Healthcare personnel exposure risk assessment guidance

As resources permit, healthcare facilities should promptly resume formal healthcare personnel (HCP) risk assessments for exposure to COVID-19 using the updated NJDOH Risk Assessment Algorithm located at https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml. Because of their often extensive and close contact with vulnerable individuals in healthcare settings, a conservative approach to HCP monitoring and applying work restrictions is recommended to prevent transmission from potentially contagious HCP to patients/residents, other HCP and visitors. Occupational health programs should have a low threshold for evaluating symptoms and testing HCP.

The feasibility and utility of performing contact tracing to identify exposed HCP and application of work restrictions depends upon the degree of community transmission of SARS-CoV-2 and the resources available for contact tracing. Please see the NJDOH COVID-19 Activity Level Index (CALI) Report for updated local transmission at https://www.nj.gov/health/cd/statistics/covid/.

For areas with:
- Minimal to no community transmission of SARS-CoV-2 (i.e., Low CALI), sufficient resources for contact tracing, and no staffing shortages, risk assessment of exposed HCP and application of work restrictions may be feasible and effective.
- Moderate to substantial community transmission of SARS-CoV-2 (i.e., Moderate, Very/High CALI), insufficient resources for contact tracing, or staffing shortages, risk assessment of exposed HCP and application of work restrictions may not be possible.

If staffing shortages occur, it might not be possible to exclude exposed HCP from work. Healthcare facilities should include their occupational health program, if applicable, in the assessment and management of risk. Refer to the Strategies to mitigate HCP staffing shortages section, below.

HCP testing results guidance (molecular detection and rapid antigen testing only, not serology)

A test-based strategy is no longer recommended for discontinuation of isolation because, in most cases, it results in excluding from work HCP who continue to shed detectable SARS-CoV-2 RNA but are most likely no longer infectious. In some instances, a test-based strategy could be considered if needing to discontinue Transmission-Based Precautions earlier than the time- or symptom-based strategies allow. For more information regarding the evidence behind this change and test-based strategy criteria, visit https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html.

**SYMPTOM-BASED STRATEGY**

Non severely immunocompromised \(^1\) persons with mild \(^2\) to moderate \(^3\) illness should remain on isolation \(\geq 10\) **DAYS** have passed since symptoms first appeared (20 days for severe \(^4\) or critical \(^5\) illness or those who are severely immunocompromised) AND at least 24 hours have passed since resolution of fever, without use of fever-reducing medication AND improvement in symptoms.

**TIME-BASED STRATEGY**

Asymptomatic persons should remain on isolation \(\geq 10\) **DAYS** have passed since the date of first positive COVID-19 viral diagnostic test (20 days for those who are severely immunocompromised) AND have remained **asymptomatic** (if symptoms appear during this time refer to above).

**TEST-BASED STRATEGY**

Generally not recommended. Could be considered in consultation with an infectious disease expert for persons who are **severely immunocompromised** if concerns exist for the persons being infectious for more than 20 days.
1) COVID-19 Positive HCP

The highest level of illness severity (see below) experienced by the HCP at any point in their clinical course should be used when determining mild, moderate, severe or critical illness and subsequent decisions on when they may return to work. For HCP with severe or critical illness or those who are severely immunocompromised the recommended duration for work exclusion is at least 10 days and up to 20 days after symptom onset or date of their first positive viral diagnostic test (if asymptomatic). Upon meeting the return to work criteria, all HCP who have tested positive or diagnosed with COVID-19 should adhere to the following guidance:

- Wear a facemask for **source control at all times** while in the healthcare facility until all symptoms are completely resolved or at baseline. A **facemask** instead of a cloth face covering should be used by these HCP for source control during this time period while in the facility.
  - A facemask for source control does not replace the need to wear an N95 or higher-level respirator (or other recommended PPE) when indicated, including when caring for patients with suspected or confirmed COVID-19.
- **After this time period, these HCP should revert to their facility policy regarding universal source control during the pandemic.**
- Self-monitor for symptoms and seek re-evaluation from occupational health if symptoms of COVID-19 (re)occur or worsen.

2) COVID-19 Negative HCP

a) **Asymptomatic HCP tested negative:** No restrictions based on COVID-19 test results. HCP should continue to report recognized exposures, regularly monitor themselves for fever and symptoms of COVID-19, practice source control and should not report to work when ill.

b) **Symptomatic HCP tested negative:** Symptomatic HCP who test negative for COVID-19 may have another respiratory virus. Similar guidance on infection prevention and control should be followed (e.g., isolate from others, practice good hand hygiene, clean and disinfect environmental surfaces, etc.). If HCP have an alternate diagnosis (e.g., tested positive for influenza), criteria for return to work should be based on that diagnosis. **At minimum HCP should be excluded from work for at least 24 hours after symptoms resolve including fever, if applicable.** Consult your facilities occupational health policy for return to work after illness criteria.

**Note:** These are current recommendations based on available data and CDC guidelines. Facilities who wish to use an extended time frame for return to work, given the needs of their unique patient populations and available resources, may do so at their discretion.

**Contact tracing**

Healthcare facilities should have a process for notifying the health department about known or suspected cases of COVID-19, and should establish a plan, in consultation with local public health authorities, for how exposures in a healthcare facility will be investigated and how contact tracing will be performed. The plan should address the following:

- Who is responsible for identifying contacts and notifying potentially exposed individuals?
- How will such notifications occur?
- What actions and follow-up are recommended for those who were exposed?

Contact tracing should be carried out in a way that protects the confidentiality of affected individuals to the extent possible and is consistent with applicable laws and regulations. **HCP and patients who are currently admitted to the facility or were transferred to another healthcare facility should be prioritized for notification.** These groups, if infected, have the potential to expose a large number of individuals at higher risk for severe disease, or in the situation of admitted patients, be at higher risk for severe illness themselves. Long-term care facilities (LTCFs) should refer to the NJDOH **Testing in Response to a Newly Identified COVID-19 Case in LTCFs** at [https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml](https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml).

When HCP are positive for COVID-19, facilities should do their due diligence and work with their local health
department to identify and notify close contacts. HCP who had prolonged close contact (15 cumulative minutes of exposure at a distance of less than 6 feet to an infected person during a 24-hr period) or had direct contact with infectious secretions with inadequate PPE should be considered potentially exposed. Prolonged close contact should be determined by taking the cumulative contact the potentially exposed individual had with the infected case over any 24 hour period within the period from 2 days before symptom onset (or positive test collection date in an asymptomatic infected individual) until the positive case has been effectively isolated.

Contact tracing is generally recommended for anyone (e.g., HCP, patient, visitor) who had prolonged close contact with the COVID-19 case. The following actions are also recommended if the potentially infectious individual is a patient or visitor. Recommended actions for HCP, patients, and visitors:

- Perform a risk assessment and apply work restrictions for other HCP who were exposed to the infected provider based on whether these HCP had prolonged, close contact and what PPE they were wearing. Refer to the NIDOH HCP Exposure to Confirmed COVID-19 Case Risk Algorithm located at https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml.
- Patients who are identified as a close contact of a positive HCP should be assessed and quarantined using CDC Public Health Guidance for Community-Related Exposures at https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html. Place exposed patients who are currently admitted to the healthcare facility in appropriate Transmission-Based Precautions and monitor them for onset of COVID-19 until 14 days after their last exposure.
- Local health departments should work with the healthcare facility to identify and perform contact tracing of exposed patients who are not currently admitted to the healthcare facility and for visitors.
- For additional resources, tips and guidance for contact tracing see https://www.cdc.gov/coronavirus/2019-ncov/php/contact-tracing/contact-tracing-plan/overview.html.

Strategies to mitigate HCP staffing shortages

Facilities experiencing severe staffing shortages due to work exclusions related to COVID-19, may consider alternative strategies to mitigate those shortages. The CDC provides guidance for contingency and crisis capacity strategies at https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html. Facilities considering implementing these strategies should consult CDC guidance and public health authorities to assure appropriate implementation. As a reminder, individuals cared for in a healthcare setting should not test out of COVID-19 quarantine. Given the need for often extensive and close contact between patients/residents and HCP, a 14-day quarantine period continues to be recommended for patients/residents receiving healthcare and HCP with exposures to SARS-CoV-2 warranting quarantine or work restrictions, respectively. This option maximally reduces post-quarantine transmission risk and is the strategy with the greatest collective experience at present. Shortening quarantine time may increase the risk of COVID-19 transmission when compared to the currently recommended 14-day quarantine. The variability of SARS-CoV-2 transmission observed to-date indicates that there may be settings (e.g., with high contact rates) where even a small risk of post-quarantine transmission could still result in substantial spread.

Additional staffing considerations include:
- Maintain staffing internally (e.g., extra shifts, extra pay, contact staffing agencies).
- Partner with other facilities within the area or corporation.
- Review existing pandemic influenza and disaster preparedness plans for resource allocation references.
- Utilize the Medical Reserve Corps (contact the local health department and Office of Emergency Management in your jurisdiction).

Resources

HCP include, but are not limited to, emergency medical service personnel, nurses, nursing assistants, physicians, technicians, therapists, phlebotomists, pharmacists, 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).

**Illness severity definitions**

The degree of immunocompromise in the HCP is ultimately determined by the treating provider however some conditions such as being on chemotherapy for cancer, being within one year out from receiving hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count < 200, combined primary immunodeficiency disorder, and receipt of prednisone >20mg/day for more than 14 days, may cause a higher degree of immunocompromise and require actions such as lengthening the duration of HCP work restrictions. Other factors, such as advanced age, diabetes mellitus, or end-stage renal disease, may pose a much lower degree of immunocompromise and not clearly affect occupational health actions to prevent disease transmission.

1. **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.

2. **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.

3. **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%.

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