Employee Exposure to COVID-19: Contact Tracing Guidelines for Critical Infrastructure Businesses and Industries

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This guidance is for Minnesota critical infrastructure businesses and industries in food and agriculture, veterinary medicine, mining, construction, critical manufacturing, distribution, public utilities, law enforcement, transportation, and community financial banks. This Minnesota guidance does not apply to other critical infrastructure sectors described under federal Cybersecurity and Infrastructure Security Agency guidelines. This document does not apply to health care and public health, government, schools, child care, corrections, general business, retail, restaurants and hospitality, and other sectors for which there is specific Minnesota state guidance.

Contact tracing overview

The purpose of workplace contact tracing is to limit disease spread by identifying co-workers who have been exposed to an infectious employee, then excluding them from the workplace. The exposed workers are called “contacts” and they “quarantine” away from others, generally at home.

1. **Contact** is defined as spending a cumulative total of 15 minutes or more within 6 feet of someone who has COVID-19 during their infectious period.
   a. For businesses covered by this guidance, co-workers can be exempted from this definition of contact, if during their period of contact, everyone was using a face covering and a face shield, OR, if everyone was using a face covering and there was a physical barrier between them, such as a full Plexiglas screen (Figures 1 and 2).

People with COVID-19 can give the disease to others from two days before developing symptoms until 10 days after their first symptoms. This is termed the infectious period. Therefore, contact tracing should include co-workers who were exposed to a worker with confirmed COVID-19 beginning two days before the person’s symptoms started (or, for workers without symptoms, two days before their test date) until the time the case was isolated at home away from others.
Employers play a critical role in identifying workplace contacts and asking them to quarantine at home so that others in the workplace are not exposed. Supervisors and human resources personnel have the tools to identify workplace contacts quickly and efficiently. Local public health and MDH are best positioned, through routine case interviews and contact tracing activities, to identify close contacts who live with or have social ties to a worker who has COVID-19.

Figure 1: Workers using face coverings and face shields, with barrier in place between workstations

If any one of these workers tested positive for COVID-19, neither of the other two workers would be contacts, because everyone was using both a facemask and a face shield.

Figure 2: Workers using face coverings, with barriers in place between workstations

If either of the two middle workers at the table tested positive for COVID-19, the corresponding worker on the far left or far right would be a contact because there was no face shield or workplace barrier between them (assuming they had spent a cumulative total of 15 minutes together within 6 feet). However, the co-workers separated by the barrier would not be contacts of each other, because both of them were using a face covering and there was a physical barrier between them.
Develop a contract tracing plan

It is critical for employers and businesses to develop a COVID-19 Preparedness Plan that includes a protocol for quickly identifying workplace contacts of employees with COVID-19 who worked while infectious. See: Businesses and Employers: COVID-19 Preparedness Plan Overview (www.health.state.mn.us/diseases/coronavirus/businessesplan.html) for assistance.

Every contact tracing protocol must include these basic elements:

- A designated point person to whom employees report when they feel ill or have tested positive for COVID-19.
- A process that describes how to identify co-workers who have had contact with a COVID-positive employee during their infectious period.
- A policy that ensures protection of an employees’ health information.
- Information and education in the appropriate language that can be provided to an exposed employee about when they should seek testing, what quarantine means they should do differently, and when they can return to work.

Workplace contact tracing steps

Contract tracing should begin as soon as an employer is aware that an employee has tested positive for COVID-19 and that they worked while infectious.

1. Determine the timeframe for contact tracing. Look at the two days before the first symptom occurred in the employee with COVID-19 through their last day at work. For workers who tested positive but never had symptoms, use two days before their test date through their last day at work.

2. Determine the activities and interactions of the employee with COVID-19 at the facility, during the timeframe. Methods include reviewing work schedules; interviewing the employee about carpooling, work activities, and breaks; checking in with supervisors; viewing quality control or security video; and assessing breakroom or locker room use.

3. Identify co-workers who meet the definition of a contact.

4. Once all the contacts are known, supervisors should require contacts to quarantine at home, according to the facility’s COVID-19 Preparedness Plan.

5. Employers must respect protected health information (such as a COVID-19 test result) and follow their policies for releasing employee health information.
Quarantine strategies

Fourteen days is the standard length of time to quarantine at home after contact with someone (in the workplace or elsewhere) who has tested positive for COVID-19. However, CDC guidance does permit workers in critical infrastructure sectors to continue working after exposure to a confirmed case of COVID-19 if their absence would create staffing shortages, they follow COVID-19-prevention protocols, and they remain symptom-free. MDH recommends instead that critical infrastructure industries adopt one of the following quarantine strategies to better control disease spread in the workplace while providing for workforce needs:

- **Strategy 1**: Employees should quarantine at home for a **minimum** of 10 days and get tested on day seven. If the COVID-19 test is negative and the employee does not develop symptoms, they may return to work on day 11.
- **Strategy 2**: Employees should quarantine at home for a **minimum** of seven days and get tested on day five. If the COVID-19 test is negative and the employee does not develop symptoms, they may return to work on day 8. This strategy should only be adopted in facilities with severe staffing shortages.
- **Strategy 3**: Employees should quarantine at home for 10 days. If symptoms develop, the employee should get tested and remain home until results are available. If the employee does not develop symptoms, they may return to work on day 11, without any restrictions; no medical exam or testing is required. This is a fallback strategy for critical infrastructure when testing is limited.

**Note**: Even if an employee receives a negative test result prior to the end of their respective quarantine period, they must remain at home until their quarantine period is over.

MDH’s role in workplace contact tracing

The Minnesota Department of Health (MDH) or its local public health partners conduct a case interview for every person who tests positive for COVID-19. As part of that interview, people with COVID-19 are asked about household, social, and workplace contacts. Employees often do not know the full names or phone numbers of their co-worker contacts. Additionally, employers can conduct workplace contact tracing much sooner than MDH, which limits employee exposure and worksite disruption more quickly. A joint effort between the employer and public health is the most effective way to limit spread.

Tools and resources for employers

**Guidelines for businesses**

- [Businesses and Employers: COVID-19](www.health.state.mn.us/diseases/coronavirus/businesses.html)
Contact tracing for employers FAQ

1. **How can I know who my employee may have had contact with?**

   The specific method to identify workplace contacts will be different for every industry and worksite. This is why it is so important for employers to create a work plan that covers contact tracing. Reviewing camera footage, asking ill employees about their contacts with co-workers, checking work schedules, and talking with supervisors are all great methods for identifying other employees who may have been exposed to an ill worker.

2. **MDH is doing contact tracing, so why does this burden also fall on employers?**

   Employers have a unique ability to perform contact tracing similar to the contact tracing that MDH does – but often on a much shorter timeline. It is in the best interest of employers that contact tracing be completed quickly to help prevent spread of the virus in the facility. MDH and local public health (LPH) will conduct contact tracing for household and social contacts, and are always available to answer questions.

3. **What steps can I take now to help me perform contact tracing in the future, if needed?**

   Draft a plan for how you will identify contacts and ask for input from your employees. Emphasize that this plan is meant to help identify exposed individuals, so they do not become ill at work and risk spreading COVID-19 to co-workers and customers.

4. **What is the difference between isolation and quarantine?**

   Isolation is for people who have tested positive for COVID-19, to limit the spread of infection. People with COVID-19 must self-isolate at home for at least 10 days since their first symptoms; **and** symptoms have improved; **and** they have been fever-free for at least 24 hours without using medicine to reduce fever. If the person does not have symptoms, they must isolate at home for 10 days from the test date.

   Quarantine is for people who were exposed to a person who has tested positive for COVID-19, to ensure they cannot spread COVID-19 to others if they do get the disease. Quarantine is important because people can spread the disease to others for two days before they show their first symptom and would know that they are sick.
5. Are employees required to notify us if they test positive for COVID-19? Or, how will we know when we should start contact tracing?

Employees are not required to notify employers when they test positive for COVID-19; however, most do. This is why building trust with employees, having an open line of communication with them, and having a plan in place to guide contact tracing is so important.

The other way that you may be informed that an employee has tested positive is through normal case follow-up by MDH or your local public health department. MDH interviews everyone who tests positive for COVID-19 and asks where they work and what their position is. The individual is asked for consent to share their name with the employer. Routine follow-up and contact tracing may include reaching out to you for more information on possible workplace contacts.

6. Can MDH offer specific guidance to our business if we have an employee test positive?

Yes. You can email the MDH Critical Infrastructure Team with any questions (health.criticalinfrastructure@state.mn.us). Or, MDH, in partnership with local public health, can facilitate a call to work with facility management on COVID-19 best practices and how to handle employees who are exposed to COVID-19 or test positive for the virus.

7. If we have a few cases, do we need to shut down the entire facility or location?

No. As a general policy, MDH does not recommend closing facilities. Closure is usually a business decision. MDH reaches out to employers if we identify a group of cases at a particular location. We go over best practices for preventing COVID-19 in employees and the current situation with illness among employees. We can help management develop a plan for moving forward. The plan may include improvements to employee screening and testing, operational and physical changes to achieve distancing, and increased use of personal protective equipment. The best way to limit the impact of COVID-19 on a business is to modify the physical layout and the workflow to reduce the number of workers who would be considered contacts (and need to quarantine) if a co-worker were to test positive.

8. What confidentiality or privacy considerations do I have to consider when reaching out to my employees about a possible exposure?

In many situations, contact tracing by the employer can be performed while keeping the identity of the employee who has tested positive for COVID-19 confidential. If a plan is in place, supervisors can assess who was in contact with the employee with COVID-19, and let contacts know that they were exposed, without sharing information about who might have exposed them. In other situations, and depending on the facility’s plan, keeping the identity of that employee confidential may limit the ability to do thorough contact tracing. In those situations, the employer should ask permission from the employee with COVID-19 to disclose their name, only for the purposes of identifying close
contacts. Employers should carefully review relevant state and federal privacy laws and internal policies, and consult with legal counsel as necessary, to determine their obligations regarding employee confidentiality and privacy.