

Coronavirus Disease Briefing—Infection Control Practices

The outbreak of “coronavirus disease 2019” (COVID-19) continues to expand in the United States as person-to-person spread becomes more common.¹ This document provides a brief overview of the Centers for Disease Control and Prevention (CDC) interim guidance on infection prevention and control measures to be implemented in healthcare settings. Recommendations include:²

- Implementing personal and environmental hygiene practices
- Preventing exposures
- Managing personnel with potential exposures

The information contained herein is current as of the time of writing; however, this is a rapidly developing situation and readers are encouraged to stay up to date on CDC guidance using the links in the directory at the end of this document.

Key Points

<i>Ask screening questions to identify patients with potentially infectious respiratory diseases</i>	1
<i>Patients with known or suspected COVID-19 should wait in areas separate than those for uninfected patients</i>	2
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Ask screening questions to identify patients with potentially infectious respiratory diseases

The CDC recommends implementing practices to limit exposure to respiratory pathogens. Patients with respiratory illness should be identified before arrival and managed during the visit. Educate patients and caregivers to call ahead or inform personnel in the office if they have symptoms of respiratory illness such as fever, cough, or runny nose. Rather than relying completely on patient self-report, practices should also ask all patients about presence of respiratory symptoms, a history of potential close contacts with COVID-19, and recent travel to areas of high coronavirus activity.²

The CDC suggests that offices consider strategically placing educational signs and posters throughout the building reminding patients to:²

- Inform personnel of respiratory illnesses and any recent travel
- Perform good hand and respiratory hygiene
- Cough or sneeze into a tissue, dispose of it properly, and clean their hands afterwards
- Use face masks properly to prevent exposure or spread of illness while in the healthcare setting

Patients with known or suspected COVID-19 should wait in areas separate than those for uninfected patients

Patients under investigation for COVID-19 should be asked to immediately put on a mask, be triaged rapidly, and wait in an area separate from other patients. Consider creating a separate, well-ventilated area that allows patients to wait while separated from others by ≥ 6 feet. This might include using physical barriers (e.g., partitions, curtains) to guide patient movement through reception, triage, and waiting areas, to separate patients under investigation for contagious respiratory illnesses from other patients. Another option is to have patients wait outside the facility or in their cars and then contact them by mobile phone when it is their turn to be seen.²

Ensure adequate training of personnel and availability of hygiene supplies

The CDC recommends having ample hygiene supplies on hand and available at entrances, waiting rooms, check in areas, and other patient and visitor areas:²

- Alcohol-based hand sanitizer ($\geq 60\%$ alcohol)
- Tissues
- Non-touch trash receptacles
- Face masks

Ensure that all healthcare personnel receive job-specific training and education to ensure they are capable of limiting exposure to infectious agents. This includes education on correct use of personal protective equipment. Personnel should be cleared, trained, and fit tested for a respiratory mask at least as effective as an N95 mask and understand how to put on and take off gowns, gloves, and eye protection without exposing themselves.²

In general, the CDC suggests that most low-level exposure to patients with COVID-19 involves a low risk of transmission and does not require active monitoring or exclusion from work. This includes walking by a patient without direct contact, checking a patient in at the front desk, and briefly walking into a room without directly having contact with a patient or his/her secretions, even if the patient is not wearing a mask.³

Table 1. COVID-19 Exposure Risk for Health Care Personnel

Exposure	Exposure risk	Recommended monitoring (for 14 days after last exposure)	Work Exclusion
<i>Prolonged close contact with a patient with COVID-19 who WAS wearing a mask</i>			
No personal protective equipment	Medium	Active monitoring by health department	14 days after last exposure
Not wearing a facemask or respirator	Medium	Active monitoring by health department	14 days after last exposure
Not wearing eye protection	Low	Self-monitoring with delegated supervision	None
Not wearing gown or gloves (without extensive contact)	Low	Self-monitoring with delegated supervision	None
Wearing gown, gloves, eye protection, and a facemask (instead of a respirator)	Low	Self-monitoring with delegated supervision	None
<i>Prolonged close contact with a patient with COVID-19 who WAS NOT wearing a mask</i>			
No personal protective equipment	High	Active monitoring by health department	14 days after last exposure
Not wearing a facemask or respirator	High	Active monitoring by health department	14 days after last exposure
Not wearing eye protection (without extensive contact)	Medium	Active monitoring by health department	14 days after last exposure
Not wearing gown and gloves (without extensive contact) NOTE: risk category goes up one level if present for a procedure that generates high concentrations of respiratory secretions or aerosols*	Low	Self-monitoring with delegated supervision	None
Wearing gown, gloves, eye protection, and a facemask (instead of a respirator)	Low	Self-monitoring with delegated supervision	None
Adapted from: CDC. https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html . Updated: March 4, 2020. Accessed: March 10, 2020.			
* = includes cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer treatment, sputum induction			
Abbreviations: COVID-19 = coronavirus disease 2019			

Individuals with high- or medium-risk exposure should be monitored with active involvement of local public health authorities AND be excluded from work until 14 days after their last exposure. Patients with low-risk exposures are required to self-monitor with instructions on how to engage their healthcare provider(s) and public health authorities in the event they become symptomatic. They should remain vigilant for symptoms and check for a fever twice daily (including immediately before reporting to work) until 14 days after their last exposure, but they may continue to work as long as they are afebrile and asymptomatic. Even individuals who use personal protective equipment and adhere to all infection control recommendations should monitor themselves in the same manner as someone with a low-risk exposure.³

Practices should consider mandatory symptom and temperature monitoring prior to starting work OR requiring employees to report their symptoms and self-measured temperatures to employee health. If any employee develops a fever (either subjective or an oral temperature $\geq 100\text{F}$) or symptoms consistent with COVID-19, he or she should be sent home (if at work), immediately self-quarantine, and notify local or state public health authorities and the health care system. Clinical judgment should be exercised when evaluating patients who may not present initially with a fever, such as those who are elderly, immunosuppressed, or taking fever-suppressing medications.³ Clinical judgment should also guide testing for COVID-19.¹

Adhere strictly to environmental hygiene policies and procedures

The CDC recommends implementing measures to reduce the burden of virus on healthcare equipment and environmental surfaces after caring for a patient with known or suspected COVID-19.²

- Use dedicated equipment for delivering care to infected patients
- Follow all cleaning and disinfection procedures strictly when decontaminating medical equipment and frequently contacted surfaces and objects
- The CDC recommends using products approved by the Environmental Protection Agency for emerging viral pathogens, specifically COVID-19 (if no such products are available, use products active against human coronaviruses when possible). **NOTE:** These claims are only available in the technical literature or directly from the manufacturer (consumer information services, social media, company websites), not on the package label.
- Laundry, disposable equipment (e.g., food service utensils), and medical waste should be handled according to routine procedures

CDC Information Resources Directory

This is a rapidly developing situation that is changing daily. The CDC is continually updating its guidance and this information can be accessed online, including:

Information for clinicians

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>

Information for patients

<https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>

Evaluating and Reporting Persons Under Investigation (PUI)

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 (COVID-19) or Persons Under Investigation for COVID-19 in Healthcare Settings

<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>

Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease 2019 (COVID-19)

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

What Healthcare Personnel Should Know about Caring for Patients with Confirmed or Possible COVID-19 Infection

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html>

Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19)

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for 2019 Novel Coronavirus (2019-nCoV)

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html>

References

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- ¹ Coronavirus disease 2019 (COVID-19)—Clinical Care. Centers for Disease Control and Prevention website. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>. Updated: February 25, 2020. Accessed: March 2, 2020.
- ² Interim Infection Prevention and Control Recommendations. Centers for Disease Control and Prevention website. <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>. Updated: February 21, 2020. Accessed: March 10, 2020.
- ³ Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19). Centers for Disease Control and Prevention website. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>. Updated: March 7, 2020. Accessed: March 10, 2020.