

Protective Measures to Prevent Exposure to COVID-19

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Revision history:

23 March 2020	Initial Release
11 April 2020	Removed language about foreign travel and simplified to just contact with infected person; added guidance for higher risk individuals; updated with CDC voluntary guidance (i.e. cloth face coverings)
5 May 2020	Renamed document, revised content to be consistent with the lab's Return to On-site Work Plan.
11 May 2020	Added training course name and number.
5 August 2020	Added Use of Common Areas and Eating/Drinking guidance, updated Risk Chart
14 August 2020	Restricting use of face coverings with exhalation valves and added verbiage on shower use.
9 October 2020	Revised to bring face covering information up to date.
23 October 2020	Updated stockroom procedure to delivery only.
9 November 2020	Added Supervisor work review details; added section on Personal Office/Cubicle/Workstation Requirements; added recommendation to eat/drink alone; added restriction on personal fans/space heaters; updated risk chart and noted that Risk Category 2 and 3 activities run the risk of quarantine.
11 December 2020	Created new "Requirements and Expectations" section title to organize the document. Included requirement of written hazard analysis for close proximity work under supervisor expectations.

Background

COVID-19 is thought to spread mainly through close contact from person-to-person in respiratory droplets from someone who is infected. People who are infected often have symptoms of illness. According to the CDC, people who are infected may not show symptoms and could still spread the virus. Fermilab has reduced the risk of exposure to COVID-19 by closing the campus to the public, restricting travel, instituting the work at home options and sick leave expectations, and cleaning high traffic areas with recommended disinfectant. Fermilab's working environment is considered a Lower Exposure Risk (lowest of the levels of exposure risk) according to OSHA's Guidance on Preparing Workplaces for COVID-19.

Requirements and Expectations

Fermilab requires everyone on-site to cover their face when in indoor spaces and in outdoor spaces where six-foot distancing cannot be maintained. Face coverings must be worn in shared workspaces, common gathering places, and high-traffic community areas, such as stairwells and hallways. For some work situations, including work in close proximity (< 6 feet), you may need additional PPE, such as a face shield or other barrier. Please consider the hierarchy of controls prior to utilizing protective equipment. This includes elimination/substitution, engineering controls and administrative/work planning controls.

All protective equipment and PPE orders shall be made utilizing the online stockroom. The items will then be delivered to the indicated location. Stockroom orders will be approved based upon scheduled work and may be filled upon availability due to supply chain shortages. Please utilize [CDC guidance to extend the life of your protective equipment](#) to the extent possible.

The Divisions/Sections/Projects shall ensure their supervisors are verifying all work that requires close proximity is immediately necessary or mission critical. Supervisors should fully understand if the work requested aligns with immediate need and mission criticality and plan the work using the following steps:

1. Is this job immediately necessary? Can it be postponed?
2. Can it be done in a different way that does not require close contact or proximity to others?
3. If immediately necessary, can the job be planned with a Hazard Analysis, utilize COVID protective equipment and ensure personnel are GREATER than 6 feet apart at all times or only very brief contact. NOTE: Contact tracing will identify close contacts as anyone closer than 6 feet for 15 minutes aggregated over 24 hours, regardless of protective measures. Work planners should consider all activities the workers do together, such as driving in vehicles, lunch breaks, etc. that could contribute to 15 minutes of close proximity.
4. If they cannot maintain greater than 6 feet of distance at all times, and the job must be done, are the personnel deemed (or designated) as essential? (e.g. Put other tasks/projects at risk if they are quarantined)
 - a. Consider worker rotation, maintaining the work groups as family units and have redundant skill sets where another group can fulfill those functions if that group was quarantined.
 - b. Require a written hazard analysis (using [IMPACT](#) or the [paper form](#)) that describes the activities that will be completed in close proximity, and the protective equipment to be used and any other measures to reduce exposure time. See Exposure Risk Chart for required protective equipment. Some

Division/Section Heads require their approval for close proximity work. Ensure the hazard analysis is routed properly for approval(s).

Supervisors should also understand day-to-day activities of their personnel and encourage remote meetings, limiting gatherings such as in-person meetings, lunch gatherings, etc. that could result in quarantining of that group. Supervisors should think about their work crews strategically and ask, what if this group was quarantined? How would this group being quarantined affect the project or lab mission? Supervisors shall understand all work and approve or deny the work based upon mission need and risk due to that work crew potentially being quarantined. The supervisor should work with the work crews to plan to work outside the social distance requirements with worker rotation, detailed work planning (i.e. work crew will be here, then rotate out before work crew 2 commences), or shifting of the work to another time.

Based on the specifics of a work activity, the following safe work practices shall be considered:

- Maintain proper spacing (>6 feet) in between persons in a shared space. Tape floors, place cones, post signs, and use other job aids to maintain proper spacing in between persons in a shared space.
- Do not share lab coats or other personal protective equipment. If there is no alternative to sharing personal protective equipment, follow the guidelines for disinfection before/after each use.
- Do not store assigned lab coats with other lab coats.
- Assume that any tool left out has not been cleaned or disinfected. Clean it using approved methods before using.
- Rotating/alternating work schedules to reduce density in work areas and possibility of exposure.

As always, Fermilab's work planning and control requirements should be implemented during this time. This includes management review of work plans and job walk downs to ensure the scope, hazards and mitigations are adequately addressed as outlined in FESHM 2060.

Face Coverings

Face coverings are not considered PPE, but protective equipment. On site personnel will have the option of a disposable face covering or a launderable cloth face covering (depending upon availability). The CDC guidance is to use the disposable face coverings as long as possible or until they no longer function as intended.

- All staff will be required to wear a face covering when inside a building, unless they are alone in a personal office, cubicle or workstation with at least three barrier walls. See additional requirements for offices/cubicles/workstations in [Personal Office/Cubicle/Workstation Requirements](#) section.
- They will be required to wear a face covering when outside, if >6 feet from another person cannot be maintained.
- Personnel may provide and wear their own face covering that is consistent with [CDC guidance for face coverings \(e.g. multi-layered, covers nose and mouth, etc.\)](#). **Do not use face coverings with exhalation valves or those that only have a single layer of fabric.**
 - Face coverings are used to reduce the respiratory droplet's that enters another's breathing space. Face coverings with exhalation valves can potentially direct respired air towards others without capturing respiratory droplets.
 - Must be at least two layers of fabric.
 - Must fit snugly over mouth and nose.
- If a person does not have their own face covering, they may request one from the security guard at the gate.

- Disposable and launderable face coverings are available in the stockroom.
- Employees are responsible for laundering cloth face coverings supplied by Fermilab.

Personal Office/Cubicle/Workstation Requirements

Personnel need a location where they can remove masks and take breaks for eating/drinking.

The individual's personal office, cubicle or workstation may be used for mask breaks when it meets the following requirements:

- Barrier walls must be higher than head height while sitting, on all three sides.
- Masks must be donned before breaking the upper plane of the wall (e.g. before you stand up).
- Personnel are to contact their supervisor or building manager if they need to increase their barrier wall height.
- Height of the barriers shall not interfere with the fire protection system (i.e. >18 inches from the sprinkler head). Barriers should be constructed of fire-resistant material or material coated in intumescent (fire retardant) paint.

Best practice is to have personnel in neighboring/adjacent cubicles more than 6 feet away from each other. This could involve reorienting/rotating desks so that the workstations are not facing another individual's workstation or distributing personnel into unoccupied workspaces to increase distances between workers.

Stockroom Inventory

All protective equipment and PPE orders shall be made utilizing the online stockroom. The items will then be delivered to the indicated location. Stockroom orders will be approved based upon scheduled work and may be filled upon availability. Please utilize [CDC guidance to extend the life of your protective equipment](#) to the extent possible. Inventory is being evaluated daily, and efforts to maintain stock are ongoing. If the lab is running low on certain protective equipment or PPE, the FESS stockroom will notify the division/section DSOs to communicate this information to the div/sec management.

Training/Information on Protective Equipment:

- Additional training will be required prior to returning to work (*Working Safely in the Era of COVID-19 and the Return to On-site Work*, FN000684).
- Protective equipment requirements will be posted in community areas.
- Protective equipment must be disposed of properly in a lined waste receptacle.

Personnel are expected to:

- Wash hands often with soap and water for at least 20 seconds especially after you have been in a public place/common area, or after blowing your nose, coughing, or sneezing.
- If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with others (> 6 feet).
- Clean AND disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards (dependent on cleaning supplies).

Gloves

Please consider glove use when personnel are not able to easily sanitize surfaces between workers or more than one worker is working on the same equipment (this should be minimized).

- Any impervious gloves are acceptable.
- Nitrile, butyl and all other heavy-duty rubber gloves should be prioritized for work that requires protection against a chemical hazard.
- It is recommended that if possible, Divisions/Sections should designate tools, vehicles, equipment, etc. to individuals to prevent multiple users from using them. This will prevent exhausting the existing stock of gloves.
- Another option is to clean tools with soap and water or other cleanser after use.
- Frequent hand washing with soap and water for at least 20 seconds is the preferred prevention method.

Barriers

Barriers are an effective engineering control when social distance cannot be maintained.

- Division/Section management shall work with their DSO and building managers to determine where barriers are needed.
- The building manager will place a work order to FESS including:
 - Size
 - Quantity
 - Location
 - Priority
- The carpenter shop will build the barriers and arrange for the installation.

Use of Common Areas

Follow any posted occupancy limits. When using common areas (e.g. break areas, conference rooms, etc.) for lunch breaks or mask breaks, attempt to utilize the area alone, when possible, by staggering breaks. If not feasible, ensure personnel maintain at least a 6-foot social distance and avoid sitting directly across from each other.

It is recommended personnel do not use communal food/beverage items (e.g. coffee makers, etc.)

Showers should be used for work-related needs only.

Eating/Drinking in Lunchrooms/Breakrooms or Other Common Areas

Personnel are encouraged to eat and drink alone, if possible. Unused conference rooms are available for this purpose.

Personnel are allowed to remove a mask while eating or drinking only when:

- Hands are washed or sanitized prior to eating or drinking.
- At least 6 feet is maintained between people, at all times if more than one person must be in the lunch/breakroom at the same time. Lunchroom occupants run the risk of quarantine if exposed.
- Room occupancy limits are observed.
- Masks are donned immediately when eating/drinking is done or when traversing the area.
- Areas are wiped down with sanitizing cleaner when eating/drinking is complete.
- Wash/sanitize your hands before returning to work.

Personal Fans/Space Heaters

Personal fans and space heaters can disburse respiratory droplets further and into the breathing zones of others nearby. The Department of Energy released an Awareness Article based on research from Savannah River National Laboratory that indicates personal fans can direct respiratory droplets into the breathing zones of others in the same workspace. Therefore, the use of personal fans and space heaters is discouraged at this time. Please dress appropriately with the expectation that there will be greater fresh air exchanges in facilities.

Area cleaning

Personnel are encouraged to clean common areas in their immediate work area such as; printers, copiers, break tables, kitchens, microwave exteriors, vending machines, etc., to alleviate the demand for janitorial services, and to allow them to prioritize high risk areas. Janitorial services are available for detailed cleanings through the normal service request process.

- Division/Section Management should develop a list of high priority areas and communicate them to building management.
- Building management can then request additional cleaning upon janitorial service's availability.

Fermilab COVID-19 Protective Equipment and Behavior Risk Chart

Potential Exposure Activity	Risk Category	Protective Equipment Requirements	Additional Requirements
Outdoors, separated from other personnel	0	None	<ul style="list-style-type: none"> • Maintain a 6 foot or greater social distance.
Inside buildings or enclosures, other common spaces (e.g. elevators, lunchrooms, hallways, vehicles)	1	Face covering (not required to be worn when alone in your personal office or while seated at your 3-sided cubical space when walls are above head height)	<ul style="list-style-type: none"> • Maintain a 6 foot or greater social distance when possible. • Respect the capacity limitations for elevators (posted next to elevator car) and restrooms. • Limit of two individuals in a government vehicle. <ul style="list-style-type: none"> ◦ Face coverings at all times, even when alone. • Clean touched surfaces prior to leaving a common area. • Wash/sanitize hands after touching surfaces or removing face covering.
Inside a lunchroom/breakroom or other common area when eating or drinking	2	Face covering (removed only when eating or drinking)	<ul style="list-style-type: none"> • Eat alone whenever possible by utilizing compliant office spaces, unused conference rooms and/or staggering lunch break schedules. • Maintain a 6 foot or greater social distance from others. • Respect the room capacity limitations. • Clean surfaces after eating/drinking. • Wash/sanitize hands prior to eating/drinking and before returning to work. • Don mask immediately after eating/drinking is complete or when traversing in the area. • Potluck style meals are discouraged.
Working within 6 feet of another individual	3	<ul style="list-style-type: none"> • Face covering and face shield and impervious gloves OR <ul style="list-style-type: none"> • Face covering and safety glasses/goggles and impervious gloves 	<ul style="list-style-type: none"> • Approved written hazard analysis describing the task, hazards, and protective measures. • Division/Section Head approval is required by some D/S; confirm approval requirements. • Wash hands after removing protective equipment.

NOTE 1: "Face covering" means cloth face mask or disposable face mask.

NOTE 2: Medical and first response personnel are to follow their exposure control protocol.

* Risk Category 2 and 3 activities may result in quarantine if one person develops COVID-like symptoms or has a confirmed COVID-19 diagnosis.

Contact your supervisor or DSO with questions regarding this chart.