**Infection Control – Infection Preventionist Competency**

**Competency**

Leader’s Guide

**Infection Preventionist**

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The Guidance portion of §483.80(a), (e), (f)in the CMS State Operations Manual, Appendix PP, states,“Healthcare-associated infections (HAIs) can cause significant pain and discomfort for residents in nursing homes and can have significant adverse consequences. The facility must establish and maintain an Infection Prevention and Control Program (IPCP) designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable diseases and infections. This program must include, at a minimum, a system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases for all residents, staff, and visitors. The IPCP must follow national standards and guidelines.”[[1]](#footnote-1)

The results of the Facility-Wide Resource Assessment at §483.70(e) (F838) “must be used, in part, to establish and update the IPCP, its policies and/or protocols to include a system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases for residents, staff, and visitors. A community-based risk assessment should include review for risk of infections (*e.g.,* multidrug-resistant organisms- MDROs) and communicable diseases such as tuberculosis and influenza. Appropriate resident tuberculosis screening should be performed based on state requirements.”[[2]](#footnote-2)

**Definitions[[3]](#footnote-3)**

**The Advisory Committee on Immunization Practices (ACIP)**: “a group of medical and public health experts that develops recommendations on how to use vaccines to control diseases in the United States. ACIP’s recommendations stand as public health advice that will lead to a reduction in the incidence of vaccine preventable diseases and an increase in the safe use of vaccines and related biological products. See http://www.cdc.gov/vaccines/acip/index.html for further information.”

**“Airborne precautions: “**actions taken to prevent or minimize the transmission of infectious agents/organisms that remain infectious over long distances when suspended in the air. These infectious particles can remain suspended in the air for prolonged periods of time and can be carried on normal air currents in a room or beyond, to adjacent spaces or areas receiving exhaust air”

**“Alcohol-based hand rub** (ABHR): “a 60-95 percent ethanol or isopropyl alcohol- containing preparation base designed for application to the hands to reduce the number of viable microorganisms.”

**Antibiotic: “**a medication used to treat bacterial infections. They are not effective for infections caused by viruses (e.g., influenza or most cases of bronchitis).”

**Antibiotic Stewardship: “**refers to a set of commitments and actions designed to optimize the treatment of infections while reducing the adverse events associated with antibiotic use. This can be accomplished through improving antibiotic prescribing, administration, and management practices thus reducing inappropriate use to ensure that residents receive the right antibiotic for the right indication, dose, and duration.63”

**Cleaning**: “removal of visible soil (*e.g.,* organic and inorganic material) from objects and surfaces and is normally accomplished manually or mechanically using water with detergents or enzymatic products.”

**Clostridium difficile infection (C. difficile or CDI): “**an infection from a bacterium that causes colitis, an inflammation of the colon, causing diarrhea.”

**Cohorting:** the practice of grouping residents infected or colonized with the same infectious agent together to confine their care to one area and prevent contact with susceptible residents (cohorting residents)40.During outbreaks, healthcare staff may be assigned to a specific cohort of residents to further limit opportunities for transmission (cohorting staff). The terms “cohort or cohorting” is standardized language used in the practice of infection prevention and control; the use of this terminology is not intended to offend residents or staff.”

**Colonization: “**the presence of microorganisms on or within body sites without detectable host immune response, cellular damage, or clinical expression.”

**Communicable disease “**(also known as [*a.k.a*.] “contagious disease”): an infection transmissible (*e.g.,* from person-to-person) by direct contact with an affected individual or the individual's body fluids or by indirect means (e.g., contaminated object).”

**Community-acquired infections “**(*a.k.a.* “present on admission”)**:** infections that are present or incubating at the time of admission and which generally develop within 72 hours of admission.”

**Contact precautions: “**measures that are intended to prevent transmission of infectious agents which are spread by direct or indirect contact with the resident or the resident’s environment.”

**Contaminated laundry: “**laundry which has been soiled with blood/body fluids or other potentially infectious materials or may contain sharps.”

**Decontamination: “**the use of physical or chemical means to remove, inactivate, or destroy pathogenic organisms on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.”

**Disinfectant**: “usually a chemical agent (but sometimes a physical agent) that destroys disease-causing pathogens or other harmful microorganisms but might not kill bacterial spores. It refers to substances applied to inanimate objects.”

**Disinfection: “**thermal or chemical destruction of pathogenic and other types of microorganisms. Disinfection is less lethal than sterilization because it destroys most recognized pathogenic microorganisms but not necessarily all microbial forms (e.g., bacterial spores).41”

**Droplet precautions: “**actions designed to reduce/prevent the transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.”

**Hand hygiene: “**a general term that applies to hand washing, antiseptic hand wash, and alcohol-based hand rub.”

**Hand washing: “**the vigorous, brief rubbing together of all surfaces of hands with plain (*i.e.,* non-antimicrobial) soap and water, followed by rinsing under a stream of water.”

**Healthcare-associated infection (HAI): “**an infection that residents acquire, that is associated with a medical or surgical intervention (*e.g.,* podiatry, wound care debridement) within a nursing home and was not present or incubating at the time of admission.”

**Hygienically clean: “**being free of pathogens in sufficient numbers to cause human illness.44”

**Infection: “**the establishment of an infective agent in or on a suitable host, producing clinical signs and symptoms (*e.g.,* fever, redness, heat, purulent exudates, *etc.*).”

**Infection preventionist**: “term used for the person(s) designated by the facility to be responsible for the infection prevention and control program. **NOTE:** Designation of a specific individual, detailed training, qualifications, and hourly requirements for an infection preventionist are not required until implementation of Phase 3.”

**Medical contraindication: “**a condition or risk that precludes the administration of a treatment or intervention because of the substantial probability that harm to the individual may occur.”

**Methicillin-resistant Staphylococcus aureus (MRSA) “**(*a.k.a.* Oxacillin-resistant Staphylococcus aureus**):** Staphylococcus aureus bacteria that are resistant to treatment with one of the semi-synthetic penicillin’s (*e.g.,* Oxacillin/Nafcillin/Methicillin).”

**Multidrug-Resistant Organisms (MDROs**): microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents.51 Although the names of certain MDROs describe resistance to only one agent, these pathogens are frequently resistant to most available antimicrobial agents and include multidrug-resistant gram negative bacteria (GNB), Carbapenem-resistant Enterobacteriaceae (CRE), and extended spectrum beta-lactamase-producing Enterobacteriaceae (ESBLs).”

**Personal protective equipment (PPE): “**protective items or garments worn to protect the body or clothing from hazards that can cause injury and to protect residents from cross-transmission.”

**Precaution: “**a condition in a potential recipient that might increase the risk for a serious adverse reaction or that might compromise the vaccine’s induction of immunity. For example, as a result of the resident’s condition, complications could result, or a person might experience a more severe reaction to the vaccine than would have otherwise been expected. However, the risk for this happening is less than expected with medical contraindications.”

**(Regulated) Medical waste: “**liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling (*e.g.,* blood-soaked bandages); contaminated sharps.”

**Standard Precautions: “**infection prevention practices that apply to all residents, regardless of suspected or confirmed diagnosis or presumed infection status. Standard precautions is based on the principle that all blood, body fluids, secretions, excretions except sweat, regardless of whether they contain visible blood, non-intact skin, and mucous membranes may contain transmissible infectious agents. Furthermore, equipment or items in the patient environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents. Standard precautions include but are not limited to hand hygiene; use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure; safe injection practices, and respiratory hygiene/cough etiquette. Also, equipment or items in the patient environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents (*e.g.,* wear gloves for direct contact, properly clean and disinfect or sterilize reusable equipment before use on another patient).40”

**Transmission-based precautions (*a.k.a.* Isolation Precautions)**:” actions (precautions) implemented, in addition to standard precautions that are based upon the means of transmission (airborne, contact, and droplet) in order to prevent or control infections. **NOTE**: Although the regulatory language refers to “isolation,” the nomenclature widely accepted and used in this guidance will refer to “transmission-based precautions” instead of “isolation”.”

**Vancomycin resistant enterococcus (VRE): “**species of enterococcus which have developed resistance to the antibiotic, vancomycin.”

Organizational leaders will need to ensure competency of all staff members regarding infection prevention and control principles and practices. Adequate resources for the program will need to be evaluated using information from the Facility-Wide Resource Assessment including:

* Staff Resources
  + Infection Preventionist
  + Licensed Nurses
  + CNAs
  + Food and Nutrition Services
  + Housekeeping, Laundry, and Environmental Services
* Documentation Considerations
  + Paper vs. Electronic
  + Assessment/Evaluation forms
  + Care planning
* Education
  + Communication
  + Assessment/Evaluation skills
  + Recognizing changes indicative of infections
  + Standard precautions
  + Transmission based precautions
  + Disease-specific protocols
  + Antibiotic stewardship
* Evaluation and Monitoring
  + Observations, Interviews, and Record Reviews
  + QAPI
* Supplies and Equipment, Etc.
  + Paper-based or computer-based tools
  + Personal Protective Equipment (PPE)
  + Cleaning, disinfecting, and sterilization chemicals; laundry detergents
  + Fingerstick devices, blood glucose meters, insulin pens, syringes for injectable medications, vascular access devices
  + Laundry equipment
  + Food storage, refrigeration, freezing, etc.
  + Physicians, Physician extenders, Psychologists, Pharmacists
  + Emergency/Starter doses of antibiotics
  + Linen processing, transport, and storage

**Reference**

Centers for Medicare & Medicaid Services State Operations Manual, Appendix PP – Guidance to Surveyors for Long Term Care Facilities (Rev. 173, 11-22-17): <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf>

1. Centers for Medicare & Medicaid Services State Operations Manual, Appendix PP – Guidance to Surveyors for Long Term Care Facilities (Rev. 173, 11-22-17): <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf> [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)