



Coronavirus Disease 2019 (COVID-19)

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Guidance for General Laboratory Safety Practices during the COVID-19 Pandemic

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General Guidance

This guidance is to address the general workflow safety concerns of laboratory personnel during the COVID-19 pandemic. All laboratories should perform site- and activity-specific risk assessments to determine the most appropriate safety measures to implement for particular circumstances. In addition, facilities should adhere to local policies and procedures as well as all applicable federal, state, and local regulations and public health guidelines.

Risk assessments should include the following considerations:

- Analyze the number of people that the laboratory space can realistically and safely accommodate while maintaining [social distancing](#).
- Assess the flow of personnel traffic. Where possible, design one-way paths for staff to walk through the laboratory space.
- Assess procedures for cleaning and sanitizing commonly shared equipment and areas—for example, counters, benchtops, and desks—to ensure clean surfaces and equipment for all users.
- Review emergency communication and operational plans, including how to protect staff at higher risk for severe illness from COVID-19.

Every institution should have a COVID-19 health and safety plan to protect employees. This plan should be shared with all staff. Ideally, this plan would:

- Describe [steps to help prevent the spread of COVID-19 if an employee is sick](#).
- Instruct sick employees to stay home and not return to work until [the criteria to discontinue home isolation are met](#), in consultation with healthcare providers and state and local health departments.
- Provide information on whom employees should contact if they become sick.
- Implement flexible sick leave and supportive policies and practices. If sick leave is not offered to some or all employees, the institution should consider implementing emergency sick leave policies.
- Designate someone to be responsible for responding to employees' COVID-19 concerns. Employees should know who this person is and how to contact this person at all times.
- Provide employees with accurate information about COVID-19, how it spreads, and the risk of exposure.
- Reinforce training on proper [handwashing](#) practices and other routine infection control precautions to help prevent the spread of many diseases, including COVID-19.

Ensure that employees have access to personal protective equipment (PPE); disinfectant [products that meet EPA's criteria for use against SARS-CoV-2](#) [↗](#); and soap, clean running water, and drying materials for handwashing, or alcohol-based hand sanitizers that contain at least 60% ethanol or 70% isopropanol.

Social Distancing

To the extent possible, adhere to [social distancing](#) recommendations by adjusting staff schedules, adding additional shifts, or implementing non-overlapping teams to minimize personnel contact. Identify laboratory tasks and activities that can be performed with reduced or no face-to-face interactions. Examples include limiting the number of laboratory meetings that occur and, when possible, using remote collaboration tools (such as video and phone conferencing), even for those who work in the same location or building.

To the extent possible, reconfigure workspaces and locations of shared equipment to reduce crowding. Create one-directional paths and workflows. Declutter workspaces and dispose of unnecessary items to help with reconfiguration. If reconfiguration is not possible, consider placing barriers (plexiglass, partition, plastic, etc.) between computer workstations, desks, or equipment that position staff six feet apart from each other.

Minimize personnel traffic and interactions by limiting visits from vendors and other external partners; engage with them virtually whenever possible.

Face Coverings

To help slow the spread of COVID-19, CDC recommends wearing face coverings in settings where social distancing measures are challenging to maintain, like office spaces, computer workstations, and break rooms. In general, laboratory employees should wear a face covering in laboratory spaces that do not have requirements for respiratory PPE and where other social distancing measures are difficult to maintain. Any face covering that is worn inside a laboratory area where personnel work with potentially infectious material should subsequently not be worn outside of that laboratory area. Laboratory PPE are critical supplies, and employees should refrain from removing them from the laboratory for general use. Site- and activity-specific risk assessments, as well as available resources, should determine where specific facial protection, such as disposable masks, should be used.

These face coverings should not be used in place of recommended personal protective equipment (PPE).

- Face coverings are not intended to protect those who wear them and are not considered PPE.
- All staff should follow established PPE requirements for working in laboratory spaces.

Wash hands before putting on face coverings and minimize the removal while in the laboratory. The guidance below describes how to remove a face covering and replace it with a clean face covering:

- Take off the face covering carefully.
- Be careful not to touch eyes, nose, or mouth when removing a face covering.
- Untie the strings behind the head or stretch the ear loops.
- Handle only by the ear loops or ties.
- Place reusable cloth face coverings in a bag and close the bag until it can be washed.
 1. Cloth face coverings should be washed frequently.
 2. Staff are responsible for maintaining and cleaning their cloth face coverings.
- Wash hands immediately after removing.

Depending on the facility's design or configuration, additional physical barriers, such as a face shield, plexiglass, partition, or plastic barriers, may be needed to achieve social distancing goals.

Personal Hygiene and Disinfection





As more workers return to the laboratory, extra measures may be needed to ensure a clean and appropriate environment. Reevaluate current protocols for cleaning, use of PPE, and handwashing. High-touch locations and equipment with a high frequency of handling and contact present a higher probability of contamination in the work area and should be disinfected frequently. Increasing the number of available cleaning supplies and distributing them throughout the laboratory can encourage staff to more frequently clean surfaces and equipment.

Use visual reminders, such as posters displayed throughout the laboratory environment, common areas, and restrooms, to emphasize the importance of hand hygiene and to encourage frequent handwashing. Hands should be washed regularly with soap and water for at least 20 seconds. An alcohol-based hand sanitizer containing at least 60% ethanol or 70% isopropanol can be used when soap and water are not available. For more information, see CDC's [Hand Hygiene Recommendations](#).

Resources

For additional information, refer to the following:

OSHA information for all employers and workers:

- [OSHA COVID-19 website](#) 
- [COVID-19 Safety and Health Topics](#) 
- [File a Complaint](#) 
- [Online Whistleblower Complaint Form](#) 

CDC COVID-19 resources:

- [Considerations for Wearing Masks](#)
- [Use of Masks to Help Slow the Spread of COVID-19](#)
- [How to Wash Masks](#)
- [Social Distancing](#)
- [How to Protect Yourself and Others](#)

CDC Laboratory Safety Resources

- [Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories](#)
- [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\) \(5th edition\)](#)

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Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases