

Cross contamination, particularly from raw foods to cooked foods, is another source of foodborne illness; hospital leaders implement practices to minimize this risk and ensure that any suppliers and vendors do so as well. In addition to mixing raw and prepared foods, cross contamination can result from contaminated hands, surfaces on which food is prepared such as countertops and cutting boards, or cloths used to wipe countertops or dry dishes. The utensils, appliances, pots, and pans used for preparing food, and the trays, dishes, and utensils used for serving food can also be a risk for infection if not properly cleaned and sanitized. Personnel who are ill, or who do not perform appropriate hand hygiene, can also transmit infection when handling food. The hospital must have a process, including policies and procedures, to ensure that ill personnel do not handle food. The hospital conducts a risk assessment when food is stored or prepared outside of central kitchen areas, including patient refrigerators, and implements protocols to mitigate risk related to this practice.

Some nutritional products, such as human milk, baby formula, and other enteral nutrition products, have special storage and preparation requirements. Staff refer to professional guidelines to identify safe handling criteria for these products, including storage temperature, length of storage, preparation technique, proper labeling, and administration guidelines.

The food and nutrition program must be integrated with the infection prevention and control program and the employee health program.

Measurable Elements of PCI.06.00

1. ⑩ The hospital stores food and nutrition products in a manner that reduces the risk of infection, including those stored outside of the kitchen and food preparation areas.
2. The hospital adopts and implements kitchen sanitation measures and guidelines for preparation areas to prevent the risk of cross contamination and infection.
3. ⑩ The hospital prepares food and nutrition products using proper sanitation and temperature.
4. The hospital uses a process to ensure that proper food temperature is maintained during the preparation, transportation, and distribution process.
5. Professional guidelines are adopted for nutritional products that have special storage and preparation requirements, such as human milk, baby formula, and other enteral products.

Transmission of Infections

Standard PCI.07.00

The hospital protects patients, visitors, and staff from transmission of infections and communicable diseases.

Intent of PCI.07.00

In addition to the use of standard precautions, transmission-based precautions must be used to prevent infection transmission based on the type of microorganism (for example, use of negative pressure rooms and N95 masks for airborne infectious diseases). Transmission-based precautions include all potential modes of transmission, such as contact, droplet, and airborne. They also include special considerations such as *Clostridioides difficile* precautions. Airborne pathogens such as tuberculosis and COVID-19 require negative air pressure isolation rooms to prevent transmission because these pathogens can remain suspended in the air for long periods of time. (For additional considerations regarding highly significant emerging or novel diseases such as COVID-19, see Standard PCI.07.02.)

Transmission-based precautions are initiated upon suspicion or diagnosis of infections and include the following:

- Contact precautions for patients with known or suspected infections transmitted via contact
- Airborne precautions for patients with known or suspected infections transmitted via the airborne route

- Droplet precautions for patients with known or suspected infections transmitted via respiratory droplets expelled during talking, coughing, or sneezing
- Reverse/protective isolation to protect immunocompromised patients from transmission of infections from other patients or staff

The hospital implements policies and procedures that establish the isolation and barrier procedures for the hospital. These policies and procedures are based on the disease transmission method and address individual patients who may be infectious and the physical environment.

Temporary negative pressure rooms may be necessary when there is an airborne infectious disease outbreak with many communicable patients. The most effective system for creating temporary negative pressure isolation involves using a high-efficiency particulate air (HEPA) filtration system that discharges air to the outside. The hospital has a program that addresses how to manage patients with airborne infections for short periods of time when negative pressure rooms are not available as well as when there is a large influx of patients with contagious infections. In these cases, hospitals may adjust the air flow for entire wards or units to create a negative pressure ward or unit during an emergency influx.

When the structure of the building prevents the immediate construction of a negative pressure room, or when otherwise necessary such as when there is a sudden influx of infectious patients, the hospital may construct temporary negative pressure isolation rooms. For example, placing a HEPA filter on the exhaust end of an existing mechanical exhaust system can create a room with temporary negative pressure isolation by filtering the air being removed from the room via the exhaust system. When discharging air outside, a HEPA filter is used to exhaust room air outside through a window; the HEPA filter cleans contaminated air and induces negative pressure into the room. Because the discharged air is cleaned, no additional precautions are required for the discharged air. If HEPA-filtered air is discharged through the return air system, caution is required, as large volumes of returned air may overpressurize the air return system and may alter the negative/positive pressure balance.

The use of temporary negative pressure isolation follows all national and local laws and regulations, professional guidelines, or industry standards, and must adhere to all building and fire codes. Discharge outflow is positioned in a location and height that prevents it from creating exposure risks for staff, patients, and visitors. In situations in which resources are insufficient to use HEPA filtration systems for mechanical methods of creating negative pressure ventilation, the World Health Organization (WHO) guidelines for airborne infection prevention state that using cross-ventilation and other methods of natural ventilation are better at preventing the spread of airborne infection than providing no ventilation. Please note, this recommendation applies to temporary instances in which hospital resources are inadequate to use mechanical methods for managing an influx of patients with airborne infectious disease, not for permanent use.

Measurable Elements of PCI.07.00

1. ⑩ The hospital uses a process to isolate patients with infectious diseases, and staff use transmission-based precautions, in accordance with recommended guidelines. (*See also* FMS.09.01, ME 1)
2. The hospital protects immunocompromised or otherwise vulnerable patients through isolation or the use of reverse/protective isolation in accordance with recommended guidelines. (*See also* PCC.01.04, ME 4)
3. The hospital routinely monitors and makes available negative pressure rooms for infectious patients who require isolation for airborne infections.
4. The hospital implements a process to address management of patients with airborne infections when negative air pressure rooms are not available, including adding temporary negative pressure rooms.
5. Staff are educated in the management of infectious patients when there is a sudden influx or when negative pressure rooms are not available.