



Responding to and Monitoring COVID-19 Exposures in Health Care Settings

8/6/2021

This guidance was updated on August 6, 2021, to include:

- All health care workers, regardless of vaccination status, should be tested for SARS-CoV-2 when symptomatic, after a higher-risk exposure, and when working in a facility experiencing an outbreak.
- Post-exposure testing should occur immediately and at day 3–5 after exposure.

Exposure risk assessment and monitoring

MDH and health care organizations are cooperating to identify, manage, and monitor health care workers (HCW) with workplace exposure to people with confirmed COVID-19 disease. This approach calls for timely identification of these people who have contact with a coworker, patient, or congregate care resident beginning two days before onset of symptoms. Then, a structured risk assessment is conducted, with individual employees receiving recommendations for health monitoring, voluntary quarantine, and social distancing, as relevant. Details on how to carry out HCW monitoring can be found in posted MDH guidelines,^{1–3} and exposure risk categories are found in the Appendix of this document. This remains MDH's recommended approach at this time.

This targeted method to identify and exclude those who have had high-risk exposures should be conducted in parallel with efforts such as employee health screening, universal masking for source control, strict enforcement of ill-worker exclusion, and education covering infection prevention, appropriate PPE use, and social distancing in the workplace and community.

Data collected by MDH support the efforts to identify, assess, and exclude unvaccinated HCW with known exposures.

- Among monitored unvaccinated HCW who experienced medium- or high-risk exposures during March 6–April 20, 2020, 33% (411/1,237) developed fever or symptoms consistent with COVID-19 during the 14-day quarantine period. However, by June 1, the total percentage of HCW who

developed symptoms decreased to 25% (937/3772) possibly indicating the level of exposure may be decreasing as more PPE becomes available.

- On average, symptom onset occurs on day 6 after contact with the person having confirmed COVID-19. Considering the demonstrated danger of asymptomatic shedding of SARS-CoV-2, this finding highlights the importance of excluding HCW with known high-risk exposures before symptom onset.

Protecting HCW during widespread community transmission

Widespread community transmission puts all HCW at some risk for exposure to COVID-19, whether in the workplace or in the community. As community transmission becomes more prevalent in Minnesota, it might become unmanageable for an individual health care organization to conduct contact tracing and risk assessment of all HCW potentially exposed to a patient, resident, or coworker with confirmed COVID-19. If facilities have exhausted all options to continue targeted contact identification and exclusion, they should strengthen efforts to identify recognized exposures (e.g., PPE breaches), institute monitoring of HCW fever and symptoms, and strictly deter HCW from working while ill (“presenteeism”)⁴.

Data collected by MDH support an increased emphasis on limiting close interactions among coworkers, using universal masking for source control, and robust health monitoring.

- As of April 21, 2020, the mean number of medium- or high-risk HCW exposures resulting from a confirmed COVID-19 interaction of HCW with coworkers is 3.6 persons. Following the recognition of these significant exposures and systemic efforts to reduce coworker interactions, the mean number of exposures decreased to 2.6 persons as of June 1.
- The mean number of medium- or high-risk HCW exposures resulting from a COVID-19 positive patient is 2.2 persons and from a positive congregate-care resident, 2.6, and has remained relatively constant throughout the response.

Best practices for health care facilities

- All health care workers, regardless of vaccination status, should be tested for SARS-CoV-2 when symptomatic, after a higher-risk exposure, and when working in a facility experiencing an outbreak. Post-exposure testing should occur immediately and at day 3–5 after exposure.
- Unvaccinated HCW who experience a high-risk exposure to a person with COVID-19, either inside or outside of the health care facility, should be excluded from work for 14 days. These staff may be asked to return to work during the quarantine period if other options have been exhausted to address a staffing shortage. HCW who return to work in that time must wear a medical-grade facemask for source control at all times. Follow MDH recommendations for inviting unvaccinated

HCW to work in the 14 days after a high-risk exposure at [COVID-19 Recommendations for Health Care Workers \(www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf\)](https://www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf).

- Fully vaccinated asymptomatic HCW with known high-risk exposure do not need to quarantine from work or the community for the 14 days following the exposure. HCW who return to work in that time must wear a medical-grade facemask for source control at all times. Refer to additional detail, including potential exceptions, in [COVID-19 Recommendations for Health Care Workers \(www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf\)](https://www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf).
- Institute universal masking of all HCW for source control. In light of PPE limitations, universal masking could be instituted in a tiered, risk-based approach. If this approach is used, begin in areas with highest exposure risk (e.g., emergency departments, urgent care, and emergency medical services) and patient vulnerability (e.g., those in intensive care and immunocompromised people). Universal masking is intended to protect both patients and employees from infected HCW who might shed virus into the environment before onset of symptoms. HCW should be reminded that universal masking does not excuse their working with signs or symptoms of illness, however mild.
- Institute use of eye protection (e.g., face shield, goggles) as a way to reduce COVID-19 exposure risk, now that SARS-CoV-2 is circulating. Eye protection is recommended at minimum for all routine outpatient, acute care, and long-term care encounters when PPE supplies allow. Use of all appropriate PPE can reduce the number of exposures for which exclusion from work is recommended.
 - [CDC: Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 \(COVID-19\) Pandemic \(www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html\)](https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html)
- CDC has outlined considerations for health care facilities to allow HCW to gather without source control or physical distancing if all present are fully vaccinated. MDH does not have specific recommendations on this topic. Medical and legal leadership should develop health care facility-specific protocols and procedures which may or may not include relaxation of source control and distancing for fully vaccinated HCW.
 - [CDC: Updated Healthcare Infection Prevention and Control Recommendations in Response to COVID-19 Vaccination \(www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-after-vaccination.html\)](https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-after-vaccination.html)
 - CDC considerations include: Fully vaccinated HCW can dine and socialize together in break rooms and conduct in-person meetings without source control or physical distancing, as long as no unvaccinated HCW or other unvaccinated people are present.
- Institute symptom monitoring facility-wide. Enforce policies preventing HCW from reporting to work while ill and mandate departure if symptoms develop mid-shift. Health care organizations should institute policies to ensure that HCW feel financially and socially supported for taking sick leave.
- Fully vaccinated asymptomatic HCW may be exempt from expanded screening testing in health care facilities (e.g., routine staff testing in long-term care facilities).
- Fully vaccinated HCW should have a SARS-CoV-2 test if symptomatic, after a high-risk exposure, or when working in a facility experiencing an outbreak.

- Develop social distancing policies that are enforced throughout the facility. Discourage congregating in work areas (e.g., nurse stations, workstations) and in recreation areas (e.g., break rooms, cafeterias). These policies can take into account staff vaccination status, as appropriate.
- Enforce strict hand hygiene policies throughout the facility. Utilize electronic surveillance or successful existing monitoring programs. Do not take this opportunity to institute new complex hand-hygiene programs.
- Dedicate staff to rigorous cleaning/disinfection of high-touch areas (e.g., doorknobs, computer terminals, phones, etc.).
- Ensure that all personnel performing aerosol-generating procedures have access to an N95 mask or higher level respiratory protection. Follow extended-use or reuse guidance as outlined by CDC⁵.
- Investigate recognized exposures of high-risk (e.g., PPE breaches) to confirmed or suspected SARS-CoV-2 patient infections (see Appendix). Examine and report clusters of employee illness to identify concerning exposures and ongoing transmission risk (see reporting recommendations, below).
- Investigate recognized patient or resident exposures to positive HCW. Anyone with prolonged close contact (within 6 feet for at least 15 minutes) beginning two days before a positive HCW's symptom onset date or specimen collection date is considered exposed.
 - Notify patients or residents of the exposure situation.
 - Exposed patients or residents who are still admitted should be placed into Transmission-based Precautions if PPE allows and monitored for onset of COVID-19 until 14 days after their last exposure to the positive HCW.
- Ensure prompt notification of all HCW and responders who are involved in the care of a positive COVID-19 patient. Health care facilities, EMS and transporting agencies should develop communication plans to ensure other first responders such as police and fire departments are notified of any positive results.
- CDC recommends people delay travel until they are fully vaccinated.
- People who are fully vaccinated can travel safely within the United States.
 - Fully vaccinated HCWs do not need to test before travel unless required by destination.
 - MDH recommends that HCW be tested around day 3-5 post-travel.
 - Fully vaccinated HCWs do not need to self-quarantine after travel.
- People who are not fully vaccinated and must travel should follow CDC's recommendations for unvaccinated people.
 - Delay travel and stay home to protect yourself and others from COVID-19 per CDC and MDH recommendations. MDH recommends that unvaccinated people participating in domestic and international travel enter self-quarantine for 14 days after arrival in Minnesota by limiting their interactions to their immediate household. This recommendation does not apply to people who must cross state or country borders for work, study, medical care, or personal safety and security. People who travel should be tested 1-3 days prior to travel and 3-5 days post-travel and practice careful preventive measures during travel. These recommendations for testing and quarantine apply to unvaccinated HCW.

- CDC has outlined considerations for travel (e.g., transportation, accommodation, activities) and potential associated risk. Health care organizations should review CDC resources to establish expectations for HCW around travel and the course of action (e.g., 14-day quarantine) that will be taken for HCW who participate in nonessential travel. Visit [CDC: Safer Travel Tips for Families with Unvaccinated Children \(www.cdc.gov/coronavirus/2019-ncov/travelers/travel-risk.html\)](https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-risk.html).

Best practices for health care workers

- Observe the social responsibility of staying home while ill. Do not report to work if you have any signs consistent with COVID-19 (measured or subjective fever) or symptoms (e.g., cough, shortness of breath, sore throat, muscle aches, headache, loss of taste or smell). If you develop fever or respiratory symptoms at work, isolate yourself immediately and leave work, reporting the onset to your supervisor or occupational health services before departure.
- HCW who are fully vaccinated do not need to quarantine from work or community activities in the 14 days following a high-risk exposure. HCW are fully vaccinated 2 weeks after their final COVID-19 vaccine dose (two doses in a two-dose series or one dose in a one-dose series). These HCW should self-monitor for signs and symptoms of COVID-19 through day 14. If signs or symptoms develop at any time during the 14-day period, seek testing and isolate at home.
 - Refer to additional detail, including potential exceptions, in [COVID-19 Recommendations for Health Care Workers \(www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf\)](https://www.health.state.mn.us/diseases/coronavirus/hcp/hcwrecs.pdf).
- After a high-risk exposure, remain out of work for 14 days if you are not fully vaccinated, unless you are asked to return to work because of a staffing shortage. HCW who are not fully vaccinated may return to community activities based on the quarantine options outlined in the community quarantine guidance. Continue to self-monitor for signs and symptoms of COVID-19 through day 14. If signs or symptoms develop at any time during the 14-day period, seek testing and isolate at home.
 - [Health Advisory: Quarantine Duration for SARS-CoV-2 Contacts \(www.health.state.mn.us/communities/ep/han/2020/dec7iq.pdf\)](https://www.health.state.mn.us/communities/ep/han/2020/dec7iq.pdf)
- Adhere to strict hand hygiene at all times.
- Clean and disinfect high-contact personal items often (e.g., cell phone, computer keyboards, tablets, etc.).
- Practice social distancing whenever possible, including during breaks and meals.
 - Depending on employer policies, fully vaccinated HCW may be able to dine and socialize with other fully vaccinated HCW without source control or physical distancing, as long as no unvaccinated HCW or other unvaccinated people are present.
- Medical-grade facemask or N95 respirator for source control should be used in all health care settings, including during non-patient encounters when social distancing is not possible, except when facility policies outline other recommendations for fully vaccinated HCW (as described above). Ensure that all face masks are well-fitted.
 - [COVID-19 PPE Grid for Congregate Care Settings \(www.health.state.mn.us/communities/ep/surge/crisis/ppegrid.pdf\)](https://www.health.state.mn.us/communities/ep/surge/crisis/ppegrid.pdf)

- [CDC: Improve How Your Mask Protects You \(www.cdc.gov/coronavirus/2019-ncov/your-health/effective-masks.html\)](https://www.cdc.gov/coronavirus/2019-ncov/your-health/effective-masks.html)
- Report recognized coworker illness and PPE breaches when caring for a person with suspected or confirmed COVID-19 to your supervisor or occupational health services.
- Travel increases your chances of getting and spreading COVID-19. CDC and MDH recommend that unvaccinated people do not travel at this time. Delay travel and stay home to protect yourself and others from COVID-19.
- MDH recommends that unvaccinated people in Minnesota participating in domestic and international travel:
 - Enter self-quarantine for 14 days after arrival in Minnesota by limiting their interactions to their immediate household.
 - Get tested for COVID-19 1-3 days prior to travel and 3-5 days post-travel and practice careful preventive measures during travel.
 - These recommendations apply to unvaccinated HCW.
 - These recommendations do not apply to people who must cross state or country borders for work, study, medical care, or personal safety and security.
- MDH recommends that fully vaccinated HCW who participate in non-essential travel do the following:
 - Practice careful preventive measures during travel.
 - Get tested for COVID-19 3-5 days post-travel.

Recommended incidents to report to MDH:

If they are no longer conducting contact tracing and risk assessment of all HCW potentially exposed to a person with confirmed COVID-19, health care organizations should report the following to MDH.

- Known exposures of high-risk
- Known or suspected COVID-19 transmission within the health care setting
- Clusters (≥ 2 cases) of COVID-19-like illness, including among:
 - HCW working in a single unit/ward/care team
 - Patients and/or HCW in a single unit or ward

Health care organizations are strongly encouraged to conduct COVID-19 testing for all HCW who have worked while ill.

References

1. [Potential Exposure to Patients with COVID-19 in Inpatient Settings including Emergency Departments \(ED\): Risk Assessment and Public Health Management of Health Care Personnel \(www.health.state.mn.us/diseases/coronavirus/hcp/inpatient.pdf\)](http://www.health.state.mn.us/diseases/coronavirus/hcp/inpatient.pdf)
2. [Potential Exposure to Patients with COVID-19 in Outpatient Settings excluding Emergency Departments \(ED\): Risk Assessment and Public Health Management of Health Care Personnel \(www.health.state.mn.us/diseases/coronavirus/hcp/outpatient.pdf\)](http://www.health.state.mn.us/diseases/coronavirus/hcp/outpatient.pdf)
3. [Potential Exposure to Residents with COVID-19 in Long-term Care, Nursing Home, and Assisted Living Settings: Risk Assessment and Public Health Management of Health Care Personnel \(www.health.state.mn.us/diseases/coronavirus/hcp/ltcassess.pdf\)](http://www.health.state.mn.us/diseases/coronavirus/hcp/ltcassess.pdf)
4. [CDC: Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to SARS-CoV-2 \(www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html\)](http://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html)
5. [CDC: Optimizing Personal Protective Equipment \(PPE\) Supplies \(www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html\)](http://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html)
6. [CDC: Clinical Questions about COVID-19: Questions and Answers \(www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html\)](http://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html)

Appendix: Exposure Risk Assessment

Patient or Resident Contact

Risk level	Risk level is defined by any of the following situations involving PATIENT/RESIDENT contact.
Low Risk	HCW did not have prolonged close contact* with patient/resident: <input type="checkbox"/> Regardless of PPE HCW was wearing
	HCW had prolonged close contact* with patient/resident: <input type="checkbox"/> HCW wearing all recommended PPE and adhering to all recommended infection control practices. <input type="checkbox"/> HCW wearing medical-grade facemask but no eye protection while positive patient or resident is wearing medical-grade facemask or alternative/cloth mask <input type="checkbox"/> HCW wearing a medical-grade facemask and eye protection, regardless of gown and gloves
	HCW present when aerosol-generating procedure was performed: <input type="checkbox"/> HCW wearing a respirator, eye protection, gown and gloves
High Risk	HCW had prolonged close contact* with patient/resident: <input type="checkbox"/> HCW not wearing medical-grade facemask or respirator. <input type="checkbox"/> HCW not wearing eye protection and positive patient or resident is not wearing a medical-grade facemask or alternative/cloth mask. <input type="checkbox"/> HCW had sustained breach in PPE (eye and/or respiratory protection) for ≥15 minutes or had unprotected direct contact with excretion or secretions from positive patient or resident without wearing PPE to prevent unprotected contact
	HCW present when aerosol-generating procedure was performed: <input type="checkbox"/> HCW not wearing all recommended PPE (respirator, eye protection, gown, and gloves)

Prolonged close contact is defined as being within 6ft for ≥15 minutes cumulatively during a shift **OR having unprotected direct contact with secretions or excretions of a person with confirmed COVID-19 infection.*

Coworker Contact

Risk level	Risk level is defined by any of the following situations involving COWORKER contact.
Low Risk	<input type="checkbox"/> Present in the same indoor environment but did not have prolonged close contact*
	HCW had prolonged close contact* with positive coworker: <input type="checkbox"/> HCW wearing medical-grade facemask and eye protection, regardless of PPE worn by positive coworker <input type="checkbox"/> HCW wearing medical-grade facemask but no eye protection while positive coworker is wearing medical-grade facemask or alternative/cloth mask
High Risk	<input type="checkbox"/> Direct contact with infectious secretions or excretions of positive HCW (e.g., being coughed on) without wearing PPE to prevent direct, unprotected contact
	HCW had prolonged close contact* with positive coworker: <input type="checkbox"/> HCW not wearing medical-grade facemask, regardless of PPE worn by positive coworker <input type="checkbox"/> HCW wearing medical-grade facemask but no eye protection and positive coworker is not wearing medical-grade facemask or alternative/cloth mask

Prolonged close contact is defined as being within 6ft for ≥15 minutes cumulatively during a shift **OR having unprotected direct contact with secretions or excretions of a person with confirmed COVID-19 infection.*



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