



Protecting Worker Health

Returning to Work: Small Manufacturing, Repair and Maintenance Shops

Guidance Document

[aiha.org](https://www.aiha.org)

Overview

With stay at home and shelter in place restrictions beginning to lift, small manufacturing sites, repair & maintenance shops, etc. are faced with difficult questions that must be addressed as they transition back to normal operations, such as:

- How can we protect our employees, third-parties, and customers from the disease?
- How can we minimize the risk of disease transmission if those that are ill or those who have had contact with positive COVID-19 in our workforce?
- What steps are needed if an employee had COVID-19 symptoms or a confirmed test for COVID-19?

Common examples of small manufacturing sites and maintenance shops include:

- Plants that directly manufacture, package and transport material and goods for market
- Plants that manufacture parts, materials & goods as parts that are sent to other manufacturers
- Welding shops, mechanical shops, small repair shops, etc.

What should an Employer do to protect themselves and their workers?

Small Manufacturing sites, Maintenance & Repair Shops, etc. should continually monitor global (World Health Organization WHO), federal (CDC), state, and local guidelines for changes in recommendations, disinfection strategies, worker protections and other best management practices.

In addition, employers should consider the following strategies for reducing the risk of COVID-19 transmission in regards to physical distancing, ventilation, enhanced cleaning practices, restrooms, gathering areas and contact surfaces, personal hygiene,

employee wellness, personal protective equipment (COVID-19 related protective equipment should include face coverings/ masks and/or face shields for close contact activities, regular work gloves) training, waste and laundering, and communication.

Tips to Consider to Return to Normal Business Operations:

- Develop ongoing communications to your employees regarding the facts of SARS-CoV-2 virus and COVID-19 disease.
- In alignment with CDC recommendations provide employees with face coverings. Also consider providing gloves, shoe covers and hand sanitizer and ensure employees are trained on the proper use and limitations of personal protective equipment (PPE)

NOTE: Face coverings primarily protect others not yourself.

NOTE: If an employer chooses to provide an N95 respirator, please fully consider all the potential OSHA requirements.

- In alignment with CDC recommendations, face coverings should be worn while at work.
- Face coverings would not be required if you work alone in a separate single space, or when doing so would pose a safety or security risk.
- If possible stagger shifts to isolate and compartmentalize staff. This will allow protection of others if a breakout occurs and reduces/limits the number of people who are exposed at shift change. Having the same teams work together can limit the reach of a potential outbreak.
- Consider a 4-day work week, or other variation where possible, to allow for 72 hours of downtime at the facility.
 - this allows for limited exposure to 4 days instead of 5 days and;



- The CDC and other recent studies have shown COVID-19 can stay active up to 3 days on surfaces.
- Complete a task-based review/mapping of the business work areas to determine best strategies for social distancing of at least 6 feet, and ensure staff have face coverings as necessary.
- Identify all high touch surfaces and ensure they are cleaned and disinfected on a daily basis.
- For two person jobs, determine what additional PPE may be required besides face coverings.
- Where individual workstations prevent 6 foot separation, utilize plastic partitions between employees or, where possible, spread out the work stations.
- Reduce the number of individuals to the site to essential staff to complete the work. Temporary spaces (site/job trailers should be cleaned and disinfected daily).
- Inform all customers, sales personnel and visitors to wear face coverings and to abide by physical distancing requirements when on site.
- No handshake greetings.
- Eliminate non-essential visits, such as job tours, vendor demos, etc. Essential visits should be done in a dedicated, isolated space if available.
- Do not share clipboards, but rather use a white board to demonstrate the concept in the field.
- If you are symptomatic – do not visit the site and stay home.
- Establish an isolated area for all delivery companies to drop off materials and supplies. Require delivery and shipping personnel to wear mask and gloves when arriving at the site.
- Consider wiping down/disinfecting all items to be shipped prior to pick up.
- Reduce tasks requiring a large number of people to be in one area.
- Weekly safety/toolbox talks should be virtual or in smaller groups. All hands meetings shall be reduced in frequency. Consider limiting meetings to 10 people or less. Employees should consider using virtual meeting tools, including phone, TEAMS, VTC or WebEx, in lieu of in-person meetings, whenever possible.
- Employee teams or identified groups shall clean and disinfect their shared workstations and equipment after each use or shift.
- Do not share tools if possible. When tools are shared, ensure they are cleaned and disinfected before and after each use.
- All large shared equipment and tools shall be cleaned before and after use.
- Ensure toolbox talks have adequate spacing and only have one person note who is in attendance.
- Encourage employees to raise other measures that can be put into place to further reduce the potential spread of the virus.
- Modify break areas to allow for physical distancing. Stagger breaks to reduce people in break areas.
- Dining tables should be marked with “X”s to stop people from sitting close to each other.
- Breakrooms should have chairs removed to minimize any chance of gathering.
- Janitorial staff should be disinfecting eating areas hourly or as frequently as possible.
- Reduce the number of people in company-owned vehicles or organized van pools.
- Encourage staff to wash clothes daily and face coverings daily on the warmest setting possible.
- Monitor employees’ wellness. If they are not feeling well, they should stay home.
- Revisit your leave or sick program to allow for time off and follow all HR Policies and HIPAA/other regulatory requirements.



- Provide up-to-date information about COVID-19, SARS-CoV-2 and local, state and federal guidelines.
 - Provide additional information for employee and family use (i.e., EAP).
 - If a positive COVID-19 case amongst the workforce is identified, quickly disinfect spaces the worker was at.
 - Maintain a daily approved visitor log. This log should include the date, time, and contact information of the visitor.
 - Stop employees from randomly walking floors, between floors, or buildings to reduce cross-contamination.
 - Consider wearable technology such as proximity devices worn on hard hats or wrist bands to monitor employee physical distancing and tracing of contacts.
 - Personal Protective Equipment (PPE) for close contact activities that cannot be adjusted for physical distancing, consider providing enhanced PPE or a face shield with a face covering while fully considering all the potential OSHA requirements.
- NOTE: If an employer chooses to provide an N95 respirator, please fully consider all the potential OSHA requirements.**
- Employer Response to positive case:
 - Cleaning and disinfecting should be done immediately by trained personnel and they must wear appropriate PPE, including face coverings and dispose of gloves after use and wash hands and face when complete. Visibly dirty surfaces shall be cleaned using a detergent or soap and water PRIOR to disinfection. For disinfection, diluted household bleach solutions, alcohol solutions with at least 70 percent alcohol, and EPA-registered disinfectants on List-N should be effective. Recommended bleach solution mixture for cleaning:
 - Immediately trace the movement of the employee from the past 72 hours. Clean and disinfect the locations where the employee may have worked or been in contact.
 - Contact-tracing and sharing of employee information must be done under the guidance of Human Resources if available due to privacy requirements of HIPAA and/or ADA.
 - If an employee tests positive:
 - The employee shall be isolated to the area they are in currently.
 - Any individuals working with the employee shall also be isolated and all parties will follow social distancing rules.
 - The general contractor/client shall be notified.
 - Remove the employee who tested positive for a minimum of 14 days.
 - Follow primary care physician (PCP) instructions.
 - Follow CDC and health care guidance.
 - Follow CDC return-to-work protocol in conjunction with HR return-to-work process if applicable.
 - Employees who are sick with non-COVID-19 illness, but show similar symptoms (fever, cough, shortness of breath), should be sent home for a minimum of 72 hours. Returning to work after 72 hours symptom free without aid of medication, following HR guidelines and regulations.
 - Trace 48 hours prior to onset of symptoms for direct contact personnel had contact with the affected employee.
 - For transparency, each contractor should notify the client of the situation (involving your HR professional to ensure privacy requirements are followed and maintained).
 - Employer Human Resources engages to provide supportive care to worker and family.



- Follow CDC guideline and exposure protocol for Critical Infrastructure Workers.
- Communicate and reinforce with employees, while maintaining PII and HIPAA requirements, that they may have been exposed and to closely monitor their health, temperature and current symptoms as identified by CDC.
- Provide employees with additional PPE and monitoring (at the company's discretion).
- Follow Critical Infrastructure Exposure Protocol
 - [CDC interim guidance](#)
 - [Best Management Practices Protocols](#)

Screening and Temperature Check Tips for Employees

- Employees can take their temperature at home or have their temperature taken using an infrared camera and answer a medical questionnaire to evaluate their current physical state before entering any job site.
- Employees, who monitor their temperature at home, should update their supervisor if they have a temperature exceeding 100.4 degrees Fahrenheit.
- Any employee who has a temperature that exceeds 100.4 degrees Fahrenheit should be further evaluated for COVID-19 symptoms to determine their ability to access the workplace.
- Per the medical questionnaire, any employee who answers “Yes” to any of the questions will be sent to the secondary evaluation area, where the designated onsite nurse or contact (if available) will assess and determine if they are allowed on the job site.
 - Example Medical Questionnaire.
 - Have you, or a person you have been in close contact with, been diagnosed with COVID-19 within the last 14 days? (Close contact is 6 feet or less for more than 10 minutes).
 - Have you experienced any cold or flu-like symptoms in the last 72 hours (to include fever, shortness of breath, cough, sore throat, or difficulty breathing)?
 - Have you traveled internationally or another hot spot (e.g., New York) in the last 14 days?

Enhanced Cleaning Practices

- Select appropriate disinfectants – consider effectiveness and safety.
 - The U.S. Environmental Protection Agency (EPA) has developed a [list of products](#) that meet EPA's criteria for use against SARS-CoV-2.
 - Review product labels and Safety Data Sheets and follow manufacturer specifications.
 - Consider consulting industrial hygiene experts if additional advice is needed.
- Establish a disinfection routine.
 - Ensure disinfection protocols follow product instructions for application and contact time.
 - Provide hand sanitizer in work van/trucks and ask employees to apply prior to touching interior surfaces.
 - Use disposable products when possible.
 - If reusable products are used, ensure that these products are maintained, handled, and cleaned as instructed in product instructions.
 - Consider using a checklist or audit system to track when and how cleaning is conducted.

Ventilation

- Get fresh air to the workers/workplace and properly utilize ventilation system. Some ways to do this or seek help:
 - Maximize fresh air through your ventilation system.
 - Maintain relative humidity at 40-60%.
 - Ensure restroom is under negative pressure.



- If you don't know how, ask an HVAC professional and see [ASHRAE](#) updates for more information.
- Consider using portable HEPA filtration units for localized control.
- If fans, such as pedestal fans or hard mounted fans, are used in the facility, take steps to minimize air from fans blowing from one person directly at another individual. If fans are disabled or removed, employers should remain aware of, and take steps to prevent, [heat hazards](#).
- Ensure restroom facilities are under negative pressure. **(NOTE: Contact an occupational health and safety professional or ventilation specialist for advice on how to best utilize ventilation systems).**

Restrooms

- Doors to multi-stall restrooms should be able to be opened and closed without touching handles if at all possible.
- For single restrooms, provide signage and materials (paper towels and trash cans) for individuals to use without touching the handles.
- Place signs indicating that toilet lids (if present) should be closed before flushing.
- Place signs asking employees to wash hands before and after using the restroom.
- Provide paper towels in restrooms and disconnect or tape-off hand air dryers.
- Double efforts to keep bathrooms clean and properly disinfected.
- Provide for additional hand washing stations with soap and water in common areas and throughout the site.
 - Also provide hand sanitizer in vehicles such as forklifts and workstations

What should an Employee do to protect themselves?

- Educate yourself with the facts of COVID-19.
 - Obtain your information about COVID-19 from credible sources.
- If you feel unwell or have any of the symptoms associated with COVID-19 and/or have been exposed to someone who is COVID-19 positive, stay home and follow the [CDC exposure protocol](#) related to your job site.

NOTE: Employer HR Policies, HIPAA guidelines and other laws should be followed at all times.

- Self-monitor your temperature every morning.
- If you test positive:
 - Stay home and isolate yourself.
 - Contact your supervisor and advise them of your results.
 - Identify to them if you were commuting with others.
 - Tell them who you had come in contact with or shared tools or workspaces with at least 48 hours prior to the onset of symptoms.

Returning back to work, employee should at minimum follow most recent [CDC guidelines](#).

- Understand the rules within the workspace – no large gatherings.
- Let your employer know if you have concerns about the PPE that may be provided to you and that you are properly instructed on how to use it.
- Maintain good hygiene practices (washing hands with soap and water) or a hand sanitizer with at [least 60% alcohol](#).



Resources

- [AGC: The Construction Association – Pro- active Measures for Addressing COVID-19 / Pre-Screening Questionnaire](#)
- [AGC: The Construction Association - COVID-19 Recommended Practices for Construction Job-sites](#)
- [Cybersecurity and Infrastructure Security Agency CISA resource on Critical Infrastructure Workers](#)
- Numerous **wellness questionnaire examples** are available online (e.g., [South Dakota Department of Health's COVID-19: Employee Screening Questions and Guidelines](#))
- The EPA has developed a [list of disinfectants](#) for use against SARS-CoV-2.
- **American Society of Heating, Refrigeration, Air-conditioning Engineers** [ASHRAE COVID 19 resource for ventilation](#)
- [CDC Interim Critical Infrastructure Guidelines](#)
- [Foundation for Manufacturing Excellence's COVID-19 Guidance & Resources for Small and Medium Manufacturers](#)
- [EPA-Registered Approved Disinfectant List N.](#)
- AIHA's Indoor Environmental Quality Committee developed these guidance documents about re-opening and cleaning buildings after closures due to COVID-19: [Recovering from COVID-19 Building Closures and Workplace Cleaning for COVID-19.](#)
- [American Cleaning Institute's COVID-19 Resources](#)

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About Occupational Health and Safety Professionals

Occupational health and safety (OHS) professionals (also known as industrial hygienists) practice the science of anticipating, recognizing, evaluating, and controlling workplace conditions that may cause workers' injury or illness. Through a continuous improvement cycle of planning, doing, checking and acting, OHS professionals make sure workplaces are healthy and safe.

Get additional resources at AIHA's Coronavirus Outbreak Resource Center.

https://www.aiha.org/public-resources/consumer-resources/coronavirus_outbreak_resources

Find a qualified industrial hygiene and OEHS professionals near you in our Consultants Listing. <https://www.aiha.org/consultants-directory>.



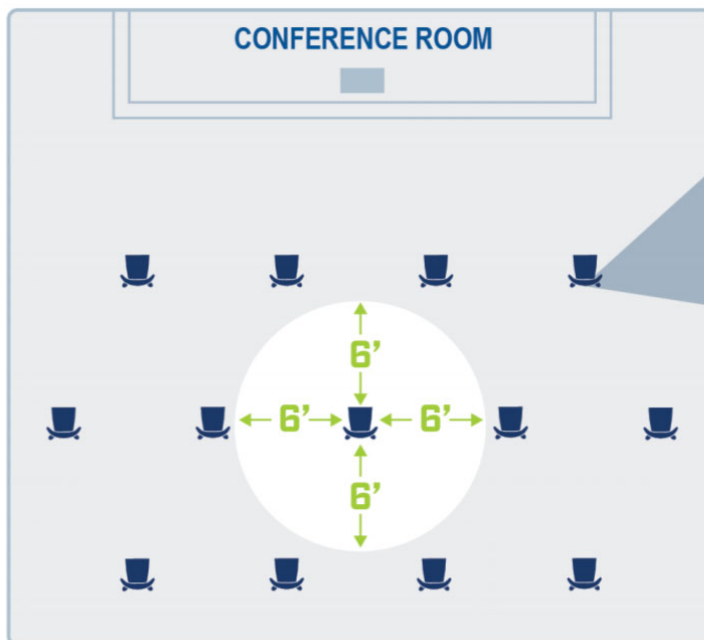
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Periodically scan this QR Code to check if any new versions of AIHA's guidance documents have been posted, as well as to find guidance documents for other businesses and industries.



Communication

Posters that are visible through the workspace for general public and employees or as a quick take-away.



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