g., presentation at QA committee).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>D. Written infection control policies and procedures are available and based on evidence-based guidelines (e.g., CDC/HICPAC), regulations (F-441), or standards.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Note: Policies and procedures should be tailored to the facility and extend beyond OSHA bloodborne pathogen training or the CMS State Operations Manual.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>E. Written infection control policies and procedures are reviewed at least annually or according to state or federal requirements, and updated if appropriate.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>F. The facility has a written plan for emergency preparedness (e.g., pandemic influenza or natural disaster).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
CMS Regulation: Infection Control

§483.80 Infection Prevention and Control Program (IPCP)

- A system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases that:
  - Covers all residents, staff, volunteers, visitors, and other individuals providing services under a contractual arrangement;
  - Is based on the individual facility assessment;
  - Follows accepted national standards;
- Written standards, policies and procedures in accordance with §483.80(a)(2);
- A system for recording incidents identified under the IPCP and corrective actions taken by the facility; and
- An antibiotic stewardship program (ASP) (F881).
COMAR 10.07.02.33

1. Nursing home shall establish, implement, and maintain an effective infection control program

2. Nursing home shall have at least one infection preventionist
   a. Must have received training in infection control by OHCQ/MDH approved program
   b. Must be staffed at 1 FTE per 200 beds

http://www.dsd.state.md.us/comar/comarhtml/10/10.07.02.33.htm
The infection prevention and control program shall establish policies and procedures to:

1. Identify HAIs and communicable diseases
2. Report certain infectious diseases and outbreaks to the health department
3. Institute appropriate control measures during an outbreak to control infection and prevent spread
4. Perform surveillance for infections among staff and residents
5. Train employees in infection control (Standard precautions, Hand hygiene, Respiratory hygiene, Laundry processing, Safe handling of sharps, Medical waste handling/disposal, Use of antiseptics and disinfectants, Bloodborne pathogens, TB exposure, PPE)
6. Train and perform compliance monitoring of employees
7. Review ICP program elements at least annually
8. Obtain approval of ICP program

http://www.dsd.state.md.us/comar/comarhtml/10/10.07.02.33.htm
Emergency Preparedness for All Provider & Certified Supplier Types

All facilities must develop an all-hazards Emergency Preparedness Program and Plan

Download Appendix Z:

Access CMS Emergency Preparedness Home Page including FAQs:

Toolkits, templates:
“All-Hazards” Approach:

- Integrated approach: identifying hazards and developing emergency preparedness capacities and capabilities

- Includes preparedness for natural, man-made, and or facility emergencies that may include but is not limited to:
  - Care-related emergencies
  - Equipment and power failure
  - Interruptions in communications
  - Cyber-attacks
  - Loss of a portion or all of a facility
  - Interruptions in normal supply of essentials, such as water and food

- Planning for, using an all-hazards approach, should also include emerging infectious disease (EID) threats
  - Influenza, Ebola, Zika Virus, COVID-19 and others.
Infection Control Program and Infrastructure

Domain 2: Health Care Personnel and Resident Safety
Health Care Personnel

A. The facility has work-exclusion policies concerning avoiding contact with residents when personnel have potentially transmissible conditions which do not penalize with loss of wages, benefits, or job status.

B. The facility educates personnel on prompt reporting of signs/symptoms of a potentially transmissible illness to a supervisor.

C. The facility conducts baseline Tuberculosis (TB) screening for all new personnel.
   • Facility must maintain documentation of testing
Health Care Personnel

D. The facility has a policy to assess health care personnel risk for TB (based on regional, community data) and requires periodic (at least annual) TB screening if indicated.

- Guideline UPDATED MAY 2019
- Annual testing NO LONGER recommended, UNLESS known exposure or ongoing transmission at facility
- HCP with untreated latent TB infection should receive annual TB symptom screen
- Facilities can consider annual TB screening for groups at increased occupational risk for exposure (e.g., respiratory therapists, pulmonologists)
- All HCP should receive TB education annually
**Health Care Personnel**

E. The facility offers Hepatitis B vaccination to all personnel who may be exposed to blood or body fluids as part of their job duties.

F. The facility requires all personnel receive influenza vaccination annually.
   - MD: Any employee not vaccinated must wear a mask when within 6 feet of residents and during the flu season

G. The facility maintains written records of personnel influenza vaccination from the most recent influenza season.
ICAR for LTCF: Health Care Personnel and Resident Safety

Health Care Personnel

H. The facility has an exposure control plan which addresses potential hazards posed by specific services provided by the facility (e.g., blood-borne pathogens).

I. All personnel receive training and competency validation on managing a blood-borne pathogen exposure at the time of employment.

J. All personnel received training and competency validation on managing a potential blood-borne pathogen exposure within the past 12 months.
Resident Safety

A. The facility currently has a written policy for to assess risk for TB (based on regional, community data) and provide screening to residents on admission.

B. The facility documents resident immunization status for pneumococcal vaccination at time of admission.

C. The facility offers annual influenza vaccination to residents.
Infection Control Program and Infrastructure

Domain 3: Surveillance and Disease Reporting
<table>
<thead>
<tr>
<th>Surveillance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has written intake procedures to identify potentially infectious persons at the time of admission.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><em>Examples: Documenting recent antibiotic use, and history of infections or colonization with C. difficile or antibiotic-resistant organisms</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. The facility has system for notification of infection prevention coordinator when antibiotic-resistant organisms or C. difficile are reported by clinical laboratory.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>C. The facility has a written surveillance plan outlining the activities for monitoring/tracking infections occurring in residents of the facility.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>D. The facility has system to follow-up on clinical information, (e.g., laboratory, procedure results and diagnoses), when residents are transferred to acute care hospitals for management of suspected infections, including sepsis.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>*Note: Receiving discharge records at the time of re-admission is <em>not</em> sufficient to answer “yes”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ICAR for LTCF: Surveillance and Disease Reporting

<table>
<thead>
<tr>
<th>Surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has written intake procedures to identify potentially infectious persons at the time of admission.</td>
</tr>
</tbody>
</table>

*Examples: Documenting recent antibiotic use, and history of infections or colonization with C. difficile or antibiotic-resistant organisms*

- Talk through the intake procedure
- Is there a standard form?
- Does it include questions about previous infections? Lab results? Antibiotics?
ICAR for LTCF: Surveillance and Disease Reporting

- What is the lab notification process?
- Is it a fax? Email? EHR?
- How long does it take to get results?
- Who gets the results?
- Is this information used for resident placement?
ICAR for LTCF: Surveillance and Disease Reporting

- How do they do surveillance?
  - Paper, Excel, EHR
  - Case counts, Rates, Charts, NHSN
  - By physician, By Unit
- What infections do they perform surveillance for?
- What do they do with the data?
  - Share with staff? Present at infection control meeting?
ICAR for LTCF: Surveillance and Disease Reporting

D. The facility has system to follow-up on clinical information, (e.g., laboratory, procedure results and diagnoses), when residents are transferred to acute care hospitals for management of suspected infections, including sepsis.

Note: Receiving discharge records at the time of re-admission is *not sufficient* to answer “yes”

- How do they provide this information to the hospital?
- How do they receive this information from the hospital?
  - EHR, Phone, Email, Fax?
- Are they active in this process?
ICAR for LTCF: Surveillance and Disease Reporting

<table>
<thead>
<tr>
<th>Disease Reporting</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has a written plan for outbreak response which includes a definition, procedures for surveillance and containment, and a list of syndromes or pathogens for which monitoring is performed.</td>
<td></td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The facility has a current list of diseases reportable to public health authorities.</td>
<td></td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. The facility can provide point(s) of contact at the local or state health department for assistance with outbreak response.</td>
<td></td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
Anything above the norm!

- When occurrence of disease is above baseline
  - **Baseline** = the usual number of occurrences within a specific population over a specific period of time

- Can be:
  - A specified number of cases, as defined by the Maryland Department of Health (MDH)
  - A single infection of certain conditions
    - Ex: Influenza, TB, Ebola, **COVID-19**
How does MDH define outbreak?

Maryland COMAR 10.06.01.02(B)(18)

1. Foodborne disease outbreak = Two or more epidemiologically-related cases of illness following consumption of common food item

2. Three or more cases of a disease or illness:
   a. That is not a foodborne outbreak
   b. That occurs in individuals who are not living in the same household, but who are epidemiologically linked

3. One case of:
   a. Anthrax; Botulism; Cholera; Ciguatera poisoning; Mushroom poisoning; Paralytic shellfish poisoning; Plague; Rabies (human); Smallpox; Scombroid poisoning; Trichinosis
How does MDH define outbreak?

Maryland COMAR 10.06.01.2(B)(18)

4. A situation designated by the Secretary as an outbreak

5. An increase in the number of infections in a facility, such as a hospital, long-term care facility, assisted living facility, school, or childcare center, over the baseline rate usually found in that facility
Respiratory Illness Outbreak Definitions:

- An outbreak of ILI is defined as 3+ clinically defined cases in patients/residents/staff in a facility within a 7-day period.
- An outbreak of influenza is defined as 2 patients/residents/staff having onsets of ILI or pneumonia within 3 days of each other and at least one person has influenza confirmed by any test.
- An outbreak of pneumonia is defined as 2+ cases of pneumonia in a ward/unit within a 7-day period.
- Outbreaks can also consist of a combination of ILI, influenza, and pneumonia cases.

Components of Outbreak Investigation

Things don’t always go in this order...
1. Determine if an outbreak exists, verify diagnosis
2. Inform the appropriate individuals
3. Develop a case definition
4. Find cases and record information
5. Organize data: Person, Place, and Time
6. Form a hypothesis
7. Evaluate hypothesis
8. Design and implement control measures
9. Evaluate control measures
10. Communicate findings & make a report
## COMAR 10.06.01.03

### Table 1

<table>
<thead>
<tr>
<th>HEALTH CARE PROVIDERS, INSTITUTIONS, &amp; OTHERS&lt;sup&gt;1&lt;/sup&gt;</th>
<th>LABORATORIES</th>
<th>TIMEFRAME FOR REPORTING&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases and Conditions</td>
<td>Laboratory Evidence of</td>
<td>Submit Clinical Materials to the Department&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>An outbreak of a disease of known or unknown etiology that may be a danger to the public health&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Similar etiological agents from a grouping or clustering of patients</td>
<td></td>
</tr>
<tr>
<td>A single case of a disease or condition not otherwise included in</td>
<td>An etiologic agent suspected to cause that</td>
<td></td>
</tr>
</tbody>
</table>

https://phpa.health.maryland.gov/IDEHASharedDocuments/ReportableDisease_HCP.pdf
Selected Conditions...

- Outbreaks
- Single cases of diseases that may be a danger to public health
- Unusual manifestation of communicable disease
- E. coli O157: H7
- Gonococcal infection
- Legionellosis

- Pneumonia in a HCW resulting in hospitalization
- Salmonellosis
- Invasive Group A or B Strep
- Syphilis
- Tuberculosis and Suspected Tuberculosis
- VISA / VRSA
- Fatal Varicella (chickenpox)

Full list available here: https://phpa.health.maryland.gov/IDEHASharedDocuments/ReportableDisease_HCP.pdf
Not on the list, but also reportable by Secretary’s Order:

- Carbapenem-resistant Enterobacteriaceae (CRE)
  - Reportable by labs only

- *Clostridiodes difficile* (formerly *Clostridium difficile*) / *C. diff*
  - Reportable by labs only

- NHSN Data
  - Facilities must join the MDH NHSN group
ICAR for LTCF: Section 2

Infection Control Program and Infrastructure

Domain 4: Hand Hygiene
### Elements to be assessed

| A. Hand hygiene policies promote preferential use of alcohol-based hand rub (ABHR) over soap and water in most clinical situations.  

*Note: Soap and water should be used when hands are visibly soiled (e.g., blood, body fluids) and is also preferred after caring for a patient with known or suspected C. difficile or norovirus during an outbreak or if rates of C. difficile infection in the facility are persistently high.* |
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes ○ No</td>
<td></td>
</tr>
</tbody>
</table>

| Click here to enter text. |

- During walk-through, note locations of sinks and ABHR – is it easy for staff to perform hand hygiene before/after entering a resident’s room?
B. All personnel receive training and competency validation on HH at the time of employment.

C. All personnel received training and competency validation on HH within the past 12 months.

D. The facility routinely audits (monitors and documents) adherence to HH.
   • Describe process, and provide audit report

E. The facility provides feedback to personnel regarding their HH performance.
   • Describe process, provide sample feedback report

F. Supplies necessary for adherence to HH (e.g., soap, water, paper towels, alcohol-based hand rub) are readily accessible in resident care areas (i.e., nursing units, resident rooms, therapy rooms).
What were commonly identified issues across SNFs?

• No hand hygiene audits performed

• No hand hygiene observed with active *C. diff* residents

• Residents not offered hand hygiene product before meals

• No hand hygiene before or after donning gloves
Finding: Hand Hygiene Audits

The facility did NOT audit (monitor & document) Hand Hygiene adherence and provide feedback among:

- Nursing: RNs, LPN, and CNAs
- Therapy: PT, OT, Speech
- Clinical: MDs, NPs, PAs
- Dietary including food-preparers
- Environmental services personnel
- Contract: Lab, Dialysis, Respiratory
No Alcohol-based hand rub (ABHR) was readily accessible and placed in appropriate locations:

- Entrance to Facility
- Entrance to Dining Hall
- Staff workstations
- Inside/Outside Resident Rooms
A well written hand hygiene policy and procedure should include the following and reflect all the elements of your program:

- Indications for hand hygiene
- How to perform hand hygiene
- Selection of products used for hand hygiene
- Appropriate placement of hand hygiene products
- Management of product dispensing containers
- Use of ABHR as the preferred method of hand hygiene
- Issues pertaining to nail enhancements and jewelry
- Hand hygiene compliance and feedback
- Auditing and feedback
ABHR Pointers

• The **optimal location for dispensers** appears to be just outside the doorways to patient rooms

• In that location, the dispenser is typically **highly visible**, it is on the route of the caregiver, and the action of entering the room is a trigger for the caregiver to perform hand hygiene

• Do **not** place **near electrical outlets**; minimize leaks

• Check your state-specific regulations for mounting locations

• Never top-off or mix products – **discard empty containers**
Handwashing Pointers

Handwashing sink placement should be near the point of care

• The **location of sinks** is more influential than the number of sinks.

• Each additional meter (~3 ft) between the resident’s immediate surroundings and the nearest sink **decreased the likelihood of handwashing by 10 percent**

• **Paper towels are preferable** to warm-air blowers for drying hands, because the towels can be used to turn off the faucet and open door after use. The blowers may spread pathogens
Using the CMS Surveyor Guidelines for Hand Hygiene

Hand Hygiene:
- Staff implement standard precautions (e.g., hand hygiene and the appropriate use of personal protective equipment (PPE)).
- Appropriate hand hygiene practices are followed.
- Alcohol-based hand rub (ABHR) is readily accessible and placed in appropriate locations. These may include:
  - Entrances to resident rooms;
  - At the bedside (as appropriate for resident population);
  - In individual pocket-sized containers by healthcare personnel;
  - Staff work stations; and
  - Other convenient locations.
- Staff wash hands with soap and water when their hands are visibly soiled (e.g., blood, body fluids), or after caring for a resident with known or suspected C. difficile infection (CDI) or norovirus during an outbreak, or if endemic rates of CDI are high. ABHR is not appropriate to use under these circumstances.
- Staff perform hand hygiene (even if gloves are used) in the following situations:
  - Before and after contact with the resident;
  - After contact with blood, body fluids, or visibly contaminated surfaces or other objects and surfaces in the resident’s environment;
  - After removing personal protective equipment (e.g., gloves, gown, facemask); and
  - Before performing a procedure such as an aseptic task (e.g., insertion of an invasive device such as a urinary catheter, manipulation of a central venous catheter, and/or dressing care).
- When being assisted by staff, resident hand hygiene is performed after toileting and before meals.
- Interview appropriate staff to determine if hand hygiene supplies are readily available and who they contact for replacement supplies.
- Soap, water, and a sink are readily accessible in appropriate locations including, but not limited to, resident care areas, food and medication preparation areas.

1. Did staff implement appropriate hand hygiene? [ ] Yes [ ] No F880
# Hand Hygiene Compliance Audit

## Hand Hygiene and Contact Precautions Observations

<table>
<thead>
<tr>
<th>Staff type*</th>
<th>Type of opportunity</th>
<th>HH performed?</th>
<th>Gown or glove indicated?</th>
<th>Gown/glove used?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Room entry</td>
<td>○ Alcohol-rub</td>
<td>○ Gown only</td>
<td>○ Gown used</td>
</tr>
<tr>
<td></td>
<td>Room exit</td>
<td>○ Hand Wash</td>
<td>○ Glove only</td>
<td>○ Glove used</td>
</tr>
<tr>
<td></td>
<td>Before resident contact</td>
<td>No HH done</td>
<td>○ Both</td>
<td>○ Both</td>
</tr>
<tr>
<td></td>
<td>After resident contact</td>
<td></td>
<td>○ No</td>
<td>○ Both</td>
</tr>
<tr>
<td></td>
<td>Before glove</td>
<td>○ After glove</td>
<td>○ No</td>
<td>○ Neither</td>
</tr>
<tr>
<td></td>
<td>After glove</td>
<td>○ Other: Click here to enter text</td>
<td>○ Gown only</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other: Click here to enter text</td>
<td>○ Glove only</td>
<td>○ Both</td>
<td>○ Neither</td>
</tr>
</tbody>
</table>

*Staff type* refers to the type of staff member involved in the observation.
ICAR for LTCF: Section 2

Infection Control Program and Infrastructure

Domain 5: Personal Protective Equipment (PPE)
## ICAR for LTCF: PPE

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has a policy on Standard Precautions which includes selection and use of PPE (e.g., indications, donning/doffing procedures).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The facility has a policy on Transmission-based Precautions that includes the clinical conditions for which specific PPE should be used (e.g., <em>C. difficile</em>, influenza).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. Appropriate personnel receive job-specific training and competency validation on proper use of PPE at the time of employment.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>D. Appropriate personnel received job-specific training and competency validation on proper use of PPE within the past 12 months.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>E. The facility routinely audits (monitors and documents) adherence to PPE use (e.g., adherence when indicated, donning/doffing).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td> Note: If yes, facility should describe auditing process and provide documentation of audits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. The facility provides feedback to personnel regarding their PPE use.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td> Note: If yes, facility should describe feedback process and provide documentation of feedback reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Supplies necessary for adherence to proper PPE use (e.g., gloves, gowns, masks) are readily accessible in resident care areas (i.e., nursing units, therapy rooms).</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
Employer Responsibilities

The Occupational Safety and Health Administration (OSHA) states that the employer is responsible for:

1. Performing a hazard assessment of the workplace to identify and control physical and health hazards.
2. Identifying and providing appropriate PPE for employees.
3. Training employees in the use and care of PPE.
4. Maintaining PPE, including replacing worn or damaged PPE.
5. Periodically reviewing, updating, and evaluating the effectiveness of the PPE program.
PPE Principles

- Type of PPE depends on precautions required – splash vs spray
- Don PPE BEFORE contact with the patient/resident
- PPE must fit well and cover intended areas
- Keep hands away from face
- Work from clean to dirty
- Limit surfaces touched
- Change when torn or heavily contaminated
- Prevent contamination of clothing and skin during PPE removal
- Remove & discard gown/gloves/mask before leaving resident room
- Perform hand hygiene
<table>
<thead>
<tr>
<th>Precaution</th>
<th>Applies to:</th>
<th>PPE For:</th>
<th>Room Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Precautions</td>
<td>All residents</td>
<td>Any exposure to blood, body fluid, mucous membrane, non-intact skin, contaminated surfaces</td>
<td>No</td>
</tr>
<tr>
<td>Enhanced Barrier Precautions</td>
<td>All residents with: -Wound/Indwelling Device -Novel/Targeted MDRO (when Contact Precautions do not apply)</td>
<td>During high-contact resident care activities</td>
<td>No</td>
</tr>
<tr>
<td>Transmission-Based Precautions</td>
<td>-Active infection for which additional precautions are needed to prevent transmission</td>
<td>Any room entry</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Transmission-Based Precautions

1. Contact Precautions
   a. Residents with infection that represents increased risk for contact transmission
   b. MRSA, C. diff, Norovirus, GE, Scabies/Lice, Conjunctivitis, Bloodborne pathogens (HIV, Hep C)
   c. Gown + Gloves, Hand Hygiene, Room restrictions, Dedicated equipment

2. Droplet Precautions
   a. Residents infected with pathogens transmitted by respiratory droplets, generated by coughing, sneezing, or talking
   b. Influenza, RSV, Adenovirus, Rhinovirus, Streptococcus group A
   c. Mask on resident, Mask + Appropriate PPE, Room restrictions

3. Airborne Precautions
   a. Residents infected with pathogens transmitted by airborne route
   b. TB, Varicella (chickenpox), Measles, Disseminated herpes zoster
   c. Mask on resident, Negative pressure or private room, N95 mask + Appropriate PPE
Wear gloves when there will be contact with:

- Blood or other potentially infectious materials
- Mucous membranes
- Non-intact skin
- Potentially contaminated intact skin
- Urine, feces, sputum
Gloves – Best Practices

- Do not wear same pair of gloves for care of > than 1 resident
- Check for documented latex allergy
- Do not wash gloves for purpose of reuse
- Change gloves if soiled
- Keep gloved hands away from your face
- Change gloves during single resident care:
  - If hands move from contaminated site to clean body-site (think peri-care)
- Remove gloves *prior* to leaving the room
- Hand Hygiene immediately after removing gloves
Gowns

Gown should be worn to cover entire torso & protect clothing & skin when contact with blood, bodily fluids, secretions, or excretion is reasonably anticipated.
Gowns – Best Practices

• Resistant to fluid penetration (OSHA requirement)

• Disposable – Worn once

• Secured at the waist and neck

• Single-use for one patient only

• Easy to don and doff (D“on” and D“off”)

• Removed before leaving the patient’s environment and hand hygiene performed
Mouth, Nose, Eye Protection

Wear PPE protecting the mouth, nose, and eyes during procedures and resident-care activities when exposure to splashes, sprays, or droplets of blood or bodily fluid is expected.

For Respirator Overview:
Mouth, Nose, Eye Protection – Best Practices

- Fluid resistant
- Single use
- Change face mask if soiled
- Consider masks with ear loops versus ties
- Face masks should fully cover nose and mouth
- Goggles should fit snugly over & around eyes
- Prescription glasses should not be substituted for goggles
- Face Shield offer simultaneous protection to mouth/nose/eyes
  - Covers forehead, extends below chin, wraps around side of face
- Respirators prevent inhalation of very small infectious particles
- Remove mask and respirator outside of the room
Accessibility & Availability Are Key

**Overcome a key barrier in non-compliance**

- PPE should be available at the point of care
  - Obtain staff input to determine supply locations
  - Define who is tasked with maintaining adequate PPE supplies
- Do ALL staff know who to call when supplies run out
- Responsibilities include:
  - Identifying minimum supply levels
  - Determining frequency supplies should be restocked
  - Ensuring that backup PPE supplies are available
### Methods for Assessing Competency

- Return demonstration
- Pre and Post-tests
- Skills Checklists

### When to Assess Competency

- Upon Hire
- Annually
- Monthly Auditing
- Product change;
- Lapses in standard of care
- Outbreaks

*Has the facility re-assessed competency since the start of COVID-19?*
ICAR for LTCF: Section 2

Infection Control Program and Infrastructure

Domain 6: Respiratory Hygiene/Cough Etiquette
ICAR for LTCF: Respiratory and Cough Etiquette

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has signs posted at entrances with instructions to individuals with symptoms of respiratory infection to: cover their mouth/nose when coughing or sneezing, use and dispose of tissues, and perform hand hygiene after contact with respiratory secretions?</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The facility provides resources for performing hand hygiene near the entrance and in common areas.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. The facility offers facemasks to coughing residents and other symptomatic persons upon entry to the facility.</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>D. The facility educates family and visitors to notify staff and take appropriate precautions if they are having symptoms of respiratory infection during their visit?</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>E. All personnel receive education on the importance of infection prevention measures to contain respiratory secretions to prevent the spread of respiratory pathogens</td>
<td>○ Yes ○ No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
Infection Control Program and Infrastructure

Domain 7: Antibiotic Stewardship
What is “Antibiotic Stewardship”? 

A set of commitments and actions designed to optimize the treatment of infections while reducing the adverse events and harms associated with antibiotic use.

Measure antibiotic prescribing

Ensure prompt initiation of antibiotics when they are needed

Ensure that the right drug, dose, and duration are selected when antibiotic is needed

Improve antibiotic prescribing so that antibiotics are prescribed and used only when needed
F881 §483.80 (a)(3):

• An antibiotic stewardship program (ASP) that includes antibiotic use protocols and a system to monitor antibiotic use

INTENT:
*The intent of this regulation is to ensure that the facility*:

• Develops and implements protocols to optimize the treatment of infections by ensuring that residents who require an antibiotic, are prescribed the appropriate antibiotic;

• Reduces the risk of adverse events, including the development of antibiotic-resistant organisms, from unnecessary or inappropriate antibiotic use; and

• Develops, promotes, and implements a facility-wide system to monitor the use of antibiotics
Antibiotic Prescribing

• Up to 70% of long term care facility residents receive one or more antibiotics every year
• 40-75% of antibiotics prescribed in nursing homes may be unnecessary or inappropriate
• Antibiotic-related complications can be more severe among 65+ year old patients.

ICAR for LTCF: Antibiotic Stewardship

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas 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>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The facility has identified individuals accountable for leading antibiotic stewardship activities</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. The facility has access to individuals with antibiotic prescribing expertise (e.g. ID trained physician or pharmacist).</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>D. The facility has written policies on antibiotic prescribing.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>E. The facility has implemented practices in place to improve antibiotic use.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>F. The facility has a report summarizing antibiotic use from pharmacy data created within last 6 months.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</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>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>H. The facility provides clinical prescribers with feedback about their antibiotic prescribing practices.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Note: If yes, facility should provide documentation of feedback reports.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. The facility has provided training on antibiotic use (stewardship) to all nursing staff within the last 12 months.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>J. The facility has provided training on antibiotic use (stewardship) to all clinical providers with prescribing privileges within the last 12 months.</td>
<td>□ Yes □ No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
ICAR for LTCF: Antibiotic Stewardship

- Ask for names, not just “yes”
- Who is on their antibiotic stewardship committee?
  - Medical director, DON, IP, QA, unit leads, etc.

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas 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>Yes or No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. The facility has identified individuals accountable for leading antibiotic stewardship activities</td>
<td>Yes or No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>C. The facility has access to individuals with antibiotic prescribing expertise (e.g. ID trained physician or pharmacist)</td>
<td>Yes or No</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
### Antibiotic Stewardship Policies

| D. The facility has written policies on antibiotic prescribing. | ![Yes/No] | Click here to enter text. |
| E. The facility has implemented practices in place to improve antibiotic use. | ![Yes/No] | Click here to enter text. |

a. Documentation of dose, duration, and indication  
b. Develop facility-specific treatment recommendations  
c. Review antibiotic agents available in the facility  
d. Implement algorithms for assessment of residents  
e. Use a communication tool for residents with suspected infection  
f. Disseminate an antibiogram to providers  
g. Perform antibiotic “time outs”  
h. Reduce prolonged antibiotic treatment courses for common infections  
i. Reduce antibiotic use in asymptomatic bacteriuria  
j. Reduce antibiotic prophylaxis for UTI prevention  
k. Optimize management of pneumonia  
l. Optimize use of cultures for management of chronic wounds
Pharmacy Role in ASP

1. Do they use a consultant pharmacist, have an in-house pharmacy, or contract pharmacy services from hospital?

2. What sort of support does the pharmacist provide?
   - Provide antimicrobial stewardship education to all licensed staff
   - Request indication for antibiotic use on all prescribers’ orders
   - Review antibiotic prescriptions as part of the drug regimen review
   - Communicate standards and guidelines regarding intravenous-to-oral therapies, and duration of therapy
   - Establish lab testing protocols to monitor for adverse events and drug interactions related to use of antibiotics
Antibiogram

= overall profile of aggregated antibiotic susceptibility testing results across residents with positive cultures during a certain time period

• Provide information on local susceptibility patterns
  • Helps prescribers with antibiotic selection
• Monitor effectiveness of interventions
• Provide feedback to prescribers

• *Should be in contract with their lab*
Maryland Antibiogram

2018 Gram Negative Organism Percent Susceptibility — By Region

<table>
<thead>
<tr>
<th>Class</th>
<th>Antibiotic</th>
<th>Baltimore Metro Area</th>
<th>National Capitol Region</th>
<th>Southern Maryland</th>
<th>Western Maryland</th>
<th>Eastern Shore</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organism</td>
<td>A. baumannii</td>
<td>K. aerogenes</td>
<td>E. coli</td>
<td>P. aeruginosa</td>
<td>A. baumannii</td>
</tr>
<tr>
<td>Aminoglycosides</td>
<td>Amikacin</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>99%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>Gentamicin</td>
<td>63%</td>
<td>99%</td>
<td>97%</td>
<td>90%</td>
<td>94%</td>
</tr>
<tr>
<td></td>
<td>Tobramycin</td>
<td>73%</td>
<td>98%</td>
<td>95%</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>Penicillins</td>
<td>Amox/Clav</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>83%</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>Ampicillin</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>50%</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Amp/sub</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>57%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Pip/Tazo</td>
<td>71%</td>
<td>81%</td>
<td>83%</td>
<td>96%</td>
<td>89%</td>
</tr>
<tr>
<td>Cephalosporins</td>
<td>Cefazolin</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Ceftrioxone</td>
<td>32%</td>
<td>79%</td>
<td>76%</td>
<td>91%</td>
<td>89%</td>
</tr>
<tr>
<td></td>
<td>Cefotaxime</td>
<td>26%</td>
<td>77%</td>
<td>78%</td>
<td>89%</td>
<td>91%</td>
</tr>
<tr>
<td></td>
<td>Ceftazidime</td>
<td>51%</td>
<td>74%</td>
<td>79%</td>
<td>88%</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>Cefepime</td>
<td>60%</td>
<td>97%</td>
<td>92%</td>
<td>92%</td>
<td>90%</td>
</tr>
<tr>
<td>Carbapenems</td>
<td>Ertapenem</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Imipenem</td>
<td>76%</td>
<td>*</td>
<td>94%</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>Meropenem</td>
<td>55%</td>
<td>99%</td>
<td>94%</td>
<td>100%</td>
<td>98%</td>
</tr>
<tr>
<td>Fluoroquinolones</td>
<td>Ciprofloxacin</td>
<td>54%</td>
<td>97%</td>
<td>93%</td>
<td>73%</td>
<td>89%</td>
</tr>
<tr>
<td></td>
<td>Levofloxacin</td>
<td>67%</td>
<td>99%</td>
<td>95%</td>
<td>75%</td>
<td>94%</td>
</tr>
<tr>
<td></td>
<td>Tetraoxine</td>
<td>64%</td>
<td>87%</td>
<td>87%</td>
<td>68%</td>
<td>74%</td>
</tr>
</tbody>
</table>

https://phpa.health.maryland.gov/pages/hai.aspx
Antibiotic Stewardship Feedback

- What does that feedback look like?
- Is it by prescriber or for the facility as a whole?
- How often provided?
- How is it provided? – email, meeting, bulletin board, EHR
  a. Adherence to clinical assessment documentation at the time of the antibiotic prescription (Signs/Symptoms, Vitals, Physical Exam)
  b. Adherence to antibiotic prescribing documentation (dose, duration, indication)
  c. Antibiotic selection consistent with recommended agents for specific indications
  d. Point prevalence antibiotic use
  e. Antibiotic Starts/1000 resident-days
  f. Antibiotic Days of Therapy (DOT)/1000 resident-days
ICAR for LTCF: Antibiotic Stewardship

- Who receives training?
- Do they have documentation?
- What does the training include?
  - Flyers, Pocket Guides, Newsletters, Interactive academic detailing
Infection Control Program and Infrastructure

Domain 8: Injection Safety and Point of Care Testing
ICAR for LTCF: Injection Safety

<table>
<thead>
<tr>
<th>Elements to be assessed</th>
<th>Assessment</th>
<th>Notes/Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The facility has a policy on injection safety which includes protocols for performing finger sticks and point of care testing (e.g., assisted blood glucose monitoring, or AMBG).</td>
<td>[ ] Yes   [ ] No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>B. Personnel who perform point of care testing (e.g., AMBG) receive training and competency validation on injection safety procedures at time of employment.</td>
<td>[ ] Yes   [ ] No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Note: If point of care tests are performed by contract personnel, facility should verify that training is provided by contracting company.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Personnel who perform point of care testing (e.g., AMBG) receive training and competency validation on injection safety procedures within the past 12 months.</td>
<td>[ ] Yes   [ ] No</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Note: If point of care tests are performed by contract personnel, facility should verify that training is provided by contracting company.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Is the policy customized to the facility?
- How do you conduct training? What is included?
1. Use aseptic technique
2. Do not administer medications to multiple patients using the same syringe, even if the needle is changed
3. Do not reuse a syringe to access medications from a vial that may be used on multiple patients
4. Do not administer medications from single-dose vials to multiple patients
5. Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients
6. Do not keep multi-dose bottles vials in the immediate patient treatment area.

7. Multi-dose medications should be:
   a. Dedicated to a single patient, whenever possible
   b. Entered only with sterile needle and sterile syringe
   c. Dated upon initial entry and discarded within 28 days of opening or according to manufacturer’s instructions
   d. Discarded if sterility is compromised
Healthcare-Associated Hepatitis B & C Outbreaks

Between 2008-2019 in the United States...

• 66 outbreaks of viral hepatitis – 62 in non-hospital settings
  • 25 Hepatitis B outbreaks
    • 19 (76%) in LTCF
    • 15/19 associated with infection control breaks during AMBG
  a. 43 Hepatitis C outbreaks
    • 16 in outpatient or LTCF
    • 22 in hemodialysis
    • 4 because of drug diversion
    • 2019: A single case of HCV seroconversion in a long term care facility that provided hemodialysis. HCV sequences from case with seroconversion were 100% related to HCV sequences from another hemodialysis patient in the facility; infection control lapses in hemodialysis procedures included injection safety practices and inadequate environmental disinfection in the shared dialysis treatment area.

https://www.cdc.gov/hepatitis/outbreaks/healthcarehepoutbreaktable.htm
1. Fingerstick devices should be dedicated to one patient, even if the device is reusable

2. Blood glucose meters should be dedicated to one patient
   a. If blood glucose meters must be shared, the device should be cleaned and disinfected after every use, per manufacturer’s instructions

3. Unused supplies should be stored in clean areas separate from used supplies

4. Insulin pens should be dedicated to one patient

5. Multi-dose vials of insulin should be dedicated to one patient, when possible
   a. If must be shared, vial should be stored and prepared in a dedicated medication preparation area outside of patient care environment

6. Gloves should be worn
   a. Changed between patients, and after touching potentially contaminated objects

7. Injection equipment should be disposed in approved sharps container
ICAR for LTCF: Injection Safety

- Do you have assigned blood glucose meters, or shared?
- How often do you perform audits?
- What does that feedback look like?
  - Is it by HCP or for the facility as a whole?
  - How often provided? Is it provided in real-time?
  - How is it provided? – email, meeting, bulletin board, EHR
### Point of Care Testing Observations (e.g., assisted blood glucose monitoring)

<table>
<thead>
<tr>
<th>HH performed</th>
<th>Clean gloves worn</th>
<th>Single use, lancet used?</th>
<th>Testing meter</th>
<th>Gloves removed</th>
<th>HH performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
<td>☐ Yes No</td>
</tr>
</tbody>
</table>

☐ Dedicated to resident, cleaned/disinfected before storing
☐ Cleaned/disinfected before next resident
ICAR for LTCF: Injection Safety

F. Supplies necessary for adherence to safe injection practices (e.g., single-use, auto-disabling lancets, sharps containers) are readily accessible in resident care areas (i.e., nursing units).

- Observe during facility walk-thru
- Look for accessibility of supplies and sharps containers, and how full are the sharps containers
• CMS Condition of Participation – facilities must report controlled substances abuses and losses to the responsible party in the pharmacy and to the CEO of the facility.

• What polices has the facility implemented?
  • Pre-employment screening
  • Security measures and engineering controls
  • Pharmacy controls
  • Inventory recording
  • Random drug testing
ICAR for LTCF: Section 2

Infection Control Program and Infrastructure

Domain 8: Environmental Cleaning
ICAR for LTCF: Environmental Cleaning

**Elements to be assessed**

A. The facility has written cleaning/disinfection policies which include routine and terminal cleaning and disinfection of resident rooms.

B. The facility has written cleaning/disinfection policies which include routine and terminal cleaning and disinfection of rooms of residents on contact precautions (e.g., *C. difficile*).

C. The facility has written cleaning/disinfection policies which include cleaning and disinfection of high-touch surfaces in common areas.

D. The facility cleaning/disinfection policies include handling of equipment shared among residents (e.g., blood pressure cuffs, rehab therapy equipment, etc.).

E. Facility has policies and procedures to ensure that reusable medical devices (e.g., blood glucose meters, wound care equipment, podiatry equipment, and dental equipment) are cleaned and reprocessed appropriately prior to use on another patient.

- Does the facility contract their EVS staff?
- Are the policies customized by the facility?
- Do they use cleaning checklists and/or logs?
- How often is cleaning happening?
- Who is responsible for cleaning medical equipment? (EVS vs Nursing)
- Pay attention to cleanliness during walk-thru
Environmental Cleaning Policies

Should include the following elements:

• Defined lines of accountability
• Cleaning schedules for every patient care area and noncritical patient care equipment, specifying the frequency, method, and staff responsible
• Cleaning procedures for environmentally hardy organisms and outbreak management
• Training requirements and performance standards for staff
• Monitoring methods, frequency, and staff responsible
• List of approved cleaning products, supplies, equipment
• List of necessary PPE and when hand hygiene is recommended

ICAR for LTCF: Environmental Cleaning

**Standard Operating Procedures (SOP)**
- Specific supplies and equipment needed
- Preparatory steps, including preparing cleaning products, hand hygiene and PPE
- Step-by-step cleaning instructions, in the order they should be performed
- Contact times for disinfectants
- Disposal or reprocessing of cleaning supplies

**Cleaning Techniques**
- Cleaner to Dirtier
- High to Low
- Methodical, Systematic Manner

F. Appropriate personnel receive job-specific training and competency validation on cleaning and disinfection procedures at the time of employment.

Note: If environmental services are performed by contract personnel, facility should verify that training is provided by contracting company.

G. Appropriate personnel received job-specific training and competency validation on cleaning and disinfection procedures within the past 12 months.

Note: If environmental services are performed by contract personnel, facility should verify that training is provided by contracting company.

Does training include:
• Principles of infection prevention and control?
• PPE Use?
• Hands-on practice?
• Documentation of training?
• Focus on gaps identified during audits?
ICAR for LTCF: Environmental Cleaning

- How often are audits performed?
- What’s included?
- What does that feedback look like?
  - Is it by staff member or for the facility as a whole?
  - How often provided? Is it provided in real-time?
  - How is it provided? – email, meeting, bulletin board, EHR
## Environmental Cleaning Evaluation Options

<table>
<thead>
<tr>
<th>Method</th>
<th>Ease of Use</th>
<th>Identifies Pathogens</th>
<th>Useful for Individual Teaching</th>
<th>Directly Evaluates Cleaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practice Observation</td>
<td>Low</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Swab cultures</td>
<td>High</td>
<td>Yes</td>
<td>Not Studied</td>
<td>Potentially</td>
</tr>
<tr>
<td>Agar slide cultures</td>
<td>Good</td>
<td>Limited</td>
<td>Not Studied</td>
<td>Potentially</td>
</tr>
<tr>
<td>Fluorescent gel</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ATP system</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Potentially</td>
</tr>
</tbody>
</table>

## CDC Environmental Cleaning Checklist

### CDC Environmental Checklist for Monitoring Terminal Cleaning

**Date:**

**Unit:**

**Room Number:**

**Initials of ES staff (optional):**

<table>
<thead>
<tr>
<th>High-touch Room Surfaces</th>
<th>Cleaned</th>
<th>Not Cleaned</th>
<th>Not Present in Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed rails / controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tray table</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV pole (grab area)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call box / button</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedside table handle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room sink</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room light switch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room inner door knob</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathroom inner door knob / plate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathroom light switch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathroom handrails by toilet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathroom sink</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilet seat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilet flush handle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilet bedpan cleaner</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Evaluate the following additional sites if these equipment are present in the room:

<table>
<thead>
<tr>
<th>High-touch Room Surfaces</th>
<th>Cleaned</th>
<th>Not Cleaned</th>
<th>Not Present in Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV pump control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-module monitor controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-module monitor touch screen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-module monitor cables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilator control panel</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mark the monitoring method used:**

- [ ] Direct observation
- [ ] Swab cultures
- [ ] Fluorescent gel
- [ ] ATP system
- [ ] Agar slide cultures

---

[https://www.cdc.gov/hai/pdfs/toolkits/Environmental-Cleaning-Checklist-10-6-2010.pdf](https://www.cdc.gov/hai/pdfs/toolkits/Environmental-Cleaning-Checklist-10-6-2010.pdf)
ICAR for LTCF: Environmental Cleaning

1. Microfiber vs Cotton
2. Ready-to-use Wipes
3. PPE
4. Color-coded cloths?

J. Supplies necessary for appropriate cleaning and disinfection procedures (e.g., EPA-registered, including products labeled as effective against *C. difficile* and Norovirus) are available.

*Note: If environmental services are performed by contract personnel, facility should verify that appropriate EPA-registered products are provided by contracting company.*

○ Yes  ○ No

Click here to enter text.
### Disinfectants

**Table 4. Advantages and disadvantages of common healthcare disinfectants (modified from reference 24)**

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Low-level disinfectant: Quaternary ammonium compounds e.g., alkyl dimethyl benzyl ammonium chloride, alkyl dimethyl ethylbenzyl ammonium chloride | Toxicity:  
• may be used on food contact surfaces.  
Wide material compatibility  
• noncorrosive  
Detergent properties, with good cleaning ability  
• low cost | Toxicity:  
• skin irritant, can also cause respiratory irritation  
Narrow microbiocidal spectrum  
• not mycobactericidal or sporicidal, only limited activity against non-enveloped viruses  
Diluted solutions can support growth of microorganisms, particularly gram negative organisms  
Affected by environmental factors:  
• activity reduced by various materials (e.g., cotton, water hardness, microfiber cloths, organic material)  
• could induce cross resistance with antibiotics  
• persists in the environment and waterways |
| Spectrum of activity | Bactericidal |  |
| | Virucidal (only enveloped viruses) |  |
| | Fungicidal |  |
## Disinfectants

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate-level disinfectant: Alcohols (60-80%)</td>
<td>Broad spectrum (but not sporicidal)</td>
<td>Slow acting against non-enveloped viruses</td>
</tr>
<tr>
<td>e.g., isopropyl alcohol, ethyl alcohol, and methylated spirits</td>
<td>Rapid action</td>
<td>Does not remain wet</td>
</tr>
<tr>
<td><strong>Spectrum of activity</strong></td>
<td>Nontoxic</td>
<td>• rapid evaporation makes contact time compliance difficult (on large environmental surfaces)</td>
</tr>
<tr>
<td>Bactericidal</td>
<td>Non-staining, no residue</td>
<td>Affected by environmental factors:</td>
</tr>
<tr>
<td>Virucidal</td>
<td>Noncorrosive</td>
<td>• inactivated by organic material</td>
</tr>
<tr>
<td>Fungicidal</td>
<td>Low cost</td>
<td>Material compatibility:</td>
</tr>
<tr>
<td>Mycobactericidal</td>
<td>Good for disinfecting small equipment or devices that can be immersed</td>
<td>• can damage materials (plastic tubing, silicone, rubber, deteriorate glues)</td>
</tr>
<tr>
<td></td>
<td>Flammable</td>
<td></td>
</tr>
</tbody>
</table>

## Disinfectants

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermediate-level disinfectant:</strong> Chlorine releasing agents</td>
<td>Hypochlorites are broad spectrum (sporicidal)</td>
<td>Affected by environmental factors:</td>
</tr>
<tr>
<td>e.g., bleach/sodium or calcium hypochlorite, sodium dichloroisocyanurate (NaDCC)</td>
<td>Rapid action</td>
<td>- inactivated by organic material</td>
</tr>
<tr>
<td><strong>Spectrum of activity</strong></td>
<td>Nonflammable</td>
<td>High toxicity:</td>
</tr>
<tr>
<td>Bactericidal</td>
<td>Low cost</td>
<td>- can release toxic chlorine if mixed with acids or ammonia</td>
</tr>
<tr>
<td>Virucidal</td>
<td>Widely available</td>
<td>- skin and mucous membrane irritant</td>
</tr>
<tr>
<td>Fungicidal</td>
<td>Can reduce biofilms</td>
<td>Material compatibility:</td>
</tr>
<tr>
<td>Mycobactericidal</td>
<td></td>
<td>- damages fabrics, carpets</td>
</tr>
<tr>
<td><strong>Sporicidal</strong> (hypochlorites only at 5000ppm or 0.5%)</td>
<td></td>
<td>- corrosive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leaves residue, requires rinsing or neutralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offensive odors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor stability:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- subject to deterioration if exposed to heat and UV</td>
</tr>
</tbody>
</table>

## Disinfectants

<table>
<thead>
<tr>
<th>Disinfectant</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate-level disinfectant: Improved hydrogen peroxide</td>
<td>Rapid action</td>
<td>Material compatibility:</td>
</tr>
<tr>
<td>e.g., 0.5% enhanced action formulation hydrogen peroxide, 3% hydrogen peroxide</td>
<td>Nontoxic</td>
<td>• contraindicated for use on copper, brass, zinc, aluminum</td>
</tr>
<tr>
<td><strong>Spectrum of activity</strong></td>
<td>Detergent properties, with good cleaning ability</td>
<td>High cost</td>
</tr>
<tr>
<td>Bactericidal</td>
<td>Not affected by environmental factors</td>
<td></td>
</tr>
<tr>
<td>Virucidal</td>
<td>• active in the presence of organic material</td>
<td></td>
</tr>
<tr>
<td>Fungicidal</td>
<td>Safe for environment</td>
<td></td>
</tr>
</tbody>
</table>
Direct Observation of Facility Practices
(Optional)
ICAR for LTCF: Direct Observation

1. Point of Care Testing Observations (i.e., assisted blood glucose monitoring)
2. Hand Hygiene and Contact Precautions Observations
3. Indwelling Urinary Catheter (IUC) Maintenance Observations (i.e., Foley)
4. Central Venous Catheter (CVC) Maintenance Observations (i.e., Central line, PICC line)
5. Wound Dressing Change Observations
Use Modified LTCF ICAR for ALF

- Tool can be used with considerations for assisted living facilities (ALFs)
  - Any language in the ICAR tool referring to CMS does not apply to an ALF assessment
  - Any language referring to scope of services outside of ALF operations, such as onsite dialysis or skilled care units does not apply to an ALF assessment
Contact Information

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