

Droplet-Airborne Precautions

There are two different respiratory isolation precautions. Droplet Precaution, which is defined when an organism is transmitted from respiratory droplets to susceptible mucosal surfaces of the recipient, and requires additional PPE to be worn. Patients that are in Airborne Precaution require a special respirator due to the size of the pathogen and its ability to be carried over a long distance.



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Private Room

Private Rooms

It is important to isolate patients that have a known active infection. The mode of transmission will depend on the organism, but to prevent the possible spread from person to person in a hospital setting, patients are required to be in a private room.

Droplet

Droplets Larger than 5 Microns

Droplets Larger than (5) Hand Micron-ruler

Pathogens that are considered droplet are defined as being larger than 5 microns in size. At this size, particles can remain suspended in the air for a short period of time, and can infect susceptible recipients as they pass by.

Being Within 3 Feet of Patient

3 Feet of Patient

The distance a droplet can travel in the air depends on a variety of factors. However, as a general rule anyone that is going to be within three feet of an infected patient needs to wear proper PPE.

Surgical Mask with Face Shield

Surgical Mask and Face Shield

Masks are used during invasive procedures when respiratory secretions are present or when the patient is on Droplet or Respiratory Precautions.

Type of Infection or Condition

Different Types of Droplets

A patient that is being worked up for influenza is a common cause for placing a patient on Droplet Precaution. Other infections that would require Droplet Precaution would be Meningitis and Pertussis.

Airborne

Airborne Infection Isolation Room (AIIR)

AIIR-vacuum

Also known as a Negative Pressure Room, these rooms pull air into the room and are not connected to the hospital's circulating air ducts. The door needs to remain closed at all times to keep the negative pressure in the room.

Droplets Smaller than 5 Microns

Droplets Smaller than (5) Hand Micron-ruler

Pathogens that are smaller than 5 microns in size can be suspended in the air for a longer distance by the air current and be infectious for a longer period of time. This means that direct patient interaction does not need to occur for a recipient to be infected.



N95 Respirator

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Staff members that will be caring for a patient in Airborne isolation are required to wear a N95 or higher-level respirator. Being " fit tested" by your healthcare organization is required before using these masks. These respirators are specially made to prevent the inhalation of pathogens that are smaller than 5 microns.

Type of Infection or Condition

Different-types of Airborne-infantry

Patients that are being treated for tuberculosis, rubeola (measles), and disseminated varicella-zoster virus (chickenpox) require AIIR and the use of a specialized respirator.