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

Updated Sept. 23, 2022

Summary of Recent Changes

Updates as of September 23, 2022

- In most circumstances, asymptomatic HCP with higher-risk exposures do not require work restriction.
- Updated recommendations for testing frequency to detect potential for variants with shorter incubation periods and to address the risk for false negative antigen tests in people without symptoms.

Previous updates

Key Points
- In general, asymptomatic HCP who have had a higher-risk exposure do not require work restriction, regardless of vaccination status, if they do not develop symptoms or test positive for SARS-CoV-2.

Background

This interim guidance is intended to assist with the following:

1. Determining the duration of restriction from the workplace for HCP with SARS-CoV-2 infection.
2. Assessment of risk and application of workplace restrictions for asymptomatic HCP with exposure to SARS-CoV-2.

Guidance addressing recommended infection prevention and control practices including use of source control by HCP is available in Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

Employers should be aware that other local, territorial, tribal, state, and federal requirements may apply, including those promulgated by the Occupational Safety and Health Administration (OSHA).

Evaluating Healthcare Personnel with Symptoms of SARS-CoV-2 Infection

HCP with even mild symptoms of COVID-19 should be prioritized for viral testing with nucleic acid or antigen detection assays,
When testing a person with symptoms of COVID-19, negative results from at least one viral test indicate that the person most likely does not have an active SARS-CoV-2 infection at the time the sample was collected.

- If using NAAT (molecular), a single negative test is sufficient in most circumstances. If a higher level of clinical suspicion for SARS-CoV-2 infection exists, consider maintaining work restrictions and confirming with a second negative NAAT.
- If using an antigen test, a negative result should be confirmed by either a negative NAAT (molecular) or second negative antigen test taken 48 hours after the first negative test.

For HCP who were initially 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.

**Return to Work Criteria for HCP with SARS-CoV-2 Infection**

The following are criteria to determine when HCP with SARS-CoV-2 infection could return to work and are influenced by severity of symptoms and presence of immunocompromising conditions. After returning to work, HCP should self-monitor for symptoms and seek re-evaluation from occupational health if symptoms recur or worsen. If symptoms recur (e.g., rebound) these HCP should be restricted from work and follow recommended practices to prevent transmission to others (e.g., use of well-fitting source control) until they again meet the healthcare criteria below to return to work unless an alternative diagnosis is identified.

HCP with mild to moderate illness who are not moderately to severely immunocompromised could return to work after the following criteria have been met:

- At least 7 days have passed since symptoms first appeared if a negative viral test* is obtained within 48 hours prior to returning to work (or 10 days if testing is not performed or if a positive test at day 5-7), 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.

*Either a NAAT (molecular) or antigen test may be used. If using an antigen test, HCP should have a negative test obtained on day 5 and again 48 hours later

HCP who were asymptomatic throughout their infection and are not moderately to severely immunocompromised could return to work after the following criteria have been met:

- At least 7 days have passed since the date of their first positive viral test if a negative viral test* is obtained within 48 hours prior to returning to work (or 10 days if testing is not performed or if a positive test at day 5-7).

*Either a NAAT (molecular) or antigen test may be used. If using an antigen test, HCP should have a negative test obtained on day 5 and again 48 hours later

HCP with severe to critical illness who are not moderately to severely immunocompromised could return to work after the following criteria have been met:

- 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.
- The test-based strategy as described below for moderately to severely immunocompromised HCP can be used to inform the duration of work restriction.

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 a summary of the literature, refer to Ending Isolation and Precautions for People with COVID-19: Interim Guidance (cdc.gov)

HCP who are moderately to severely immunocompromised may produce replication-competent virus beyond 20 days after symptomatic illness and should not return to work until told to do so by their healthcare provider.
Test-based strategy

HCP who are symptomatic could return to work after the following criteria are met:

- 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 48 hours apart (total of two negative specimens) tested using an antigen test or NAAT.

HCP who are not symptomatic could return to work after the following criteria are met:

- Results are negative from at least two consecutive respiratory specimens collected 48 hours apart (total of two negative specimens) tested using an antigen test or NAAT.

Return to Work Criteria for HCP Who Were Exposed to Individuals with Confirmed SARS-CoV-2 Infection

Exposures that might require testing and/or restriction from work can occur both while at work and in the community. 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.

Other exposures not classified as higher-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 HCP then touch their eyes, nose, or mouth. When classifying potential exposures, specific factors associated with these exposures (e.g., quality of ventilation, use of PPE and source control) should be evaluated on a case-by-case basis. These factors might raise or lower the level of risk; interventions, including restriction from work, can be adjusted based on the estimated risk for transmission.

For the purposes of this guidance, higher-risk exposures are classified as HCP who had prolonged close contact with a patient, visitor, or HCP with confirmed SARS-CoV-2 infection and:

- HCP was not wearing a respirator (or if wearing a facemask, the person with SARS-CoV-2 infection was not wearing a cloth mask or facemask)
- HCP was not wearing eye protection if the person with SARS-CoV-2 infection was not wearing a cloth mask or facemask
- HCP was not wearing all recommended PPE (i.e., gown, gloves, eye protection, respirator) while present in the room for an aerosol-generating procedure

Following a higher-risk exposure, HCP should:

- Have a series of three viral tests for SARS-CoV-2 infection.
  - Testing is recommended immediately (but not earlier than 24 hours after the exposure) and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. This will typically be at day 1 (where day of exposure is day 0), day 3, and day 5.
  - Due to challenges in interpreting the result, testing is generally not recommended for asymptomatic people who have recovered from SARS-CoV-2 infection in the prior 30 days. Testing should be considered for those who have recovered in the prior 31-90 days; however, an antigen test instead of NAAT is recommended. This is because some people may remain NAAT positive but not be infectious during this period.
- Follow all recommended infection prevention and control practices, including wearing well-fitting source control, monitoring themselves for fever or symptoms consistent with COVID-19, and not reporting to work when ill or if testing positive for SARS-CoV-2 infection.
- 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.
Work restriction is not necessary for most asymptomatic HCP following a higher-risk exposure, regardless of vaccination status. Examples of when work restriction may be considered include:

- HCP is unable to be tested or wear source control as recommended for the 10 days following their exposure;
- HCP is moderately to severely immunocompromised;
- HCP cares for or works on a unit with patients who are moderately to severely immunocompromised;
- HCP works on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions;

If work restriction is recommended, HCP could return to work after either of the following time periods:

- HCP can return to work after day 7 following the exposure (day 0) if they do not develop symptoms and all viral testing as described for asymptomatic HCP following a higher-risk exposure is negative.
- If viral testing is not performed, HCP can return to work after day 10 following the exposure (day 0) if they do not develop symptoms.

In addition to above:

- HCP should follow all recommended infection prevention and control practices, including wearing well-fitting source control, monitoring themselves for fever or symptoms consistent with COVID-19, and not reporting to work when ill or if testing positive for SARS-CoV-2 infection.
- 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.

HCP with travel or community exposures should consult their occupational health program for guidance on need for work restrictions. In general, HCP who have had prolonged close contact with someone with SARS-CoV-2 in the community (e.g., household contacts) should be managed as described for higher-risk occupational exposures above.

Footnotes:

1. For this guidance an exposure of 15 minutes or more is considered 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. 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. 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 if the patient was also wearing a cloth mask or facemask.

Definitions:
Transmission-Based Precautions:

The studies used guidance, for severe illnesses, air. Critical illness: individuals with respiratory failure, septic shock, and/or multiple organ dysfunction. 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.

- 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 HCP had close contact with someone with SARS-CoV-2 infection. However, people in this category should still consider continuing to practice physical distancing and use of source control while in a healthcare facility, even if they have received all COVID-19 vaccine doses, including booster dose, as recommended by CDC.

- Ultimately, the degree of immunocompromise for the HCP 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) ≥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]).

Facemask: OSHA defines facemasks as “a surgical, medical procedure, dental, or isolation mask that is FDA-cleared, authorized by an FDA EUA, or offered or distributed as described in an FDA enforcement policy. Facemasks may also be referred to as ‘medical procedure masks’.” Facemasks should be used according to product labeling and local, state, and
federal requirements. FDA-cleared surgical masks are designed to protect against splashes and sprays and are prioritized for use when such exposures are anticipated, including surgical procedures. Other facemasks, such as some procedure masks, which are typically used for isolation purposes, may not provide protection against splashes and sprays.

**Respirator:** A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases, or vapors. Respirators are certified by CDC/NIOSH, including those intended for use in healthcare.

**Cloth mask:** Textile (cloth) covers that are intended primarily for source control in the community. They are not personal protective equipment (PPE) appropriate for use by healthcare personnel. Guidance on design, use, and maintenance of cloth masks is available.

### More Information

- Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic
- Strategies to Mitigate Healthcare Personnel Staffing Shortages

### Summary of Changes

**As of December 23, 2021**

Due to concerns about increased transmissibility of the SARS-CoV-2 Omicron variant, this guidance is being updated to enhance protection for healthcare personnel (HCP), patients, and visitors, and to address concerns about potential impacts on the healthcare system given a surge of SARS-CoV-2 infections. These updates will be refined as additional information becomes available to inform recommended actions.

- Ensure that SARS-CoV-2 testing is performed with a test that is capable of detecting SARS-CoV-2, even with currently circulating variants in the United States.
- Updated recommendations regarding when HCP with SARS-CoV-2 infection could return to work
- The definition of higher-risk exposure was updated to include use of a facemask (instead of a respirator) by HCP if the infected patient is not also wearing a facemask or cloth mask.
- Added options that would allow asymptomatic HCP with a higher-risk exposure who have not received all COVID-19 vaccine doses, including booster dose, as recommended by CDC to return to work prior to the previously recommended 14-day post-exposure period of work restriction, assuming they do not develop symptoms or test positive for SARS-CoV-2.

**As of September 10, 2021**

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.

**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.

Last Updated Sept. 23, 2022