

MedStar Health Guideline for the use of Negative Pressure Isolation Rooms for COVID-19 Patients

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COVID19 confirmed positive patients and COVID19 PUI patients should be placed in negative pressure rooms AIIR (Airborne Infection Isolation Room) **based on the need for aerosol generating procedures (AGPs)**, regardless of patient care level (ICU, IMC, general medicine floor).

NOTE: Ventilated patients with viral filter and in-line suctioning do NOT require negative pressure rooms.

Examples of Cases to be Triaged to AIIR/Negative Pressure Room

1. Intermittent AGPs (multiple times per day, e.g. scheduled nebulizer treatments in non-intubated patients), or continuous AGP (e.g. high flow nasal cannula)
2. Unstable ventilated patient who will require further AGPs, such as instances where the ETT must be detached from the ventilator tubing such as frequent bronchoscopy
3. Clinically unstable patient who is more likely to require intubation or CPR in near term (i.e. impending AGP)

REFERENCES

For patients under investigation (PUI) and COVID+ patients, CDC and WHO *recommend* negative pressure rooms for patients undergoing aerosol generating procedures (AGP), however both organizations qualify that negative pressure/airborne infection isolation room (AIIR) is *not required*.

<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/infection-prevention-control-faq.html> (CDC: "Do All Patients With Confirmed...")

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html> (CDC: "How You Can Protect Yourself")

<https://www.who.int/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf> (WHO: "Apply Airborne..")

Do all patients with confirmed or suspected COVID-19 need to be placed in airborne infection isolation rooms?

No. Updated [CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#) recommends placing patients in a regular examination room with the door closed. Airborne infection isolation rooms should be reserved for patients undergoing aerosol generating procedures or for diagnoses such as active tuberculosis.

How You Can Protect Yourself

Healthcare personnel caring for patients with confirmed or possible COVID-19 should adhere to CDC recommendations for [infection prevention and control](#) (IPC):

- Assess and triage these patients with acute respiratory symptoms and risk factors for COVID-19 to minimize chances of exposure, including placing a facemask on the patient and placing them in an examination room with the door closed.
- Use [Standard and Transmission-Based Precautions](#) when caring for patients with confirmed or possible COVID-19.
- Perform hand hygiene with alcohol-based hand rub before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves. Use soap and water if hands are visibly soiled.
- Practice how to properly [don, use, and doff PPE](#) in a manner to prevent self-contamination.
- Perform aerosol-generating procedures, in an AIIR, while following appropriate [IPC practices, including use of appropriate PPE](#).

Apply airborne precautions when performing an aerosol-generating procedure

Ensure that health care workers performing aerosol-generating procedures (e.g. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use the appropriate PPE, including gloves, long-sleeved gowns, eye protection, and fit-tested particulate respirators (N95 or equivalent, or higher level of protection). A scheduled fit test should not be confused with a user's seal check before each use. Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, meaning negative pressure rooms with a minimum of 12 air changes per hour or at least 160 L/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary persons individuals in the room. Care for the patient in the same type of room after mechanical ventilation begins. commences.

Abbreviations: ARI acute respiratory infection; PPE personal protective equipment.