Investigating and responding to COVID-19 cases in non-healthcare work settings

Considerations for state and local health departments

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Purpose: Workplaces can present unique challenges for COVID-19 investigation and public health action. Because many workplaces can be crowded settings, and many jobs involve a high level of interaction with the public, these settings could allow virus to be spread easily among workers. The tools below can be used for responding to individual cases and outbreaks in non-healthcare work settings.

Guidance and tools for responding to cases among workers and patients in healthcare settings can be found at:

- Healthcare settings

Guidance for non-healthcare workplaces:

- Prioritizing non-healthcare worksite assessments for Coronavirus Disease 2019 (COVID-19)
- Example COVID-19 prioritization questions for non-health care worksite assessments

Guidance for some specific types of non-healthcare workplaces:

- Correctional and Detention Facilities
- Homeless Shelters
- Meat and Poultry Processing Workers and Employers
- Manufacturing Workers and Employers

General CDC guidance for Businesses and Workplaces, includes:

- Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020
- General Business Frequently Asked Questions
- Decision Tree for (Re)Opening Decisions for Workplaces During the COVID-19 Pandemic
- Resuming Business Toolkit

The Occupational Safety and Health Administration (OSHA) also has many resources available for employers and workers on the control and prevention of COVID-19.

The following considerations and tools are for public health response to cases in non-healthcare workplaces.

Background

Many people spend a large portion of their days at work, often in close contact (within 6 feet for a total of 15 minutes or more) with other workers and the public. It is important to recognize and take action to prevent transmission of infectious diseases, including COVID-19, in the workplace. This is especially important among critical infrastructure industries that must remain open to ensure continuity of operations and as states across the United States begin to reopen businesses. Reviewing and recognizing workplace factors (e.g., work practices, policies, and processes) and worker factors (e.g., socioeconomic

status and language or literacy barriers) may help state and local health departments, as well as employers, identify circumstances that contribute to disease transmission within the workplace and in the community. In addition, certain workplace and worker factors may provide insight into how health disparities impact infection rates and disease outcomes.

Occupation and industry data collection during disease investigation

Collecting information about a person's job (e.g., occupation and industry) during case investigation and subsequent contact tracing may facilitate early recognition of wider viral transmission and a potential workplace outbreak. Guidance for collecting these data can be found on the National Institute for Occupational Safety and Health (NIOSH) topic page *Collecting and Using Industry and Occupation Data* and in the Council of State and Territorial Epidemiologists (CSTE) Occupational Health Subcommittee document *Recommended Interim Guidance for Collecting Employment Information about COVID-19* .

Workplace COVID-19 clusters may also be reported to public health authorities (PHAs) or Occupational Safety and Health Administration (OSHA) offices by workers, employers, worker organizations, or healthcare providers, in addition to official case report investigation efforts. Public health authorities should consider proactively recommending that any employers in their jurisdiction notify them if they learn about ≥2 cases in workers who have been in close contact (within 6 feet for a total of 15 minutes or more) in a non-residential and non-healthcare worksite. For special work or living settings that are prone to rapid spread of disease, such as long-term care facilities, reporting is recommended for even just 1 case in a worker or resident.

The legal authority for communicable disease case investigation, including contact tracing lies with PHAs in state, local, and territorial health departments (SLTHDs). CDC encourages collaboration between employers and health departments in the investigation of workplace exposure to COVID-19. However, roles and responsibilities should be negotiated at the local level, given the authority and responsibility of the public health departments in disease control and given the level of interest and capacity of the employers.

Although many of the considerations and tools here are most applicable to responding to cases among workers who work in a fixed location, such as a factory or office building, it is also important to consider occupational risks that apply to mobile worker groups, such as transit workers, rideshare drivers, food delivery drivers, construction contractors, and workers (e.g., childcare providers, cleaners) who work in clients' homes. It is also important to consider that disease transmission can spread in either direction between workplaces and communities.

PHAs should develop clear communication pathways with local business communities and other organizations that work with employers and workers to help ensure that information about COVID-19 among workers is shared in a timely manner.

Resources

I. Considerations for State and Local Health Departments on Investigating Non-Healthcare Workplace Clusters of COVID-19
II. Interim Customizable Non-Healthcare Workplace Infection Control Assessment and Response (WICAR) tool — Coronavirus disease 2019 (COVID-19)
III. Sample Non-Healthcare Worker Interview Questions related to COVID-19 Exposure

I. Considerations for State and Local Health Departments on Investigating Non-Healthcare Workplace Clusters of COVID-19

Effectively investigating a non-healthcare workplace after a cluster (≥2 cases connected in time and place) is identified can help determine factors that might contribute to disease transmission. This will enable development and implementation of infection prevention and control measures to disrupt transmission of the disease. It is important to implement public health principles once COVID-19 illnesses are identified to prevent further disease transmission.

General approach to investigating a workplace cluster

When COVID-19 cases are identified in a workplace, public health authorities (PHAs) should determine if an outbreak investigation is necessary. CDC encourages collaboration between employers and health departments in the investigation of workplace exposure to COVID-19; however, the legal authority for communicable disease case investigation lies with PHAs. While workplace investigations should follow the same general approach as other outbreak investigations, specific information can be helpful to consider in the work environment. Outbreak investigations may include four components:

- Exposure, engineering, and work practice assessment;
- Epidemiologic investigation;
- Medical record review; and
- Employer policy and record review.

These components provide insight in identifying who is at risk, modes of transmission, and worker and workplace factors that contribute to disease transmission and can help inform infection prevention and control recommendations to reduce COVID-19 transmission. Because every workplace is unique, each situation will dictate which investigation components are necessary to identify appropriate controls and disrupt transmission. The Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH), trade associations, unions, state-based occupational health programs, and academic occupational health programs can provide subject matter expertise for various industry sectors, as needed.

After COVID-19 illnesses are identified in a workplace, and it is determined that an outbreak investigation is warranted, a multidisciplinary investigation team should be established by the PHA, in collaboration with CDC if assistance is needed. This team may include qualified professionals with experience in the fields of:

- Public health,
- Occupational safety and health (including industrial hygienists and engineers),
- Infection prevention and control,
- Epidemiology, and
- Medicine (occupational medicine, or if specialists are unavailable, general practitioners).

The team may also include other relevant practitioners, agencies, or stakeholders (e.g., agricultural agencies and veterinarians in the case of food processing facility outbreaks). Cultural liaisons may also be helpful to include if the workplace has a high proportion of refugees, immigrants, or other special populations within the workforce. After a team is formed, the investigation should begin in close consultation with officials from the facility including occupational health programs and unions or other worker organizations, if present in the workplace. If no union is present, it is important to include a worker representative in the investigation process to ensure all parties receive the same information. The team should follow the basic steps for conducting any outbreak investigation, but tailor their approach to incorporate principles that apply to the individual work environment. This includes developing a comprehensive set of questions based on knowledge of the industry and COVID-19.

The investigation team can learn about job-related characteristics associated with COVID-19 by reviewing information already available from case reports and interviews. This information can then be supplemented with employee records such as rosters that include occupational information (e.g., job tenure, job title), worker interviews or surveys, and review of occupational health policies and procedures.

Workplace outbreak investigation components

As mentioned above, specific information is available to consider for workplace environment safety. Components such as exposure, engineering, and work practice assessment; epidemiologic investigation; medical record review; and employer policy and record review may be included when conducting workplace outbreak investigations. Information about each component is provided below.

Exposure, engineering, and work practice assessment

Exposure assessment should identify potential pathways of exposure, assess the presence and use of workplace controls, and evaluate the capability of an employer to effectively implement additional controls needed to prevent further COVID-19 transmission. Identifying and controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, a hierarchy of controls has been used to help determine ways of implementing feasible and effective

control solutions. During this component of the investigation, it is critical to enlist help from industrial hygiene, engineering, and infection control professionals who understand how to evaluate the workplace and implement effective procedures based on the hierarchy of controls.

The hierarchy of controls includes:

- **Engineering controls**, such as:
  - Modification of workstations or workflow to increase distance between workers,
  - Use of physical barriers to separate workers from each other and clients (when applicable), and
  - Provision of readily accessible hand hygiene options (handwashing and/or hand sanitizer).
- **Administrative controls**, such as:
  - Developing and implementing social distancing policies and procedures for work areas and other areas where workers might congregate (e.g. break/dining areas, locker rooms, smoking areas, entrance/exits, parking lots)
  - Reviewing and revising procedures for cleaning and disinfecting surfaces within work areas and other areas, including appropriate scheduling of cleaning and disinfecting tasks and use of appropriate disinfection agents .
  - Worker communication and training on COVID-19 and workplace strategies to prevent infection, including information about how and why engineering, administrative, and personal protective equipment or source control measures are being implemented.
  - Encouraging workers to wear a mask at work if the hazard assessment has determined that they do not require personal protective equipment, such as a respirator or medical facemask for protection.
- **Personal protective equipment (PPE)**, which includes:
  - Providing access to and training on the use of appropriate PPE based on an assessment of workplace hazards present in the facility.
  - Potentially supplementing PPE usually worn for a given task with additional PPE for COVID-19 infection prevention.

CDC/NIOSH has developed a workplace infection control assessment and response tool (WICAR) that can be adapted as needed to assess these controls in the workplace.

Epidemiologic Investigation

An epidemiologic investigation in the workplace is important because it helps to better define the characteristics of workers who contracted COVID-19; it can offer insight into risk factors for transmission, prevalence, and incidence of disease within the workplace. A workplace epidemiologic investigation may include:

- **Defining the worker population at risk.**
  - Minimally, investigators should consider obtaining a list/s of all workers present at the workplace or in the work environment (e.g., construction site) during a defined time period (i.e., contact elicitation window as defined in the outbreak case definition).
  - At some workplaces, this may include workers employed by multiple companies (e.g., contractors, sub-contractors), workers who are responsible for performing a variety of tasks (e.g., production, transportation, customer service, food preparation, cleaning), and workers who may not be employed by the company but may have been physically present at the company during the defined period of interest (e.g., transportation and delivery services).
  - Collecting information about key variables such as department/area of work, shift, and job tasks/titles, is helpful so that attack rates for specific groups of workers can be calculated to determine the need for additional control measures.
- **Systematically identifying and documenting all known cases and contacts** among the worker population at risk. This can be done by PHAs through comparing a list of reported cases with the list of workers at risk and by contact tracing for known cases. Additional information about contact tracing can be found on the CDC COVID-19 Contact Tracing website.
- **Interviewing cases and contacts in the workplace.** A standard questionnaire should be used, following CDC guidance for case investigation and contact tracing. Questions asked in a workplace setting should address:
  - Known exposures to other confirmed or probable cases in and outside of the workplace (e.g., in the household or community),
  - General work practices,
  - Workplace controls (including PPE), and any breaches in the controls that occurred prior to the case becoming infected.

While in-person interviews are often used in outbreak investigations, during the COVID-19 pandemic, every effort should be made to interview workers by telephone or video conference instead of in-person to better protect outbreak investigation staff. CDC/NIOSH has developed a set of worker interview questions that can be adapted as needed.

- **Developing and implementing systems and procedures to provide ongoing monitoring of workers at risk**. Ongoing monitoring of workers at risk could include:
  - Enhanced symptom and illness monitoring and record keeping to document all exposed and symptomatic personnel. This includes daily/pre-shift symptom screening performed by employee health care staff or contractors. An electronic monitoring and notification system can also be used to provide ways for employees to self-report and monitor symptoms through a website or mobile app, with alerts sent to a health professional.
  - Absenteeism monitoring with special focus on absences due to COVID-19-like-illness (CLI).

If an employer chooses to conduct enhanced symptom and illness monitoring, they should routinely and systematically review screening results. They should also have a referral process in place that will direct employees with signs or symptoms of CLI to the system established by local public health departments for further assessment. It is important to note that some workplaces, might have a system already in place for employee monitoring, assessment, and testing. In these workplaces, employers should have systems set up to ensure all test results are reported to the appropriate public health authorities to ensure proper follow up and investigation. In some cases, public health authorities may have the right to access, monitor, and review all records.

Medical Record Review

Medical record review for a workplace cluster can include conducting medical records abstraction to assist with the epidemiologic component of the investigation. Individuals, organizations, and agencies that are covered entities under the Health Insurance Portability and Accountability Act (HIPAA) must abide by HIPAA rules. However, HIPAA permits covered entities to disclose protected health information without authorization for specified public health purposes. Records that public health authorities may be able to access include:

- Employee health records from in-house or contracted providers,
- Workers compensation records, and
- Records from workers' personal medical providers.

Employer Policy and Record Review

Relevant occupational health and medical policies and procedures to review include:

- COVID-19 response plans,
- Employee health screening,
- Health monitoring,
- Sick/medical leave policies,
- Telework policies
- Return-to-work criteria,
- Training policies,
- Respiratory protection programs, and
- Standard operating procedures.

Other employer records that may be needed to supplement the investigation include:

- Facility specific floor plans or diagrams,
- Process and job task descriptions,
- Photographs or videos,
- OSHA logs ,
- Employee rosters,
- Shift schedules, and

- Attendance records.

In some cases, PHAs may also request access to records of client interactions (e.g., appointment or site visit calendars) in order to identify non-worker workplace contacts of cases.

In Summary

When information from these investigation components is collected and analyzed, the team should provide site-specific recommendations to workplace officials. These will be shared with the requester of the cluster investigation and any unions present within the workplace. The team can also provide specific training or expertise to the employer as needed. Recommendations and training should be based on best practices followed by related industries and provided by the CDC and state and local health departments for COVID-19.

Please check this site for additional COVID-19 guidance for businesses and workplaces: https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/businesses-employers.html

II. Interim Customizable Non-Healthcare Workplace Infection Control Assessment and Response (WICAR) tool — Coronavirus disease 2019 (COVID-19)

> PDF version: Interim Customizable Non-Healthcare Workplace Infection Control Assessment and Response (WICAR) tool — Coronavirus disease 2019 (COVID-19) [23 pages]

This tool is intended to assist health departments, employers, and occupational safety and health professionals with assessment of infection prevention and control programs and practices in non-healthcare workplaces in order to make recommendations regarding COVID-19. Information to complete an assessment can be gathered through review of written policies and procedures, discussion with workplace management and worker representatives, and direct observation if a site evaluation is planned. This tool is not intended to assess regulatory compliance. If feasible, direct observation of infection prevention and control practices is encouraged. This tool should be used by qualified public health or health and safety professionals familiar with the topics and content of the tool (assisted as needed by CDC/NIOSH project officer(s) and state or local public health entities).

This tool can serve as a template for assessing a workplace; elements and response options can be removed or added depending on the local situation, assessment goals, and workplace characteristics.

Overview

Section 1: Facility and workforce characteristics

Section 2: Facility policies and procedures

Section 3: Infection prevention and control policies and practices

Section 4: Guidelines and other resources

Section 5: Direct observation of facility practices

III. Sample Non-Healthcare Worker Interview Questions related to COVID-19 Exposure

PDF version: Sample Non-Healthcare Worker Interview Questions related to COVID-19 Exposure [18 Pages]

This tool is intended to assist health departments in the assessment of non-healthcare worker exposures to COVID-19 for outbreak investigations or research studies.

Users are encouraged to select and customize the questions from this list that are most relevant to their needs, and to add questions as appropriate. These questions can be administered through personal interview (in-person or by telephone) or through a paper or online form.

Additional notes:

- It is not intended that all the questions included in this document will be used in any single investigation. Questions should be customized or selected to fit the situation.
- Although sections 4 and 5 are not specific to workplace exposures, they are included in case users would like examples of questions on these topics that may be useful in putting information collected on workplace exposures into the broader context of workers' non-occupational exposures and informational and practical needs.
- Some of the occupational information included in Section 1 is also included in Appendix C—Data Elements for Case Investigation and Contact Tracing Forms within the document Health Departments: Interim guidance on developing a COVID-19 case investigation & contact tracing plan , so it may already be part of contact tracing forms.
- Some of the workplace exposure information included in Section 2 is also included in the Interim Customizable Workplace Infection Control Assessment and Response tool (WICAR) — Coronavirus disease 2019 (COVID-19). If that tool (or something similar) has been used to assess the workplace, these questions will not be needed in the worker interview component of the investigation.

Overview

Section 1. OCCUPATIONAL INFORMATION

NOTE TO INTERVIEWER: The questions in Sections 1–4 refer to the 14 days before the date of first symptom onset. If asymptomatic or if the date of first symptom onset is unknown, the questions can refer to 14 days before the interviewee's first positive test sample was collected. To guide these questions, record the following dates:

Date of first symptom onset or first positive test sample, whichever is earlier: MM / DD / YYYY

14 days before first symptom onset or first positive test, whichever is earlier: MM / DD / YYYY

Offer the interviewee a calendar to help them answer these questions. Explain that the following questions refer to the 14-day period between the two dates listed above.

1. During the 14-day period, did you work outside of your home?
   ☐ Yes. → If yes, continue
   ☐ No. → If no, skip to the "Community exposures" section.

2. If you were employed at any time during the 14-day period, when was the last day you worked outside your home?

(MM/DD/YYYY) _____

If you had multiple jobs, the next few questions refer to your main job outside your home. (Additional jobs are covered in question 20.)

3. During the 14-day period, what kind of work did you do?
   (for example, janitor, cashier, auto mechanic)

   _____

4. During the 14-day period, what kind of business or industry did you work in?
   (for example, elementary school, clothing manufacturing, restaurant)

   _____

5. During the 14-day period, what was the name of your employer or business?

   _____

6. During the 14-day period, which of the following best describes you?
   - ☐ I am a regular, permanent employee, paid by the company I work for (standard work arrangement)
   - ☐ I am paid by a temporary agency
   - ☐ I am paid by a contractor
   - ☐ I am a self-employed business owner
   - ☐ I work as an independent contractor, independent consultant, or freelance worker
   - ☐ I work in some other work arrangement,

   specify _____

7. During the 14-day period, approximately how many people worked at this location?

   - ☐ 1 employee (just you)
   - ☐ 2-9 employees
   - ☐ 10-24 employees
   - ☐ 25-49 employees
   - ☐ 50-99 employees
   - ☐ 100-249 employees
   - ☐ 250-499 employees
   - ☐ 500-999 employees
   - ☐ 1000 employees or more
   - ☐ Don't know

8. During the 14-day period, which shift did you work?
   - ☐ Regular daytime schedule (e.g., first shift)
   - ☐ Regular evening shift (e.g., second shift)
   - ☐ Regular night shift (e.g., third or overnight shift)
   - ☐ Rotating shift (e.g., works on different shifts on different days)
   - ☐ Other, specify _____

9. During the 14-day period, how many shifts did you work? _____

10. During the 14-day period, how many hours did you work each shift? _____

11. During the 14-day period, what type of transportation did you use to get to work?
    (select all that apply)

    - ☐ Bus
    - ☐ Rideshare (e.g., Uber/Lyft)/taxi
    - ☐ Private car
    - ☐ Train/subway
    - ☐ Carpool/van

- ☐ Walk/bike
- ☐ Other, please specify _____
- ☐ Don't know

12. If you shared a ride either in a bus, train/subway, car, or other type vehicle,

a) Were you able to physically distance yourself from others in the same vehicle by at least 6 feet?
- ☐ Yes
- ☐ No

b) Did you wear a mask that covered your nose and mouth?
- ☐ Yes
- ☐ No

c) Did everyone else in the vehicle wear a mask that covered their nose and mouth?
- ☐ Yes
- ☐ No

13. During the 14-day period, what was your job title?
- ☐ Reception area
- ☐ Production area
- ☐ Break area

15. During the 14-day period, what areas of the facility did you spend most of your time in? (select all that apply)
- ☐ Harvest (could also be referred to as hot)
- ☐ Fabrication (could also be referred to as cold)
- ☐ Administrative office
- ☐ Other, specify _____

16. During the 14-day period, how often did you wear a mask (for example, a surgical mask) while at work for the purposes of source control (to contain your respiratory secretions) not as personal protective equipment?
- ☐ Always
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ Don't know

17. During the 14-day period, how often was everyone else in the facility (e.g., co-workers, customers/clients, visitors) wearing a mask (for example, a surgical mask) while at work?
- ☐ Always
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ Don't know

18. During the 14-day period, did you use any personal protective equipment (PPE)?
- ☐ Yes
- ☐ No

19. Why did you use PPE?
- ☐ For protection from a pre-COVID-19 pandemic workplace chemical, particulate, or biological hazard
- ☐ For protection from COVID-19

Did you use...?	**If yes, how often did you use this type of PPE?**
Gloves: ☐ Yes ☐ No ☐ Don't know If yes, what kind?	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

Did you use...?	If yes, how often did you use this type of PPE?
Goggles/safety glasses ☐ Yes ☐ No ☐ Don't know	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know
Face shield ☐ Yes ☐ No ☐ Don't know	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know
Respirator ☐ Yes ☐ No ☐ Don't know If yes, what kind? *(Note: an infographic with pictures of different types of respiratory protection can be found at https://www.cdc.gov/niosh/npptl/pdfs/RespProtectionTypes-508.pdf)* ☐ Disposable Filtering Facepiece Respirator (e.g., N95, P100, etc.) ☐ Elastomeric Half Facepiece Respirator (reusable with changeable cartridges) ☐ Elastomeric Full Facepiece Respirator (reusable with changeable cartridges) ☐ Powered-Air Purifying Respirator or PAPR If yes, did you receive training on how to use respirators properly? ☐ Yes ☐ No ☐ Don't know If you used a disposable respirator, were you required to re-use it? ☐ Yes ☐ No ☐ Don't know If a disposable respirator was re-used, was it decontaminated first? ☐ Yes, specify method _____ ☐ No ☐ Don't know	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know
Smock/Coveralls/Other type of body covering ☐ Yes ☐ No ☐ Don't know If yes, what type? (select all that apply) ☐ Tyvek or equivalent ☐ Cloth (washable) ☐ Disposable	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

Did you use...?	If yes, how often did you use this type of PPE?
Do you wear any other PPE while at work? ☐ Yes ☐ No ☐ Don't know If yes, please specify:	☐ Always ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

20. During the 14-day period, did you work at any other jobs?

☐ Yes
☐ No
☐ Don't know

If yes,
20a. what kind of work did you do? Please list for all other jobs.
(for example, registered nurse, janitor, cashier, auto mechanic) Please list for all other jobs.

_____

20b. what kind of business or industry did you work in? Please list for all other jobs.
(for example, hospital, elementary school, clothing manufacturing, restaurant)

_____

Section 2. SPECIFIC WORKPLACE EXPOSURES

NOTE TO INTERVIEWER: For the following questions, close contact (within 6 feet for a total of 15 minutes or more) means being 6 feet (or 2 meters) or closer for at least 15 minutes. Six feet (2 meters) is about the length of a twin or full-size mattress.

1. 1. During the 14-day period, did you have close contact (within 6 feet for a total of 15 minutes or more) with a person or persons who were visibly ill (or had probable or confirmed COVID-19) at your workplace?
   ☐ Yes
   ☐ No → If no, skip to the "Community exposures" section.
   ☐ Don't know

If yes,
1a. What was the first day you had close contact (within 6 feet for a total of 15 minutes or more) with a person who was visibly ill (or had probable or confirmed COVID-19)?((MM/DD/YYYY) _____

1b. What was the last day you had close contact (within 6 feet for a total of 15 minutes or more) a person who was visibly ill (or had probable or confirmed COVID-19)?

(MM/DD/YYYY) _____

1c. Where in the workplace did you have close contact (within 6 feet for a total of 15 minutes or more) with a person or persons who were visibly ill (or had probable or confirmed COVID-19)? (select all that apply)

☐ When entering or exiting your workplace
☐ In a locker room or restroom
☐ In the production area
☐ In break areas or cafeteria
☐ In an on-site occupational health clinic
☐ Getting to or from work
☐ In another location (specify): _____

1d. When you had close contact (within 6 feet for a total of 15 minutes or more) with a person or persons who were visibly ill (or had probable or confirmed COVID-19) at the workplace, was that person's/those persons' nose and mouth covered with a mask?

- ☐ Always
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ Don't know

2. During the 14-day period, were any of the following done at your workplace?
(Notes: This list can be customized depending on work setting; These questions do not need to be included in worker interviews if a workplace assessment has been performed.)

All employees were screened before entering the workplace	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Work practices made it possible to remain 6 feet (2 meters) away from other people	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Barriers were in place between workstations	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Workers were using personal cooling fans	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know

It was possible to remain 6 feet (2 meters) away from other people in non-work areas, including:

Entrances and exits	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Clock in/out areas	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Uniform/equipment pickup areas	☐ Yes ☐ No ☐ Don't know If yes, was it for all or some of the 14 days? ☐ All ☐ Some ☐ Don't know
Break areas	☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

Dining area/cafeteria — ☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

Locker rooms — ☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

Restrooms — ☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

Hand cleaning supplies (soap and clean water or alcohol-based hand sanitizer) were available in convenient locations — ☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

Leave policies made it possible to stay home when ill — ☐ Yes ☐ No ☐ Don't know

If yes, was it for all or some of the 14 days?
☐ All ☐ Some ☐ Don't know

3. Was training and communication provided at work on the following topics?
(Notes: This list can be customized depending on work setting; These questions do not need to be included in worker interviews if a workplace assessment has been performed.)

Signs and symptoms of COVID-19 — ☐ Yes ☐ No ☐ Don't know

How COVID-19 is spread — ☐ Yes ☐ No ☐ Don't know

What to do if you are sick before or at work — ☐ Yes ☐ No ☐ Don't know

Hand hygiene — ☐ Yes ☐ No ☐ Don't know

How to protect yourself from COVID-19 infection at work — ☐ Yes ☐ No ☐ Don't know

How to protect yourself from COVID-19 infection outside of work — ☐ Yes ☐ No ☐ Don't know

How to maintain social distancing (maintaining distance of at least 6 feet between co-workers, customers, etc.) at work — ☐ Yes ☐ No ☐ Don't know

How to safely put on and take off personal protective equipment (PPE) — ☐ Yes ☐ No ☐ Don't know

How to safely put on and take off masks ☐ Yes ☐ No ☐ Don't know

Sick leave policy ☐ Yes ☐ No ☐ Don't know

Section 3. ALTERNATIVE FORMAT FOR PPE QUESTIONS

Was any personal protective equipment (PPE) or other type of personal barrier used for any work activities/tasks?

☐ Yes ☐ No ☐ Unknown

PPE/Barrier Type	Task1 (T1): _____	Task2 (T2): _____	Task3 (T3): _____	For each task, did the use of PPE/Barrier change due to COVID-19?
Disposable gloves	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19
Surgical/face mask; describe:	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19
Goggles/safety glasses; describe:	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19
Face shield	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19

PPE/Barrier Type	Task1 (T1): _____	Task2 (T2): _____	Task3 (T3): _____	For each task, did the use of PPE/Barrier change due to COVID-19?
Respirator* ☐ disposable N95; ☐ elastomeric half face, ☐ elastomeric full face, ☐ PAPR Was this the same type (model/size) the worker was fit tested on? (does not apply to PAPR) ☐ yes, ☐ no	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19
Gown / Coveralls Check if: ☐ Cloth (washable) ☐ Disposable)	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19
Other, specify	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	Used in task? ☐ Yes ☐ No	☐ T1 ☐ T2 ☐ T3 No change, this was already routinely used and remained available ☐ T1 ☐ T2 ☐ T3 Yes, this was added due to COVID-19 ☐ T1 ☐ T2 ☐ T3 Yes, this was in routine use before, but availability decreased due to COVID-19

*Illustrations of different types of respirators are available at https://www.cdc.gov/niosh/npptl/pdfs/RespProtectionTypes-508.pdf

Section 4. COMMUNITY EXPOSURES

NOTE TO INTERVIEWER: Questions from this section would only be used if this information is unavailable from a case report form or other available records.

For the following questions, close contact is being within 6 feet for a total of 15 minutes or more). Six feet (2 meters) is about the length of a twin or full-size mattress.

1. During the 14-day period, did you…

Exposure	Answer
…attend a gathering of >50 people (e.g., religious event, wedding, party, dance, concert, banquet, festival, sports event, funeral, or other event)?	☐ Yes ☐ No ☐ Don't Know
…attend a gathering of >10 but ≤50 people (e.g., religious event, wedding, party, funeral, or other event)?	☐ Yes ☐ No ☐ Don't Know
…use public or shared transportation (bus, train, airplane	☐ Yes ☐ No ☐ Don't Know

...use public or shared transportation (bus, train, airplane, Uber/Lyft, taxi, carpooling) *to get to and from places other than work?*	☐ Yes	☐ No	☐ Don't Know
... go to school or daycare in-person?	☐ Yes	☐ No	☐ Don't Know
...have a household member who went to school or daycare in-person?	☐ Yes	☐ No	☐ Don't Know
...have close contact (within 6 feet for a total of 15 minutes or more) with a sick person who had close contact (within 6 feet for a total of 15 minutes or more) with a COVID-19 patient (i.e., secondary contact with a person with confirmed COVID-19)?	☐ Yes	☐ No	☐ Don't Know
...have close contact (within 6 feet for a total of 15 minutes or more) with a person who had traveled in the previous 2 weeks?	☐ Yes	☐ No	☐ Don't Know

2. During the 14-day period, did you have close contact with a person or persons who were visibly ill (or had probable or confirmed COVID-19) **outside of the workplace**?

☐ Yes
☐ No
☐ Don't Know

If yes,
2a. When was the first day you had close contact with a person or persons who were visibly ill (or had probable or confirmed COVID-19)?
(MM/DD/YYYY) _____

2b. When was the last day you had close contact with a person or persons who were visibly ill (or had probable or confirmed COVID-19)?
(MM/DD/YYYY) _____

2c. How do you know this person(s)? (select all that apply)
☐ Household member/intimate partner
☐ Family (who does not live with you)
☐ Friend (non-household member)
☐ Co-worker
☐ Contact only – no relationship
☐ Other (specify):_____

2d. Where did you have close contact with this person(s)? (select all that apply)
☐ Household
☐ Daycare
☐ School/University
☐ Public Transportation/Rideshare/Carpooling
☐ Hotel
☐ Healthcare setting
☐ Other (specify): _____

3. During the 14-day period, did you travel away from home (out of the county, state, or country)?

☐ Yes—domestic travel

Where did you go? _____
How did you get there?
☐ Airplane ☐ Train ☐ Bus ☐ Private car ☐ Taxi/Rideshare
☐ Other, specify _____

☐ Yes—international travel, specify destination(s): _____

Where did you go? _____
How did you get there?
☐ Airplane ☐ Train ☐ Bus ☐ Private car ☐ Taxi/Rideshare
☐ Other, specify _____

☐ No
☐ Don't know

4. What was your living situation?

☐ Lived in my own home/apartment in the same community as the facility in which I work
☐ Lived in my own home/apartment in another community
☐ Lived in temporary housing while I was working
☐ Did not have any reliable housing during this time
☐ Other (specify): _____

5. How many other people lived with you? _____

6. What type of housing (select one) did you live in?

☐ Apartment
☐ Trailer
☐ House
☐ Hotel
☐ Other (please specify)_____

7. Was your housing provided by the employer?

☐ Yes
☐ No

8. How many bedrooms were there in your home? _____
9. How many bathrooms were there in your home? _____

10. If other persons lived in the household, did they work outside of the home?

☐ Yes
☐ No

11. If yes, where did they work (select all that apply)?

☐ Same place as you
☐ Long-term care facility
☐ Hospital
☐ Other healthcare setting (including home health care)
☐ School
☐ Day care
☐ Corrections facility
☐ Food processing facility
☐ Other type of factory or warehouse
☐ Farming
☐ Retail (store)
☐ Mobile job (e.g., driver, package deliverer)
☐ Other (please specify_____)

Section 5. ABILITY TO QUARANTINE AND RISK TO OTHER HOUSEHOLD MEMBERS

1. What is the age of the eldest person in your household?_____ (years)
2. What is the age of the youngest person in your household? _____
3. Are there any people living in your household with any of the following health conditions? (check all that apply)

   - ☐ Diabetes
   - ☐ Obesity
   - ☐ Heart disease
   - ☐ Chronic respiratory disease (e.g., asthma, COPD, emphysema)
   - ☐ Cancer
   - ☐ Kidney disease
   - ☐ Pregnancy
   - ☐ Other chronic health condition

4. Are you able to maintain at least 6 feet of distance from other persons in the home?

   - ☐ Yes
   - ☐ No

5. If you were given the option of isolating yourself outside of the home to prevent transmission to other members of the household, would you take that option?

   - ☐ Yes
   - ☐ No

   If no, why not? _____

   What would make it possible to allow you to isolate in a location outside the home?

   _____