





Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2

Updated Sept. 10, 2021 Print

Summary of Recent Changes

Updates as of September 10, 2021

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The interim guidance was updated to:

- Combine information from previously posted CDC guidance addressing when healthcare personnel (HCP) with SARS-CoV-2 infection could return to work and risk assessment and work restriction for HCP with higher-risk exposure to SARS-CoV-2
- Clarify the recommended intervals for testing asymptomatic HCP with a higher-risk exposure.

Key Points

- A symptom-based strategy for determining when HCP with SARS-CoV-2 infection could return to work is preferred in most clinical situations.
- In general, asymptomatic HCP who have had a higher-risk exposure do not require work restriction if they have been fully vaccinated or if they have recovered from SARS-CoV-2 infection in the prior 90 days.

In general, healthcare facilities should continue to follow the IPC recommendations for unvaccinated individuals (e.g., use of Transmission-Based Precautions for those that have had close contact to someone with SARS-CoV-2 infection) when caring for fully vaccinated individuals with moderate to severe immunocompromise due to a medical condition or receipt of immunosuppressive medications or treatments.

Other factors, such as end-stage renal disease, likely pose a lower degree of immunocompromise and there might not be a need to follow the recommendations for those with moderate to severe immunocompromise. However, fully vaccinated people in this category should consider continuing to practice physical distancing and use of source control while in a healthcare facility.

Ultimately, the degree of immunocompromise for the patient is determined by the treating provider, and preventive actions are tailored to each individual and situation.

Background

This interim guidance is intended to assist with the following:

1. Determining the duration of work restriction for healthcare personnel (HCP) with SARS-CoV-2 infection.

2. Assessment of risk and application of work restrictions for asymptomatic HCP with potential exposure to SARS-CoV-2.

Return to Work Criteria for Healthcare Personnel with SARS-CoV-2 Infection

HCP with even mild symptoms of COVID-19 should be prioritized for viral testing with approved nucleic acid or antigen detection assays. When a clinician decides that testing a person for SARS-CoV-2 is indicated, negative results from at least one FDA Emergency Use Authorized COVID-19 viral test indicates that the person most likely does not have an active SARS-CoV-2 infection at the time the sample was collected. A second test for SARS-CoV-2 RNA may be performed at the discretion of the evaluating clinician, particularly when a higher level of clinical suspicion for SARS-CoV-2 infection exists. If the second test is positive, consultation with an infectious disease expert should be considered to resolve the discrepant results.

For HCP who were suspected of having COVID-19 but following evaluation another diagnosis is suspected or confirmed, return to work decisions should be based on their other suspected or confirmed diagnoses.

A symptom-based strategy for determining when HCP with SARS-CoV-2 infection could return to work is preferred in most clinical situations

The criteria for the symptom-based strategy are:

HCP with mild to moderate illness who are *not* moderately to severely immunocompromised:

- At least 10 days have passed since symptoms first appeared and
- At least 24 hours have passed *since last fever* without the use of fever-reducing medications **and**
- Symptoms (e.g., cough, shortness of breath) have improved

HCP who were asymptomatic throughout their infection and are *not* moderately to severely immunocompromised:

• At least 10 days have passed since the date of their first positive viral diagnostic test.

HCP with severe to critical illness or who are moderately to severely immunocompromised:

- At least 10 days and up to 20 days have passed since symptoms first appeared and
- At least 24 hours have passed since last fever without the use of fever-reducing medications and
- Symptoms (e.g., cough, shortness of breath) have improved
- Consider consultation with infection control experts

HCP who are **moderately to severely immunocompromised** may produce replication-competent virus beyond 20 days after symptom onset or, for those who were asymptomatic throughout their infection, the date of their first positive viral test. Consultation with infectious diseases specialists is recommended. Use of a test-based strategy could be considered in consultation with occupational health for determining when these HCP may return to work.

The exact criteria that determine which HCP will shed replication-competent virus for longer periods are not known. Disease severity factors and the presence of immunocompromising conditions should be considered when determining the appropriate duration for specific HCP. For example, HCP with characteristics of severe illness may be most appropriately managed by staying home for at least 15 days before return to work. Use of a test-based strategy, in consultation with infectious disease specialists and occupational health, for determining when HCP who are severely immunocompromised may return to work could be considered. Limitations of the test-based strategy are described elsewhere.

The criteria for the test-based strategy are:

HCP who are symptomatic:

- Resolution of fever without the use of fever-reducing medications and
- Improvement in symptoms (e.g., cough, shortness of breath), and
- Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized laboratory-based nucleic acid amplification test (NAAT) to detect SARS-CoV-2 RNA. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV).

HCP who are not symptomatic:

Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized laboratory-based NAAT to detect SARS-CoV-2 RNA. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV).

After returning to work, HCP should self-monitor for symptoms and seek re-evaluation from occupational health if symptoms recur or worsen.

Guidance for Asymptomatic HCP Who Were Exposed to Individuals with Confirmed SARS-CoV-2 Infection

A close contact is defined as anyone who has prolonged close contact (within 6 feet for a cumulative total of 15 minutes over 24 hours) to someone with SARS-CoV-2 infection. However, when close contact occurs, factors that can reduce risk for transmission include, but are not limited to: correct use of personal protective equipment (PPE) by HCP, use of well-fitting source control by the individual with SARS-CoV-2 infection, whether the HCP and/or the individual with SARS-CoV-2 infection are fully vaccinated. All these factors should be considered when evaluating an exposure.

Higher-risk exposures generally involve exposure of HCP's eyes, nose, or mouth to material potentially containing SARS-CoV-2, particularly if these HCP were present in the room for an aerosol-generating procedure (See row 1 of the table). Other exposures classified as lower-risk, including having body contact with the patient (e.g., rolling the patient) without gown or gloves, may impart some risk for transmission, particularly if hand hygiene is not performed and HCPs then touch their eyes, noses, or mouths. The specific factors associated with these exposures should be evaluated on a case-by-case basis; interventions, including restriction from work, can be applied if the risk for transmission is deemed substantial.

Following a higher-risk exposure, testing and work restriction are recommended for unvaccinated HCP (see table).

In general, work restriction of asymptomatic HCP who have recovered from SARS-CoV-2 infection in the prior 90 days and asymptomatic HCP who are fully vaccinated is not necessary unless they develop symptoms, test positive for SARS-CoV-2 infection, or are otherwise directed to do so by the jurisdiction's public health authority.

Additional considerations, following a higher-risk exposure, for these HCP include:

- Testing: Fully vaccinated asymptomatic HCP should have a series of two viral tests for SARS-CoV-2 infection. In these situations, testing is recommended immediately (but not earlier than 2 days after the exposure) and, if negative, again 5–7 days after the exposure. Testing is not recommended for asymptomatic HCP who have recovered from SARS-CoV-2 infection in the prior 90 days; this is because some people may be non-infectious but have detectable virus from their prior infection during this period (additional information is available). Criteria for use of post-exposure prophylaxis are described elsewhere
- Source control: Universal use of source control while in the healthcare facility is recommended for 14 days following their higher-risk exposure, then they may default to routine source control recommendations for HCP.
- Circumstances when work restrictions might be recommended:
 - Among asymptomatic HCP who have recovered from SARS-CoV-2 infection in the prior 90 days:
 - HCP who are moderately to severely immunocompromised and might be at increased risk for reinfection. However, data on which specific conditions may lead to higher risk and the magnitude of risk are not available. OR
 - Unvaccinated HCP for whom there is concern that their initial diagnosis of SARS-CoV-2 infection might have been based on a false positive test result (e.g., individual was asymptomatic, antigen test positive, and a confirmatory NAAT was not performed).
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 - Among fully vaccinated HCP:
 - HCP who are moderately to severely immunocompromised OR
 - When directed by public health authorities (e.g., during an outbreak where SARS-CoV-2 infections are identified among fully vaccinated HCP)
 - In the event of ongoing transmission within a facility that is not controlled with initial interventions, strong consideration should be given to use of work restriction of fully vaccinated HCP with higher-risk exposures. In addition, there might be other circumstances for which the jurisdiction's public health authority recommends these and additional precautions.

Exposure Personal Protective Work Restrictions for Unvaccinated HCP Equipment Used	posure	Personal Pro Equipment	tective V Used	Vork Restrictions for Unvaccinated HCP	
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Exposure	Personal Protective Equipment Used	Work Restrictions for Unvaccinated HCP
Higher-risk: HCP who had prolonged ¹ close contact ² with a patient, visitor, or HCP with confirmed SARS-CoV-2 infection ³	 HCP not wearing a respirator or facemask⁴ HCP not wearing eye protection if the person with SARS-CoV-2 infection was not wearing a cloth mask or facemask HCP not wearing all recommended PPE (i.e., gown, gloves, eye protection, respirator) while performing an aerosol-generating procedure¹ 	 Exclude from work for 14 days after last exposure. Perform SARS-CoV-2 testing immediately (but not earlier than 2 days after the exposure) and, if negative, again 5-7 days after the exposure. Criteria for use of post-exposure prophylaxis are described elsewhere 2. Advise HCP to monitor themselves for fever or symptoms consistent with COVID-19. Any HCP who develop fever or symptoms consistent with COVID-19 should immediately contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.
Lower-risk: HCP other than those with exposure risk described above	• N/A	 No work restrictions or testing. Follow all recommended infection prevention and control practices, including monitoring themselves for fever or symptoms consistent with COVID-19 and not reporting to work when ill. Any HCP who develop fever or symptoms consistent with COVID-19 should immediately self-isolate and contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.

HCP with travel or community exposures should consult their occupational health program for guidance on need for work restrictions. HCP who have traveled should continue to follow CDC travel recommendations and requirements, including restriction from work, when recommended for any traveler. HCP with community exposures should be restricted from work if they have a community exposure for which quarantine is recommended.

- 1. Data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. Until more is known about transmission risks, it is reasonable to consider an exposure of 15 minutes or more as prolonged. This could refer to a single 15-minute exposure to one infected individual or several briefer exposures to one or more infected individuals adding up to at least 15 minutes during a 24-hour period. However, the presence of extenuating factors (e.g., exposure in a confined space, performance of aerosol-generating procedure) could warrant more aggressive actions even if the cumulative duration is less than 15 minutes. For example, any duration should be considered prolonged if the exposure occurred during performance of an aerosol generating procedure.
- 2. Data are limited for the definition of close contact. For this guidance it is defined as: a) being within 6 feet of a person with confirmed SARS-CoV-2 infection or b) having unprotected direct contact with infectious secretions or excretions of the person with confirmed SARS-CoV-2 infection. Distances of more than 6 feet might also be of concern, particularly when exposures occur over long periods of time in indoor areas with poor ventilation.
- 3. Determining the time period when the patient, visitor, or HCP with confirmed SARS-CoV-2 infection could have been infectious:
 - a. For individuals with confirmed COVID-19 who developed symptoms, consider the exposure window to be 2 days before symptom onset through the time period when the individual meets criteria for discontinuation of Transmission-Based Precautions
 - b. For individuals with confirmed SARS-CoV-2 infection who never developed symptoms, determining the infectious period can be challenging. In these situations, collecting information about when the asymptomatic individual with SARS-CoV-2 infection may have been exposed could help inform the period when they were infectious.
 - i. In general, individuals with SARS-CoV-2 infection should be considered potentially infectious beginning 2 days after their exposure until they meet criteria for discontinuing Transmission-Based Precautions.
 - ii. If the date of exposure cannot be determined, although the infectious period could be longer, it is reasonable to use a starting point of 2 days prior to the positive test through the time period when the individual meets criteria for discontinuation of Transmission-Based Precautions for contact tracing.
- 4. While respirators confer a higher level of protection than facemasks and are recommended when caring for patients with SARS-CoV-2 infection, facemasks still confer some level of protection to HCP, which was factored into this risk assessment. Cloth masks are not considered PPE because their capability to protect HCP is unknown.

Definitions:

Healthcare Personnel (HCP): HCP refers to all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances (e.g., blood, tissue, and specific body fluids); contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air. HCP include, but are not limited to, emergency medical service personnel, nurses, nursing assistants, home healthcare personnel, physicians, technicians, therapists, phlebotomists, pharmacists, dental healthcare personnel, students and trainees, contractual staff not employed by the healthcare facility, and persons not directly involved in patient care, but who could be exposed to infectious agents that can be transmitted in the healthcare setting (e.g., clerical, dietary, environmental services, laundry, security, engineering and facilities management, administrative, billing, and volunteer personnel). For this guidance, HCP does not include clinical laboratory personnel.

Fully vaccinated is defined in Interim Public Health Recommendations for Fully Vaccinated People | CDC

Unvaccinated refers to a person who does not fit the definition of "fully vaccinated," including people whose vaccination status is not known, for the purposes of this guidance.

Immunocompromised: For the purposes of this guidance, moderate to severely immunocompromising conditions include, but might not be limited to, those defined in the Interim Clinical Considerations for Use of COVID-19 Vaccines | CDC.

- Other factors, such as end-stage renal disease, may pose a much lower degree of immunocompromise and not clearly affect decisions about need for work restriction if the healthcare provider had close contact with someone with SARS-CoV-2 infection. However, fully vaccinated people in this category should consider continuing to practice physical distancing and use of source control while in a healthcare facility, even when not otherwise recommended for fully vaccinated individuals.
- Ultimately, the degree of immunocompromise for the healthcare provider is determined by the treating provider, and preventive actions are tailored to each individual and situation.

SARS-CoV-2 Illness Severity Criteria (adapted from the NIH COVID-19 Treatment Guidelines)

The studies used to inform this guidance did not clearly define "severe" or "critical" illness. This guidance has taken a conservative approach to define these categories. Although not developed to inform decisions about duration of Transmission-Based Precautions, the definitions in the National Institutes of Health (NIH) COVID-19 Treatment Guidelines 🗹 are one option for defining severity of illness categories. The highest level of illness severity experienced by the patient at any point in their clinical course should be used when determining the duration of Transmission-Based Precautions.

Mild Illness: Individuals who have any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain) without shortness of breath, dyspnea, or abnormal chest imaging.

Moderate Illness: Individuals who have evidence of lower respiratory disease, by clinical assessment or imaging, and a saturation of oxygen (SpO2) \geq 94% on room air at sea level.

Severe Illness: Individuals who have respiratory frequency >30 breaths per minute, SpO2 <94% on room air at sea level (or, for patients with chronic hypoxemia, a decrease from baseline of >3%), ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO2/FiO2) <300 mmHg, or lung infiltrates >50%.

Critical Illness: Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction.

In pediatric patients, radiographic abnormalities are common and, for the most part, should not be used as the sole criteria to define COVID-19 illness category. Normal values for respiratory rate also vary with age in children; thus, hypoxia should be the primary criterion to define severe illness, especially in younger children.

Fever: For the purpose of this guidance, fever is defined as subjective fever (feeling feverish) or a measured temperature of 100.0°F (37.8°C) or higher. Note that fever may be intermittent or may not be present in some people, such as those who are elderly, immunocompromised, or taking certain fever-reducing medications (e.g., nonsteroidal anti-inflammatory drugs [NSAIDS]).

More Information

Public Health Recommendations after Travel-Associated COVID-19 Exposure

Public Health Recommendations for Community-Related Exposure

Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 (Interim Guidance)

Strategies to Mitigate Healthcare Personnel Staffing Shortages

Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease (COVID-19) in a Healthcare Setting.

Summary of Changes

As of March 10, 2021

• Clarified that asymptomatic HCP who are fully vaccinated and have a higher-risk exposure as described in this guidance do not need to be restricted from work; possible exceptions and additional information is available here.

As of February 16, 2021:

- Clarified that work restriction of asymptomatic HCP with a higher-risk exposure who have recovered from SARS-CoV-2 infection in the prior 3 months might not be necessary. Additional information about this scenario is available here.
- Clarified that work restriction of fully vaccinated HCP with a higher-risk exposure continues to be recommended. Additional information is available here.

Updates as of Dec 14, 2020:

- Include a link to the Interim Guidance on Testing Healthcare Personnel for SARS-CoV-2, which provides guidance on testing potentially exposed healthcare personnel.
- Clarify that, in general, healthcare personnel with travel or community-associated exposures where quarantine is recommended should be excluded from work for 14 days after their last exposure.

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