



STOP THE SPREAD

NIH Safety Guidance *for Return to Physical Workplace*

COLLABORATING PROGRAMS:

Office of Research Services, Division of Occupational Health and Safety, Office of Research Facilities Division of Operations and Maintenance and Division of Environmental Protection



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Executive Summary

The NIH Division of Occupational Health and Safety (DOHS) has compiled this guidance to provide NIH staff, including employees, contractors, and trainees, with information on recommended practices and available resources, as well as establish the NIH's expectation of staff (Appendix I: Code of Conduct) based on this guidance as we return to the physical workplace and work onsite during the Coronavirus pandemic. The pandemic continues to bring uncertainties that warrant changes to our daily "normal" operations. Implementing these changes can be a challenge. The goal of this document is to provide awareness, options and tools for new, enhanced safety practices in your workspaces. Occupational health and safety principles are grounded in risk mitigation measures including elimination, substitution, engineering controls, administrative controls, work practice controls and Personal Protective Equipment (PPE). All of these controls are covered in this document, with suggested mechanisms for use in our laboratory, non-laboratory and common areas. Additionally, some areas will require specialized guidance. DOHS is working with partners within the Office of Research Services (ORS) and the Office of Research Facilities (ORF) to review processes for those locations. Additional practices may be performed in spaces not outlined in this document. This guidance is not meant to supersede or be in conflict with the procedures or policies of any NIH Institutes, Centers, and Offices (ICOs). A one-size-fits-all approach is not possible, but we hope this will assist all ICOs in developing their specific procedures.

Finally, in public health emergencies, it is important that all persons follow these recommendations in order to ensure the safest workplace for everyone. In most cases, these recommendations do not eliminate risk completely. They attempt to create awareness on how risks are handled and how we can behave and respond in order to protect ourselves, colleagues, patients and the general NIH community. Key points include:

- Staff, visitor and patient safety are paramount
- Physical distancing in the workplace limits the spread of coronavirus
- Face coverings will be mandatory while on campus, with specific guidance based on work areas
- Vigilant adherence to hand hygiene and surface disinfection routines mitigates transmission risk
- Guidance in this document will be updated and reissued as national safety guidance changes

This document includes a "Code of Conduct Acknowledgement" for all supervisors to discuss and sign with staff. This Code of Conduct highlights the responsibilities we have to each other, and to ourselves, to maintain the highest level of safe practices at the NIH. NIH leadership expects all staff to comply with this Code of Conduct.

DOHS has created a COVID-19 Safety [Reporting Tool](#) and a Coronavirus hotline at 301-480-8990 for reporting unsafe conditions, COVID-19 symptoms and medical follow-up.

Return to Work Expectations

This document is intended to provide guidance for all NIH staff returning to and working on campus in the era of COVID-19. Topic areas have been identified to educate staff on protecting themselves as well as others in work areas. Not all areas are the same; laboratories, offices, and customer support areas will need to develop specific procedures for their respective activities. The goal is to minimize the risk of transmission in the NIH community and to provide examples of how work areas might be organized to support procedures and best practices.

To safely work onsite, we must embrace a culture of responsibility. Every NIH staff member has a critical role in ensuring the occupational health and safety of their colleagues. Principal Investigators and

supervisors will play a key role in establishing new protocols for their staff. These staff members will then be responsible for practicing and employing new paradigms in their work. SARS-CoV-2 exposure is a hazard we all can help mitigate by adhering to personal hygiene, administrative controls, and distancing guidelines.

NIH ICOs will formulate detailed plans using this guidance as a high-level framework which should not be superseded. NIH ICOs and laboratories will need to perform internal assessments to determine which activities will be resumed and in what timeframe. This began in Group A and will continue through Group D before an ICO is fully functioning with all staff back at their physical worksites ([NIH Framework for Returning to Physical Workspaces](#)). Staff should not be returning to campus, for any reason, without approval from their supervisor, and the appropriate persons within each ICO. All NIH staff should be provided with information about their ICO-specific plans and have opportunities or platforms to discuss concerns with supervisors and/or ICO leadership. The plan should be revised as necessary, recognizing that not every concern can be immediately addressed and that some decisions may need to be modified as more information becomes available and as the pandemic evolves.

It is important to note, that the only persons allowed on NIH campuses or in NIH leased spaces are staff and approved visitors (e.g. deliveries, vendors, contractors). Children are not permitted to be in office, laboratory or other administrative spaces in any NIH location. They are permitted to be on campus when in route to day care facilities but should not be brought into other buildings or locations. This same requirement applies to any family member or friend.

Until further notice, face coverings will be required for all persons physically present on any NIH campus, when entering or exiting NIH-owned or leased facilities, and in areas in and around NIH-occupied facilities. Face coverings are a fundamental part of preventing the spread of coronavirus. When you wear a face covering, you reduce the dispersion of airborne droplets. The health and safety of NIH employees, contractors, visitors and patients depends on everyone doing their part. Supervisors will be responsible for ensuring that staff comply with this policy.

If you see something at the NIH that you think may create a risk of coronavirus exposure, please report it to your supervisor or your ICO [Health and Safety Committee](#). Concerns can also be reported anonymously through the COVID-19 [Reporting Tool](#) or to the Coronavirus hotline at 301-480-8990. All reported concerns will be investigated and shared with appropriate staff, including NIH and ICO senior leadership, if necessary.

Symptom Monitoring and Reporting Requirements

Self-monitoring can prevent the spread of coronavirus by limiting the exposure of others to symptomatic personnel. Each day before you leave for work, take a moment to assess yourself and see if you have any symptoms associated with coronavirus. According to the most recent [CDC Guidance](#) these symptoms are:

- Fever, chills
- Cough
- Unexplained loss of taste or smell
- Congestion or stuffy nose
- Headache
- Sore throat
- Shortness of breath
- Muscle or body aches/pain
- Diarrhea
- Nausea or Vomiting

NIH staff experiencing any of these symptoms should NOT report to work. Contact Occupational Medical Service (OMS) for an evaluation by [completing the screening questionnaire](#). Please contact your supervisor to discuss your leave or duty status.

In addition, check if your family, housemates, or anyone you have recently been in close contact with are experiencing symptoms. If so, encourage them to stay at home and seek an evaluation from a medical provider. If you have had close contact with someone with confirmed or suspected COVID-19 infection or exposure in the past 14 days, please contact the coronavirus hotline at 301-480-8990 before reporting to work and [complete the screening questionnaire](#).

What Happens When Someone Tests Positive?

If a test for COVID-19 is taken within the community, and a positive result is obtained, please report that result to OMS at OMSmonitoringprogram@mail.nih.gov. Contact investigations will be performed for persons that were in the workplace within 5 days of testing positive or the onset of symptoms.

Contact investigations (CI) are conducted upon receipt of report of a NIH worker newly diagnosed with COVID-19. A positive test result may come from NIH-based testing (asymptomatic and for cause) or community-based programs. The Clinical Center (CC) Department of Laboratory Medicine (DLM) reports all positive results to OMS, who then initiates the contact tracing process by calling the individual (index case) to report the result and conduct the index case interview the same evening. This interview aims to determine when the affected worker may have been infectious and whether others may have been at risk for exposure to SARS-CoV-2, the virus that causes COVID-19. The interviewer intends to capture details such as: where the person worked; what NIH facilities were visited; use of protective measures; and, who they came into contact with while working on site. Additional questions are asked about the individual’s symptoms and general health, as OMS strives to also ensure that NIH staff have good care and support during this time. Once the index case review is complete, contact tracers will contact the supervisor, if indicated, to confirm what the affected worker said, obtain relevant contact information, and then will initiate the calls to contacts (usually the same evening). The utmost care is taken not to identify the worker to others in the workplace. Within one business day, OMS provides a form to the supervisor stating a general health condition precludes the staff member from coming to the worksite or into contact with others. Contact case interviews aim to estimate the level of risk of exposure and provide recommendations to contain further spread. For example, high-risk contacts are persons that have maintained less than 6 ft of distance from the index case for more than 15 minutes over the course of a workday, at any time without a face covering or any type of high-risk encounter. They will NOT call persons who have not been at discernable risk for exposure such as general building occupants. It can take several hours to work through the calls, as they will ask questions and make recommendations for testing or active monitoring. People on active monitoring are told to stay home, and supervisors are notified.

	Use	Time Requirement
Isolation	Person positive for COVID, required to stay home until no longer contagious and symptoms improve	10 days post symptom onset and noticeable improvement of symptoms including no fever for 72 hours without use of fever reducing medication
Quarantine	After high risk exposure to someone with a positive test for COVID or used when exposure is possible.	7 days plus negative test for essential workers, or 14 days Travel related quarantine: refer to travel section.

Please note, there are three different groups performing contact tracing. OMS aims for consistency at all times and works closely with all performing this service. Hospital Epidemiology Service provides CI

services to the clinicians working in the CC, Occupational Health Service (Leidos) does the CI for the NCI Frederick staff, and OMS/volunteers do the contact tracing for all others. All questions, no matter the groups, should be directed to OMSmonitoringprogram@mail.nih.gov.

Staffing Plans

The NIH Coronavirus Response Team carefully considered the [NIH Framework for Returning to Physical Workspaces](#) developed by the NIH Office of Human Resources (OHR), in close coordination with NIH ICO leadership. The Framework provides guidance to NIH ICOs based on common principles as they develop their specific workplans to bring their staff gradually and safely back to physical workspaces. Importantly, the plan focuses on a gradual ramp-up of staff only if certain criteria are met, most notably a 14-day trend in declining COVID-19-like case reports and confirmed COVID-19 positive cases in the counties where NIH has facilities. The NIH COVID Task Force will continuously monitor local conditions and trends to update and revise staffing guidelines and policies. Maximum telework will continue until further notice as the NIH COVID Task Force assesses local health and operational conditions. NIH staff should not return to their physical workspaces unless previously approved to do so. If additional staff are needed to return, approvals must be reviewed by the ICO and follow all required processes outlined by the OHR.

Alternative Work Scenarios

ICOs need to evaluate the best staffing options available for the identified work function or office. Staffing scenarios for the laboratory may differ significantly from an administrative office setting, which may, in turn, differ from a front-facing customer service operation. Alternating days or weeks, shift work, or physical separation of workstations should be considered. Understanding there will be scenarios where physical distancing cannot be achieved, DOHS (301-496-2960) is available to consult and help develop alternative safety measures to mitigate risk. In these situations, ICOs will need to assure strict adherence to face coverings, other protective measures and administrative controls, and supervisors must minimize these situations to the best of their ability. Maximum use of telework and flexibilities is still highly encouraged, and your health and safety are our highest priority.

Travel Guidance

In general, recommended and required infection control and prevention measures for NIH employees after travel, or after having guests in your home, are based on risk of exposure to SARS-CoV-2 rather than specific travel destinations. Travel risk can also occur within one's state, depending on local hotspots, attendance at events where public health measures are not followed, or personal behaviors not in line with public health recommendations. It is important to remember that behaviors outside of the workplace affect our risk inside the workplace.

Travel in general is associated with increased risk of exposure to SARS-CoV-2. This applies to when one travels outside their home or brings someone into their home. Risk of exposure increases with certain activities and settings particularly in areas with higher COVID-19 prevalence rates (*greater than 10% positivity rate*). Timing and level of risk of exposure should inform a safe return to the physical workplace (RTPW) after travel. In addition, employees should be aware of the most current guidance and requirements issued by local health departments of both the travel destination and home area.

Travel destination, or the location of origin of visitors, is a factor to consider when evaluating risk of exposure to SARS-CoV-2. State health departments and reputable media outlets are resources to geographically inform employees of COVID cases. For example, data used to construct metrics indicating hotspots are maintained by the Johns Hopkins University Coronavirus Resource Center at <https://coronavirus.jhu.edu/us-map>.

General Guidance for Travelers

1. Adhere to physical distancing, facial covering, and hand hygiene at all times.
2. Avoid unnecessary risk and take steps to lower it when you cannot avoid traveling.
3. Understand the risks that you are taking, e.g., activities, destinations or modes of transportation, and maintain awareness of ill persons in your vicinity.
4. Report exposure and illness and do not come to work until you have been evaluated.
5. Follow instructions regarding your overall OMS care plan, including to quarantine or isolate yourself.

Risk factors that may increase travel-associated COVID-19 exposure

- Travel by public transportation (air, bus or train).
- Prolonged presence in public areas (beaches, parks, shopping districts, pedestrian zones, narrow walkways).
- Crowded settings and large gatherings (including family or friends outside of your household).
- Travel to a high-risk area, i.e., with ongoing, widespread community transmission, or visitors from such an area coming into your home.

Risk factors that may decrease travel-associated COVID-19 exposure

- Use of private vehicles and avoidance of high-use facilities and surfaces (e.g., public restrooms).
- Avoiding crowded areas or quickly traversing when it cannot be avoided.
- Travel companions from within your household or “bubble” (i.e., family and/or friends with low risk tolerance who share in low-risk background and behaviors.)
- Consistent use of facial coverings (self, travel companions and others) and > 6ft distancing.

Instructions Before Returning to NIH Facilities After Travel

Regardless of travel or gathering with others, anyone who had high-risk exposure within 14 days prior to returning to the physical workplace should self-quarantine, notify your supervisor, complete the [OMS Coronavirus Screening Questionnaire](#), and follow recommendations for further care. An expedited process for essential workers is in place with the OMS COVID teams, which includes a 7 day quarantine, test at 7 days following the staff member’s last exposure, and if a negative test result is obtained, they can return to the workplace on active monitoring until day 14. If testing is not utilized, then they must quarantine for 14 days.

- ***High-risk exposure*** is defined as close contact (within 6 feet) for more than 15 minutes (cumulative over 24 hours) with a person likely or known to be infected with COVID-19. It can also refer to close contact of any duration with an infectious person who is coughing, sneezing or singing with or without a facial covering.

NIH encourages employees who have traveled to [high-risk areas](#) or spent time closely associating with friends or family outside of their household or bubble from high-risk areas to take the following steps before returning to NIH facilities:

- Refrain from coming to your on-campus physical workplace for a week, followed by testing at least 7 days after travel or gathering with others; you may use asymptomatic onsite testing as long as you have not had any COVID-19-like symptoms during this period of observation. If you choose to not get tested after seven days, then a 10-day quarantine at home is appropriate.
 - The NIH asymptomatic testing program sites are located in Maryland (Bethesda-Building 10, Baltimore-Bayview Research Center, NCI-Frederick, and NCI-Shady Grove), North Carolina (NIEHS Campus), Montana (RML) and Arizona (NIDDK-Phoenix). Go to this [website](#) to schedule an asymptomatic test.
 - If symptoms or fever are present, you must refrain from coming on campus, self-isolate and complete the [OMS Coronavirus Screening Questionnaire](#).

General References and Travel Advisory Resources

Domestic travel: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-in-the-us.html>

International travel: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html>

Guidance on Personal Safety

Facial Coverings

Facial coverings are required to be worn by all staff and visitors, at all times on any NIH campus or facility including in common areas and conference rooms. Appropriate use of facial coverings is critical in minimizing transmission as you can spread COVID-19 to others even if you do not feel sick or have any of the cited symptoms. Remember, facial coverings need to be worn over your nose and mouth. Facial coverings with exhalation ports are NOT permitted since they will not provide source control, as air will leave from these valves without adequate filtration. Exhalation ports are the small, plastic-like items on the front of the facial covering that allow air to move out of the mask. Face shields worn alone (without a facial covering underneath) are also NOT permitted. The mask or cloth face covering is not a substitute for physical/ distancing and should be used to supplement other controls recommended in this document. Staff should evaluate the need for a separate mask to be used during their commute to their worksite and home. In addition, cloth face coverings should only be used in a lab environment (BSL2 and below) if the individual is not performing research.

It is strongly recommended that cloth facial coverings be changed and laundered daily. If reuse of a facial covering is necessary, facial coverings and/or masks should be stored in paper bags or in some other protective device to reduce the potential for damage or contamination that could occur if the facial covering was placed on a desk or in a backpack, pocket, or purse alone. Paper bags are recommended because the facial covering may be damp from breath condensation, and the paper allows the facial covering to dry out. Additionally, data indicate the virus is viable on paper for a shorter duration than plastic. A plastic bag would trap this condensation inside and not allow the facial covering to dry out.

Cloth facial coverings should be cleaned using a mild detergent (e.g., Dawn[®], Palmolive[®], etc.) and warm water. They can be cleaned in a washing machine, a bowl, or a sink. It is recommended to dry masks using a dryer on hot setting if available or hang dry. The use of a washing machine and dryer may damage some facial coverings (e.g. elastic straps) and they should be carefully inspected each time they are used. Facial coverings must be immediately removed from use if visibly dirty or damaged.

The Clinical Center has issued its own facial covering policy. Persons entering the building will be issued a disposable surgical mask (ASTM Level 3). Cloth face coverings must be replaced by the surgical mask whenever inside the Clinical Center. Any type of disposable mask worn at the time of entry into the Clinical Center should be discarded into a trash can or in Medical Pathological Waste (MPW) containers

that are commonly found in laboratories and clinical areas. For other NIH buildings and leased spaces, disposable facial coverings can also be disposed in the MPW containers or white step cans. For convenience, white step cans have been placed at the entries/exits of buildings, at common points of departure from NIH campuses, leased facilities and in the Clinical Center. A map of disposal locations on the Bethesda campus is included as Appendix II of this document. The NIH [Division of Environmental Protection \(DEP\)](#) is the point of contact for disposal and questions regarding additional disposal container requests at 301-496-6349.

See details regarding face covering and mask use and care below. Additional recommendations can be found in Appendix 4. Consult with DOHS if you have questions about which face covering is appropriate for your needs.

Type and Intended Use of Face Coverings/Masks				
Type	<p>Cloth Face Covering</p> 	<p>Disposable Mask</p> 	<p>Medical-Grade Surgical Mask</p> 	<p>N95 Respirator</p> 
Description	<p>Home-made or commercially manufactured face coverings that are washable and help contain wearer's respiratory emissions*</p>	<p>Commercially manufactured masks that help contain wearer's respiratory emissions</p>	<p>FDA-approved masks to protect the wearer from large droplets and splashes; helps contain wearer's respiratory emissions</p>	<p>Provides effective respiratory protection from airborne particles and aerosols; helps contain wearer's respiratory emissions</p>
Intended use	<p>Recommended for common areas and non-healthcare settings. Covering should be replaced or laundered daily. They are not required when working alone in a personal office with the door closed</p>		<p>These respirators and masks are reserved for healthcare providers, individuals with patient contact and for use in procedures or settings that require close contact for extended periods of time (see Appendix IV). Use in other areas should be determined by a risk assessment conducted by DOHS and the use of N95s must follow NIH and OSHA guidelines.</p>	

Use, Care and Changing of Facial Coverings

- If changing from a cloth face covering to a lab mask, do so in a private setting before performing lab work so as not to expose others.
- Wash your hands with soap or use hand sanitizer before putting the mask on, before adjusting and after removing.
- Make sure your mouth and nose are fully covered, pull the mask down over your chin and pinch the bridge of the nose. Assure there are no gaps in the mask and that it fits against the side of your face.
- Remove your mask using the ear loops/ties and avoid touching your eyes, nose and mouth.
- Place your used mask in a paper bag for storage and wash your hands immediately after removing.

- Use designated locations to take a break for a drink or to eat, ensuring adequate distance from others. After finishing your food or drink, immediately put your face covering back on.
- Remember, never eat or drink in a laboratory. Staff can take advantage of outdoor areas on campus to eat or take breaks, weather permitting.

Physical Distancing

In accordance with CDC guidance, staff should always maintain at least 6 feet from other individuals. Avoid unnecessary person-to-person contact, such as handshakes. In-person meetings should be avoided as much as possible until work restrictions are fully lifted. To achieve this, NIH is recommending that laboratory and administrative areas not have more than one person per 200-250 net square foot of space, dependent on the space configuration. These recommendations will be updated as more groups return to the physical workspace, and as therapeutics and vaccines become available. Please ensure space density decisions are coordinated with NIH leadership. The U.S. Fire Administration has a useful reference to assist ICOs with determining the appropriate distances and physical separation of staff as they return to work. Additional information on physical distancing can be reviewed at the [US Fire Administration website](#).

Hand Hygiene

Wash your hands often with soap and water for at least 20 seconds, especially after you have been in a public place, after blowing your nose, coughing, sneezing, or touching your face. Alternatively, use a hand sanitizer that contains at least 60% ethyl or 70% isopropyl alcohol. There are many hand sanitizer stations located in NIH buildings. Ideally, hand sanitizer should be available within common-area office suites or lab locations in addition to these central stations. Laboratory settings must have soap and water available for washing hands after working with chemicals and/or biologicals as outlined in the [NIH Chemical Hygiene Guide](#), [Bloodborne Pathogens Guide](#) and [other safety guidance](#). Supervisors should place orders for needed supplies in advance of returning to physical workspaces.

Gloves

The use of gloves outside of a laboratory or the healthcare setting is not advisable. Washing your hands frequently is the best practice after touching potentially contaminated surfaces. When gloves are worn within the lab, they must be disposed in MPW boxes and after removing gloves, hand washing is required.

Coughing/Sneezing Hygiene

Wearing your cloth face covering will reduce the dispersal of aerosolized respiratory secretions. If you are in a private setting and not wearing a cloth face covering, remember to cover your mouth and nose with a tissue or the inside of your elbow when coughing or sneezing. Immediately wash your hands or use hand sanitizer that contains at least 60% ethyl or 70% isopropyl alcohol. Staff should minimize touching their face and instead use disposable tissues. Tissues should be immediately discarded after use.

Guidance on Cleaning and Disinfection

The ORF has developed a [Standard Operating Procedure \(SOP\)](#) which outlines procedures for communication and steps to be taken concerning the closure, ventilation, disinfection and reopening of NIH workspaces that may be contaminated by COVID-19. This SOP was developed for a scenario in which a staff member has been diagnosed with COVID-19 and has been in NIH workspaces (owned or leased) within 2 days prior to showing symptoms. Safety and communication are paramount throughout this process. This SOP describes the risk management decisions, and actions needed after a positive case

is identified. Identification of those areas is based on information from OMS and the contact investigation of the person who tested positive for COVID-19 infection.

Information on approved disinfectants can be found at <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>. When you use this website, scroll down, and all disinfectants listed will be effective against COVID-19. DOHS has compiled this list into a user-friendly Excel sheet which has been made available to all ICOs. Additional guidance for laboratories is below, as these areas will have to ensure efficacy against the microorganisms studied in labs as well.

The supply store carries the disinfectants listed below which are EPA approved for Coronavirus. Ensure you read the label prior to use to ensure appropriate contact time and use of the material is performed. Please be advised that the active ingredients may differ between brands (e.g. different Clorox products have differing ingredients and contact times). The label of each disinfectant bottle contains the active ingredients, contact time and efficacy information (see Appendix III for additional information).

Some of the below items will require dilution prior to use (alcohols). Some of these items will be stronger and may be hazardous to humans and require gloves or other Personal Protective Equipment (PPE) for use. We advise the non-laboratory areas to purchase materials that are ready to use, such as wipes. Laboratory areas will have protective equipment (e.g. chemical fume hoods and gloves) that can be used for dilution and cleaning with stronger chemicals.

In general, if the material is not already in wipe form, spray disinfectant onto a paper towel and then wipe the surface clean. It is not advised to directly spray a surface as that can create aerosols. Please contact DOHS at 301-496-2960 with questions. The list below is accurate as of June 1, 2020 but is subject to change.

ALCOHOL	6510005328519	ALCOHOL, PREP PAD, 70%, 200 COUNT
ALCOHOL	681000N209146	ALCOHOL, ISOPROPYL 70%, 1 GL New Item
ALCOHOL	6810011137320	ETHANOL 190 PROOF, 1 GL
ALCOHOL	6505008180293	ETHANOL 190 PROOF, 1 PINT
ALCOHOL	650500L062205	ETHANOL 190 PROOF, 5 GL
ALCOHOL	6505009262204	ETHANOL 200 PROOF REAGENT, 5 GL
ALCOHOL	650500L062206	ETHANOL, 200 PROOF, 1 GL
ALCOHOL	6505001050000	ETHANOL, 200 PROOF, 1 PINT
DISINFECTANTS	6840016212002	BLEACH, GERMICIDAL CLOROX, 121 OZ,
DISINFECTANTS	793000N203085	BLEACH, GERMICIDIAL, WIPES, CLOROX HEALTHCARE, New Item
DISINFECTANTS	793000L043454	DISINFECTANT, LYSOL POWER SPRAY, BATHROOM CLEANER, 22 OZ
DISINFECTANTS	793000L043457	DISINFECTANT, LYSOL POWER, WIPES, 35-COUNT
DISINFECTANTS	684000L041924	DISINFECTANT, 409, SPRAY, 32 OZ
DISINFECTANTS	793000N203087	DISINFECTANT, BLEACH GERMICIDAL, PULL-TOP, CLOROX HEALTHCARE, 32 OZ New Item
DISINFECTANTS	793000N203088	DISINFECTANT, BLEACH GERMICIDAL, REFILL, CLOROX HEALTHCARE, 128 OZ New Item

DISINFECTANTS	793000N203086	DISINFECTANT, BLEACH GERMICIDAL, SPRAY, CLOROX HEALTHCARE, 32 OZ
DISINFECTANTS	792000L041927	DISINFECTANT, CIDECON PLUS, WIPES,180-COUNT
DISINFECTANTS	684000L041921	DISINFECTANT, CLOROX, SPRAY,19 OZ
DISINFECTANTS	684000L041923	DISINFECTANT, CLOROX, SPRAY,32 OZ, New Item
DISINFECTANTS	793000N203083	DISINFECTANT, HYDROGEN PEROXIDE, PULL TOP, CLOROX HEALTHCARE, 22 OZ New Item
DISINFECTANTS	793000N203084	DISINFECTANT, HYDROGEN PEROXIDE, REFILL, CLOROX HEALTHCARE, 1 GAL
DISINFECTANTS	793000N203082	DISINFECTANT, HYDROGEN PEROXIDE, SPRAY, CLOROX HEALTHCARE, 22 OZ New Item
DISINFECTANTS	793000N203081	DISINFECTANT, HYDROGEN PEROXIDE, WIPES, CLOROX HEALTHCARE, 95-COUNT New Item
DISINFECTANTS	793000L046458	DISINFECTANT, LYSOL, WIPES, 80-COUNT
DISINFECTANTS	793000L012082	DISINFECTANT, OPTI-CIDE, SPRAY, 24 OZ
DISINFECTANTS	792000L041925	DISINFECTANT, WIPES, CLOROX, 35-COUNT

Requirements and Considerations for the Use of Barriers

Plexiglass barriers are recommended by CDC and OSHA specifically for work situations where staff have the potential to come in contact with people known, or suspected, to be infected with COVID, or where there is high turnover and infection status of personnel is unknown.

The CDC, OSHA and NIH do NOT recommend barriers as a replacement for physical distancing or personal protective equipment use (face coverings/face shields). Barriers should only be used in combination with physical distancing, face coverings and routine disinfection of high-contact surfaces. DOHS and the NIH Fire Marshall are available to consult on the use of barriers to ensure they are utilized appropriately. In addition to the usefulness in protecting against potential SARS-CoV-2 exposure, one must ensure they are not obstructing fire safety features (e.g. sprinkler heads, fire alarm devices, exit signs, and emergency lights). It is important to ensure the NIH Fire Marshall approval for any barrier within 18 inches from the ceiling. Opaque barriers are not recommended.

When evaluating barriers remember their limitations. They do not allow for increased population in laboratories and offices. Additionally, they may have negative impact on airflow within a space. This is important to understand when in a laboratory where Biological Safety Cabinets (BSCs), Chemical Fume Hoods (CFHs), and other local exhaust ventilation are important for controlling biological and chemical hazards. Barriers may also provide a false sense of security, leading people to believe it is safe to remain in close proximity to others for extended times.

Barriers are appropriate in some circumstances where they may provide added benefit. For example, barriers may add droplet protection in locations with frequent, short duration contact with personnel from outside your office or laboratory. When paired with physical distancing and proper face covering, reception areas may benefit from properly placed barriers. They can also be a good reminder of distancing requirements.

If you decide to use barriers, install them in a manner that reinforces physical distancing requirements:

- Design the barrier dimensions to exceed the breathing zone of partition users.
- Incorporate slots if items need to be passed between employees to minimize employees stepping around the barrier to conduct business.
- Always install with safety in mind, taking care not to hinder the user's escape in an emergency, blocking any emergency feature and ensure compliance with all fire code elements.
- Partitions should be secured to a surface to avoid falling/tipping.

For Maryland and Montana NIH facilities, please contact your assigned IC Safety and Health Specialist at <https://go.usa.gov/x7YxK> or call 301-496-2960. For NIEHS facilities in North Carolina, please call 984-287-3400.

Guidance for Personnel in Specific NIH Workspaces

Office Environments

If you work in an open office environment, be sure to maintain at least 6 feet distance from co-workers. This means having at least one workspace separating you from co-workers. All staff are required to wear a face covering while in any shared workspace. Mission essential visitors such as maintenance staff, IT help desk personnel, and delivery workers will be required to furnish and wear a face covering at NIH locations.

ICO leadership will assess office environments and processes to identify measures that facilitate physical distancing and minimize the potential for personnel to come within 6 feet of one another. Example measures include:

- Eliminate or reduce processes that prevent effective physical distancing. For example, if processes can be performed online with a brief in-person visit to verify information or identity, this will greatly reduce the duration of visitors in a space.
- Use engineering controls such as transparent shielding between customers and service providers. For instance, if a customer must have in-person, face-to-face interaction with an employee, a Lexan or Plexiglass barrier will minimize droplet transmission. These surfaces are also easily cleaned.
- Use administrative controls such as floor markings to indicate appropriate physical distancing between tasks or personnel. These markings help personnel and visitors better visualize spacing that will minimize droplet transmission. This may also minimize surface contamination from people touching common work surfaces.
- Consider using directional controls in your workspaces to allow personnel to maintain physical distance. Identify corridors as one-way or mark doorways as preferred entrances or exits.
- Use scheduling to control traffic flow within workspaces. Minimize overlapping appointments. Schedule appointments to allow maintaining adequate physical distancing.
- Shared equipment like copiers, printers, coffee pots, etc. should be disinfected prior to and immediately after use to reduce the risk of contamination.
- For IT related services, wipe items down with disinfectant appropriate for the item before allowing someone else to handle it. After work/ repair, wipe items (e.g. keyboards, telephone, monitor, etc.) with appropriate disinfectant before continued use. If someone needs to visit your work location, step out of the area and ensure physical distancing is met. Limit in-person contact as much as possible, and face coverings must be worn at all times if in-person contact is needed. Most IT functions can be done using a feature where the IT specialist can remotely install and

work on your computer from their office or home location. These features should be used to the fullest extent possible to avoid in person work.

The ORS Medical Arts Branch has created visual graphics to assist with these recommendations. Please visit their website to order posters, flyers, stickers, etc., for your location at . The site includes free downloads, which can be printed from any printer, as well as instructions for ordering larger specialty signage, posters and templates.

A cloth face covering is not required if you are working alone in an enclosed office space. A partitioned workspace, such as a cubicle, is not considered an isolated office space and consideration should be given to removing/relocating staffing personnel in adjacent cubicles.

Personnel working at a reception/front desk are expected to wear a face covering. Personnel working in these locations should consider how visitors and co-workers interact with them. These personnel may have more frequent contact with delivery personnel, customers, visitors and the public, and spaces should be configured and marked to promote safe distancing. Maintain physical distance whenever possible, frequently disinfect contact surfaces such as counters, chair armrests for visitor seating, door handles and equipment such as pens, clip boards and other office supplies that are touched by visitors. Wherever possible, eliminate touch points or shared office items. Staff in these roles should be afforded rest breaks to avoid prolonged contact time with visitors.

Common Areas

Restrooms: Use of restrooms should be limited based on size to ensure at least 6 feet distance between individuals. Wash your hands thoroughly before and afterward to reduce the potential transmission of the virus. Use a paper towel to turn on/off the water spigot and to grab door handles as you leave the restroom.

Elevators: Minimize elevator use to whatever extent possible and avoid elevators where physical distancing cannot be maintained. Consider using the stairs as an alternative where possible. Markings should be placed on the floors of elevator lobbies to remind personnel of 6-foot physical distancing requirements. Floor markings should be used inside the elevator as they are helpful visual tools to identify density numbers and locations for standing while in transit. Floor markings are available from the [ORS Medical Arts Branch](#).

If you are using the elevator, avoid touching the elevator buttons with your exposed hand/fingers. For high touch surfaces, one can use an elbow, or other device, to prevent contamination of their fingers. Ensure that while using the elevator you allow a minimum of 4 feet of clearance per person. Although 6 feet is preferred, this recommendation comes with the understanding that it is a brief, transient exposure, that will make up probably less than one minute of someone's daily potential exposure. No elevators at the NIH should ever exceed a 4-person occupancy. An elevator with its longest dimension (length or width) less than 6 feet, should have a maximum 1-person occupancy. An elevator with a longest dimension of 6 to 8 feet should have a maximum occupancy of 2 people. A larger elevator can have an occupancy of 4 people.

The lead ICO in each building should work with ORF building managers on deploying signage. Signage should include reminders to minimize touching of elevator surfaces, to disinfect hands after touching surfaces, and to minimize conversation.

Wash your hands or use alcohol-based hand sanitizers with greater than 60% ethyl or 70% isopropyl alcohol upon leaving the elevator. Hand sanitizer stations should be located outside each elevator.

Additional recommendations include refreshing “Take the Stairs” signage to encourage stairwell usage, working with ORF to determine if they can increase elevator ventilation and establish routine cleaning of elevators

Stairwells: When using stairwells minimize contact with the handrails. Keep your hand near the railing to allow you to prevent serious injury from a fall or use a disposable towel which will allow you to grasp the railing. Staff must wear face coverings in the stairwell. If you encounter another person in the stairwell, either wait on a landing for them to pass, or pass while turning your body away. Any encounter is transient, and the use of face coverings greatly reduces any exposure concern. Immediately, upon exiting the stairwell, wash your hands thoroughly or use an alcohol-based hand sanitizer with greater than 60% ethyl or 70% isopropyl alcohol. As a general reminder, stairwell doors must not be propped open as they exist in part to control smoke and provide a safe egress path out of buildings. In addition, for fire safety, stairwells should not be designated one way. They should continue to be utilized as both up and down. The NIH Fire Marshall must be consulted if a one-way designation for routine use is desired. Under emergency egress situations, all stairwells must allow persons to exit safely.

Hallways and Corridors: Wear a face covering when travelling in corridors and hallways. Minimize personal contact with people you meet or pass in the hallway and avoid touching doorknobs or surfaces. When possible, consider using one-way designations in corridors and applicable locations. The ORS [Medical Arts Branch](#) has arrow floor markings to assist with this designation. Proceed directly to your intended destination.

Break Areas: Managers must identify appropriate break locations for staff with sufficient physical distancing. These break locations should be established where personnel can take a short rest from wearing a mask or to drink fluids. Staff should be encouraged to take frequent breaks to reduce the stress of wearing a mask throughout the day. Physical distancing measures must be maintained in break areas and during mealtimes. It is recommended that persons minimize communal food or food-based celebrations/gatherings at this time. The ORS [Medical Arts Branch](#) has signage for break rooms to designate proper usage.

Although the Office of Research Facilities (ORF) has taken actions to ensure that plumbing fixtures are flushed and serviced to prevent stagnant water and the formation of Legionella or other issues, there may be appliances and devices in your immediate workplace which may require additional attention upon return.

Some suggestions include:

- flush water in refrigerators equipped with water taps and/or ice makers.
- flush water through coffee machines and dishwashers.
- remove stagnant water/ice and replace filters in water-using appliances (BRITA pitchers, Keurig, coffee makers, ice machines, refrigerators with filtered water, etc.).
- flush water in eyewashes for 15 minutes when returning to the lab and weekly hereafter.

Residual water standing in pipes can be flushed by opening taps at all water points of use and letting the water run, typically for 5-10 minutes. Care should be taken to minimize splashing and aerosol generation during flushing. Flushing your water weekly will prevent stagnation of water. Flushing and removing stagnant water regularly in water-using appliances not only prevents stagnation, it also helps prevent bacterial growth, mold, algae and discoloration. Your water-using appliance may need cleaning steps in addition to flushing (e.g., discarding ice). Consult the device manufacturer's maintenance instructions; these may be available online, in the service/repair manual or directly from the manufacturer. Filters (if

applicable) in water-using appliances also need to be replaced after a shutdown and/or non-use for over 7 days. Always follow the manufacturer's maintenance instructions in replacing the filters.

The following resources provide more information on restoring water quality after reduced operations:

- EPA Maintaining or Restoring Water Quality in Buildings with Low or No Use:
https://www.epa.gov/sites/production/files/2020-05/documents/final_maintaining_building_water_quality_5.6.20-v2.pdf.
- Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation:
<https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html>.
- For drinking water concerns/complaints, please contact the Office of Research Facilities at 301-435-8000 and/or submit a maintenance service request at:
<https://www.orf.od.nih.gov/PropertyManagement/MaintenanceServiceRequests/Pages/default.aspx>.
- For illness concerns suspected to be caused from the consumption of potable water at NIH, please contact Division of Occupational Health and Safety (DOHS) Drinking Water Program Manager at 301-537-5970 or 301-496-2346.

Meeting Spaces and Conference Rooms: Maximize the use of online meeting tools such as WebEx, Microsoft Teams and Zoom. If meetings are required with in-person attendance, [select a room](#) with a capacity that exceeds the normal needs of your meeting, keeping in mind the density requirements of 200-250 square feet per person. Space chairs apart to facilitate physical distancing. Wear face coverings at all times when holding these meetings. Prior to and at the completion of these meetings, disinfect tables and chairs and other contact surfaces using an [EPA List N approved disinfectant](#). Contact DOHS for assistance with identifying an appropriate disinfectant if needed.

Food Services and Cafeterias: When using NIH dining facilities, always wear a face covering for the selection and purchase of your food items and when navigating the public space of the cafeteria. Be decisive when selecting food items from coolers and refrigerators. This will minimize the potential for cross-contaminating multiple items. NIH dining facilities have conducted site-specific hazard assessments and have specialized practices in place tailored to protecting patrons and staff. Follow guidance from the food service facilities. Individuals are encouraged to consume their meals outside or back in their personal office space. Remember that food or drink must not be consumed in the laboratories.

Food service areas shall consider physical distancing when establishing their operations. These considerations must consider limiting available seating, reducing seating at tables in a manner that prevents multiple personnel from sitting at a table, or guarantees that personnel can maintain physical distancing. Dining facilities should identify ways that encourage outdoor dining. This will help improve physical distancing and allow for the natural ventilation of the outdoors to reduce exposure among diners.

Eating meals or snacks with colleagues should be avoided or minimized. Since eating requires removal of face coverings, this is considered a high-risk activity, especially if persons sit too close together. Ensure if eating in the same area, that minimum distance is maintained, talking is at a minimum when the face coverings are off, and that areas are cleaned before and after eating. If sharing a larger table, sitting diagonal from the other person is preferred to sitting next to or directly across from them. Smaller tables should have only one person at a time, unless all parties can be distanced and wear face coverings.

Laboratories

Research staff should carefully schedule activities to minimize multiple individuals in the laboratory at the same time. Experiments should be planned out to ensure that shared equipment and space is not overpopulated with staff. Laboratory staff will be responsible for cleaning high touch surfaces within the laboratory and it is recommended that each laboratory establish a schedule with written procedures and clearly defined responsibilities. In most cases, the disinfectant already in use for research purposes will also be effective against SARS-CoV-2. Laboratory staff may contact DOHS to assist with this assessment.

A review of required PPE to conduct research should be performed to assess the operational and hazard requirements before changes are implemented or new items introduced. In most situations, your cloth face covering will not meet the necessary PPE requirements to perform research. Do not get complacent and forget that there are other serious hazards encountered every day in laboratories. Follow established SOPs and safety guidance to ensure you meet additional requirements regarding safe laboratory practices. If COVID-19 guidance and SOPs conflict, you should discuss it with your supervisor or consult with your [ICO-assigned DOHS Safety Specialist](#).

Laboratory Scheduling Precautions

Laboratory staff shall maintain physical distancing in the workplace whenever possible. This may involve scheduling work in shifts, maintaining cohorts of staff, or spacing work appropriately on the bench and in the bays. Lab managers and PIs should consider coordinating the use of shared lab spaces to ensure there is no inadvertent double-booking of space. A well-defined schedule or online calendar will help control access to and use of equipment. Consider moving shared equipment into a space where physical distancing is possible.

Lab workers should plan their experiments thoroughly, taking extra care to identify when they will do the work, what equipment they will need, and where they will work. A thoroughly planned experiment will allow staff to reduce time in the laboratory and reduce the likelihood of encountering other staff members. Use appropriate disinfection procedures and PPE to reduce possible exposure to SARS-CoV-2.

Laboratory Cleaning and Disinfection Precautions

Proper proactive and thorough disinfection and cleaning processes can greatly reduce the risk of exposure to coronavirus. Laboratories should establish routines for disinfection of spaces and high contact surfaces. Supervisors should clearly identify the personnel responsible and procedures for disinfecting the laboratory space. These additional recommendations are not a replacement or substitute for general laboratory practices that are ongoing prior to this pandemic. Good work practices include cleaning of lab benches/ biological safety cabinets prior to and after completing work, timely cleanup of spills and preventing contamination of common surfaces by laboratory materials (e.g. not using dirty gloves on common surfaces). Gloves are worn for many tasks in the laboratory, and when they are removed, they should not be reused, and hands should be washed with soap and water immediately. It may be of benefit to declutter lab areas, and to have designated pipettes and reagents for individuals to decrease sharing of commonly used items. It is important to be aware that some laboratory chemicals may not be compatible with disinfectants, so take care if using disinfectant cloths in wiping down reagent bottles.

Be certain that disinfectants used by the laboratory are appropriate for coronavirus. Common laboratory disinfectants that are used at the NIH and are effective against coronavirus include: 10% bleach solutions (made fresh daily); 70% ethanol; Dispatch; Clorox hydrogen peroxide spray; Lysol wipes; Opticide; Peroxiguard; Vesphene III; Micro-Chem Plus; and Cavicide. Please review the label for efficacy and contact time instructions. Please be advised that the active ingredients may differ between brands (e.g. different Clorox products have differing ingredients and contact times). Active ingredients in the

disinfectant, contact time and efficacy information are listed on the label of disinfectants (Appendix III). For any questions on disinfectants, please contact DOHS at 301-496-2960.

Other cleaning and disinfection considerations include:

- Core facilities and shared spaces should implement clear expectations for shared equipment and require that personnel clean and disinfect equipment prior to start and after the completion of all work.
- Identify high-contact laboratory surfaces, equipment and tools, and minimize sharing as much as possible. When equipment must be shared, implement cleaning and disinfection protocols for all laboratory users. Many of the common NIH disinfectants will be acceptable, and laboratory staff should consider the pros and cons when determining the best agent. Concerns include whether the disinfectant could corrode items, leave sticky film, etc. DOHS is available to answer questions as needed.
- Common equipment considerations include:
 - Common laboratory surfaces and equipment: desks, workbenches, drawer handles, centrifuges, incubators, refrigerators, freezers, liquid nitrogen dewars
 - Common laboratory tools: pipettes, reagents, bottles, markers, computer keyboards and mice, touchscreens
 - Disinfectants must be chosen in line with manufacturer’s instructions to prevent damage to equipment. Depending on the volume of use, commonly touched surfaces should be cleaned before and after use.
- Scientific equipment may require specialized disinfecting procedures to avoid damaging the equipment. Review manufacturer guidance prior to disinfecting.
- Consider using disposable benchtop coverings (e.g. Chux pads, diapers, etc.) and properly disposing after use. Disposable plastic covers may be considered for keyboards.
- Follow the [NIH Exposure Control Plan](#) for further guidance.

Personal Protective Equipment (PPE) Precautions

Laboratory staff must not become complacent when selecting PPE for their work. Face coverings used when performing research should not be worn out of the laboratory. Masks or face coverings used outside of the laboratory should not also be used in the laboratory. Depending on your lab environment, this may require you to change from a cloth face covering to a disposable lab covering before starting an experiment. This recommendation is to avoid contamination of a personal face covering that would be worn in personal areas and would not be easily cleaned/discarded if accidentally contaminated with chemicals or biological materials. If you are sitting at your desk working in a laboratory environment, the cloth face covering is appropriate. If working with animals, it is not, as it will absorb allergens and is directly in your breathing zone. Appendix 4 of this document outlines specific recommendations for face coverings and other items, especially if work requires closer proximity than 6 feet. For additional questions or guidance, please contact your Safety Specialist.

While performing laboratory work, wear appropriate PPE according to your laboratory protocols. Remember:

- Avoid touching your face while wearing gloves
- Do not wear gloves used for laboratory work outside of the laboratory
- Dispose of all used laboratory PPE in Medical Pathological Waste (MPW) containers
- Do not wear laboratory PPE outside of laboratory areas

- Disposable face coverings that are worn in the laboratory should be disposed of as Medical Pathological Waste (MPW). As an alternative, laboratory staff may choose to dispose of face coverings in the general trash.

NIH Centralized Services

ORS programs (e.g., Division of Library Services, Division of Immigration Services, Division of Amenities and Travel Services, Division of Personnel Security and Access Control, etc.) have conducted activity hazard assessments of services and workflows for their operations. Follow specific guidance provided at these service locations. Personnel should always wear a cloth face covering when they visit ORS service locations and wash their hands or use an alcohol-based sanitizer when leaving those locations.

Activity hazard assessments are conducted by DOHS staff and are available for upon request.

Mechanical Spaces

Mechanical space access is limited to authorized personnel only. Limit the number of personnel working inside the mechanical space based on 6-foot physical distancing requirements. Cloth face coverings should be worn in addition to all PPE required to enter the mechanical space (closed-toed shoes, hard hat/bump cap, eye protection, work gloves, etc.). Wash hands prior to putting on and after removing PPE. ORF staff will be responsible for cleaning high touch surfaces within the mechanical space and it is recommended to establish a schedule with written procedures. Pay special attention to “high touch” areas, such as handles, buttons, switches and control panels. Tools needed to work inside the mechanical space should be disinfected after use. Personnel should always wash their hands or use an alcohol-based sanitizer as soon as possible when leaving those locations.

Staff Wellness

The outbreak of COVID-19 may be stressful – it can be difficult to cope with fear and anxiety, changing daily routines, and a general sense of uncertainty. Although people respond to stressful situations in different ways, taking steps to care for yourself and your family can help you manage stress.

Stress during an infectious disease outbreak can include:

- Fear and worry about your own health and the health of your loved ones
- Changes in sleep or eating patterns
- Difficulty sleeping or concentrating
- Worsening of chronic health problems
- Increased use of alcohol, tobacco, or other drugs

If you are experiencing stress or other mental health concerns, you can find additional resources at <https://employees.nih.gov/pages/coronavirus/how-to-cope.aspx>

Appendix I – Code of Conduct

Code of Conduct Expectation

To safely and successfully work at the NIH, we must consciously cultivate a culture of safety and responsibility in all areas. In occupational health and safety guidance, there are several key elements to building a workplace culture of safety that we incorporate in this effort: communication, employee involvement, training, leadership by example and a well-defined reporting process. This document is meant to inform the expected Code of Conduct of all NIH staff to uphold the safety work practices and policies set into place to minimize exposure of staff as they are returning to and working in the physical workspaces.

Please sign below to acknowledge that you understand the NIH’s expectations in complying to this Code of Conduct:

Individual Responsibilities

To be permitted to enter physical workspaces, individuals must:

1. Complete COVID-19 worksite specific training relevant for one’s access as required by their supervisor or ICO. Additionally, viewing the DOHS video is required for all NIH employees and tracked in the Learning Management System (LMS).
2. Comply with occupational health policies regarding reporting and contact-tracing of individuals with any COVID-19 symptoms or test-confirmed diagnosis. These include reporting any COVID-19-like symptom to OMS, staying home if/when sick, quarantining or self-isolating as instructed by physicians or after traveling as required by local government.
3. Comply with the safety measures defined in the approved plan specific to their research or administrative group and with NIH policies on facial coverings and distancing protocols. This means wearing appropriate facial coverings, cleaning and disinfecting work sites as required and complying with other risk mitigation measures outlined by the supervisor and DOHS.
4. Agree that each and every access of buildings represents an attestation – that one declares themselves symptom-free, consents to the opt-in health policy, and agrees to comply with all safety measures on and between campuses, both inside and outside buildings.

Supervisor Responsibilities

1. Develop staffing and spacing usage plans.
2. Review plans with workers and revise as necessary based on feedback.
3. Submit return to work plans for review by ICO leadership.
4. Provide site specific training to all workers prior to reentry on COVID-19 related enhanced practices.
5. Ensure open reporting of safety and health related concerns.
6. Ensure staff understand reporting of COVID-19-like symptoms and do not report to the workplace with symptoms, or if they have had a high-risk exposure to someone with COVID-19 disease.
7. Ensure staff are complying with the return to work plans, policies and reporting requirements and enforcing these requirements when necessary.

Employee Name

Employee Signature

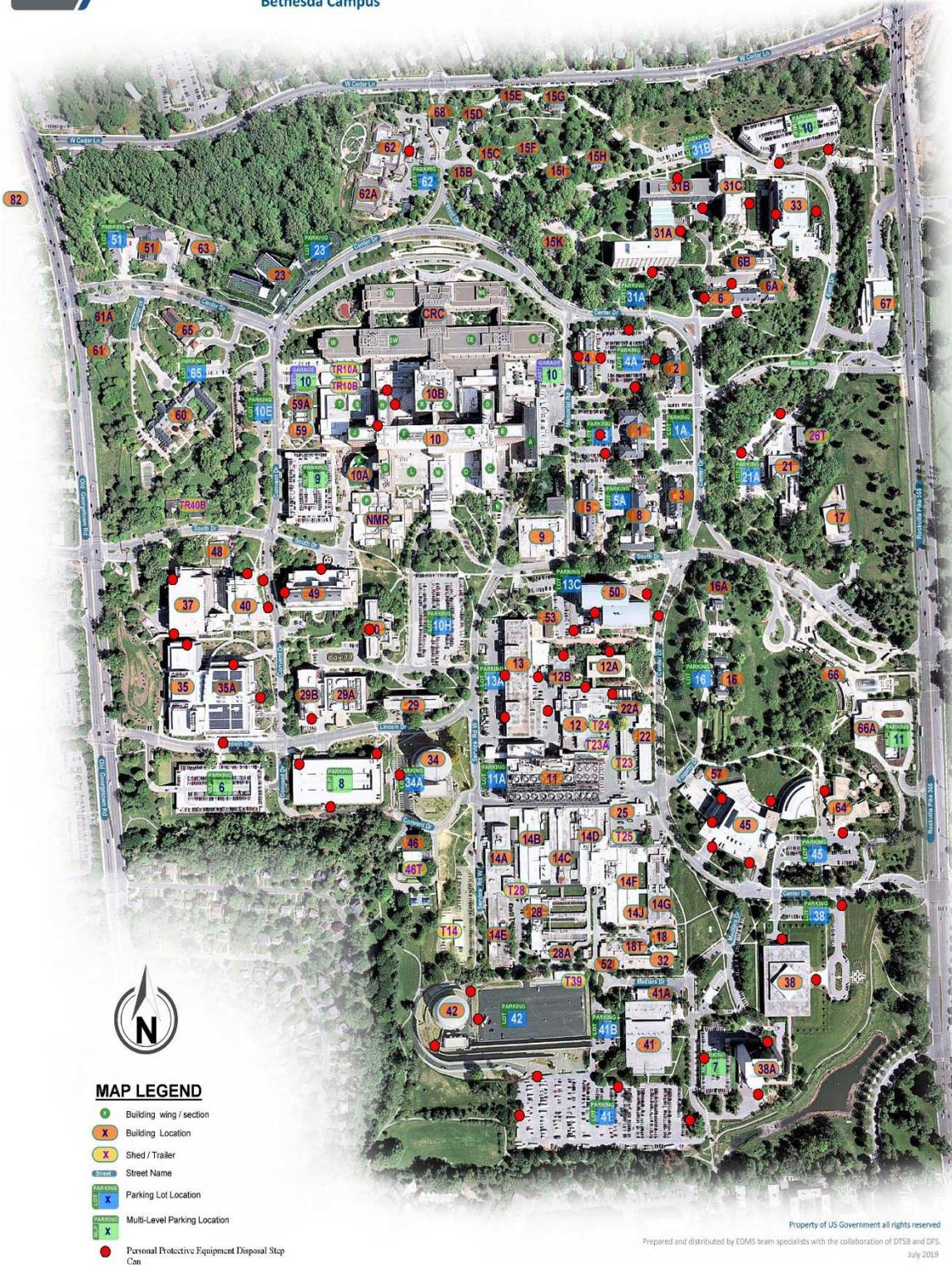
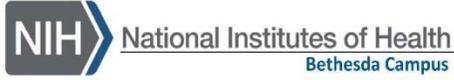
Date

Supervisor Name

Supervisor Signature

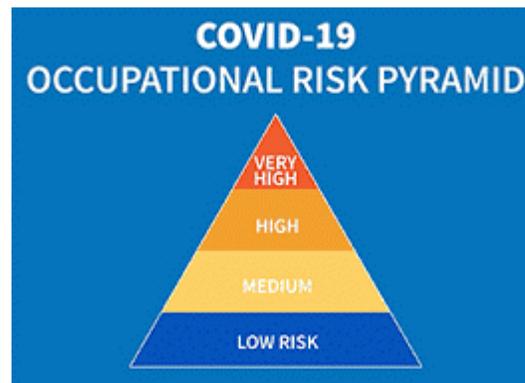
Date

Appendix II – Map of Disposal Containers for Face Coverings



Appendix IV – Risk Matrix for Workplace Operations

OSHA's Occupational Risk Pyramid for COVID-19 categorizes workers based on their risk of exposure to COVID-19. This risk pyramid reflects ranking workplace risks by using the hierarchy of controls which provides guidance to the effectiveness of different measures that can be used to mitigate a risk of exposure. Attention should focus on elimination and engineering controls, before applying administrative controls or personal protective equipment (PPE) as these are less effective measures to control hazards. This pyramid was applied to the NIH workplace, predominantly applicable to laboratory settings, resulting in the following risk categories. Please note, that clinical settings must consult the NIH clinical center infection control procedures and requirements, as they may differ due to health concerns of their patient populations. Administrative settings may employ a wide variety of technological and spacing controls, and likely are outside the scope of this appendix.



Caveat: the risk matrix below is assuming several factors to decrease the potential exposure to SARS-CoV-2 in the workplace. This assumes persons are healthy and are not coming to work when experiencing symptoms indicative of COVID-19 infection. If persons are sneezing or coughing, there is a potential for leakage around the facial covering, and this risk matrix assumes normal breathing parameters. The data are not fully conclusive, and a combination of factors must be in place to reasonably prevent COVID-19 disease. These measures need to be followed inside and outside of the workplace. This means that physical distancing, face coverings, hand hygiene and symptom assessment are performed as a standard of behavior. This risk matrix also assumes staff have operational guidelines for density in the lab, cleaning protocols, as well as operational requirements (unidirectional flows, scheduling) to assist in minimizing risk. The risk mitigation measures in this document do not supersede or replace measures outlined in pathogen or recombinant DNA registration documents.

- Low: Work activities that follow NIH Safety guidance recommendations, maintaining >6 ft distance between persons.
- Medium: Work activities that are performed within 3-6 ft distance between persons or less than 3 ft distance for <15 minutes.
- High: Work activities that are performed with <3 ft distance between persons for >15 minutes duration.
- Very High: Work activities that are performed with known COVID-19 positive sample types (serum/blood/respiratory/stool), work with live SARS-CoV-2 virus or aerosol generating procedures with known, suspected or confirmed positive patients.

In addition to use of facial coverings as described in the NIH Return to Work Safety guidance document, some work activities requiring closer interactions may dictate use of additional precautions. Research has shown that use of surgical masks reduces the potential to spread contaminants when compared to a standard disposable mask^{1,4-5}. Additionally, face shields are a good protective measure for acutely expelled aerosols (within 1-3 ft) and offer the advantage of guarding the entire face². One study demonstrated a 96% reduction in infectious particles when using a face shield near the source of particles³. Of note, face shields have been shown to be less effective when further away from the source². Additionally, face shields mean the full-face shields that attach at the forehead and cover the entire face. Face masks with attached eye protection only do not meet the layering requirement for a facial covering plus face shield.

The chart below outlines PPE and in some cases engineering/administrative controls recommended for activities that fall under each of the following NIH risk level categories. Note that face shields can be disposable or reusable. If reusable face shields are used, they should be assigned to individual staff members and not shared. If reused, they must be decontaminated after use with an EPA approved disinfectant effective against coronavirus for the appropriate contact time (even if they are not shared). If a film is left over after the contact time is achieved, using a damp paper cloth will remove this film to allow better vision through the shield.

As a reminder, any use or installation of a barrier or plexiglass shield must follow the requirements outlined earlier in the Safety Guidance. It is recommended that DOHS and the NIH Fire Marshall be consulted prior to install.

Risk Level	Admin/Engineering Controls	Recommended PPE	References
Low	<p>Refer to NIH Safety Guidance for Return to Physical Workplace</p> <p>Maintain at least 6 ft</p> <p>Use of plastic barriers may be useful to provide physical barrier between persons. Exercise virtual options, telework or telehealth options to reduce face-to-face contact</p>	<p>Lab coat, gloves and eye protection as required by NIH Manual Chapter 1340 plus disposable facial covering* for source control in accordance with Safety Guidance.</p> <p>*Procedure mask or ASTM Level 1 mask¹</p>	<p>https://www.osha.gov/Publications/OSHA3990.pdf</p> <p>https://aip.scitation.org/doi/10.1063/5.0016018</p>
Medium	<p>Consider addition of partitions that don't disrupt other engineering controls</p>	<p>Standard lab PPE plus a medical or surgical grade mask* should be</p>	<p>https://science.sciencemag.org/content/368/6498/1422</p>

	<p>(airflow of downdraft table, BSC). Perform this assessment in conjunction with your safety specialist.</p> <p>Consider arranging work so that tasks are separately physically and temporally where possible. This will assist in limiting staff in close proximity to each other. Exercise virtual options, telework or telehealth options to reduce face-to-face contact</p>	<p>used if within 3-6 feet for less than 15 minutes. Face shields should be considered as an additional layer of protection.</p> <p>*ASTM Level 2 or 3 mask¹</p>	<p>https://www.nature.com/articles/s41591-020-0843-2.pdf</p> <p>https://www.cardinalhealth.com/content/dam/corp/web/documents/whitepaper/Face%20Mask%20Selection%20Guide.pdf</p> <p>https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2931142-9</p> <p>https://www.tandfonline.com/doi/full/10.1080/15459624.2015.1095302</p>
<p>High Risk</p>	<p>Record close proximity work (date, names, length of time in contact)</p> <p>Avoid standing directly across from others, stagger location.</p> <p>Include frequent training and reminders on self-assessment for symptoms and reporting of symptoms to supervisor.</p> <p>Operations in this category must be reviewed by supervisor, DOHS is available for consult on activity hazard analyses and risk assessment guidance.</p>	<p>Standard lab PPE plus a face shield and a Medical or surgical grade mask*.</p> <p>Some procedures and patient settings may warrant use of N95s. Consult DOHS for risk assessment.</p> <p>*ASTM Level 2 or 3 mask¹</p>	<p>https://www.cdc.gov/niosh/topics/eye/eye-infectious.html</p> <p>https://www.tandfonline.com/doi/full/10.1080/15459624.2012.725986</p> <p>https://www.tandfonline.com/doi/full/10.1080/15459624.2013.877591</p>

<p>Very High Risk</p>	<p>All lab work in this category requires pathogen registration with the Institutional Biosafety Committee. Recommendations will be provided upon approval to commence the research</p> <p>Clinical operations should be reviewed with your supervisor, and where appropriate, Clinical Center Epidemiology Services and DOHS.</p>	<p>Follow requirements outlined in pathogen registration document.</p> <p>Procedural SOP and PPE should be decided upon by supervisor to be commensurate with the risk. Likely requires respiratory protection, and compliance with medical clearance and fit test requirements. Additional PPE will be warranted based on procedures and infection control measures.</p>	<p>Manual Chapter 3035</p> <p>NIH Recombinant DNA Guidelines(Risk Group 3)</p>
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¹ Face masks are rated by ASTM International based on five criteria according to the ASTM F2100-11 standard. Below are the criteria that are most commonly listed by manufacturers to help determine the rating level. The bacterial and particulate filtration efficiency tests help determine the material’s ability to filter out aerosols of bacteria and particulates respectively. Fluid penetration resistance is measured by a horizontal projection of synthetic blood at known velocities corresponding to human blood pressure (mm hg).

	<i>LEVEL 1</i>	<i>LEVEL 2</i>	<i>LEVEL 3</i>
<i>BFE (Bacterial Filtration Efficiency) at 3.0 micron</i>	≥ 95%	≥ 98%	≥ 98%
<i>PFE (Particulate Filtration Efficiency) at 0.1 micron</i>			
<i>Fluid Resistance to Synthetic Blood (mm Hg)</i>	80	120	160

Appendix V – Recommended PPE Decision Chart

The chart below is complimentary to the risk matrix contained in the previous appendix (Appendix IV). After determining the risk level for your work task from this appendix, look at the column below which matches that risk level. Recommended PPE is listed below each risk level, in descending order of preference. As availability of PPE in the marketplace continues to fluctuate, you can select less preferred PPE (lower on the chart) if preferred PPE (higher on the chart) is unavailable. Always consult DOHS before considering the provision of respirators where procedure or surgical masks are listed as the recommended PPE.



*Masks with integrated face shields are not equivalent protection to the combination of a mask and a full face shield. For these risk levels, separate masks and full face shields are required.

Models available for purchase through the NIH Supply Center are hyperlinked:

Cloth Masks: [White](#), [Black](#), [NIH Logo](#)

Procedure Masks: [3M 1820](#), [HALYARD 47117](#)

ASTM Level 1 Masks: HALYARD Level 1 Procedure Mask 47576, HALYARD Level 1 Procedure Mask 47566

ASTM Level 2 Masks: [HALYARD LEVEL 2 EARLOOP 62115](#)

Level 3 Masks: [HALYARD 47137](#), [HALYARD 47107](#)

Face Shields: [Halyard 7.5"](#), [Halyard 9.5"](#)

References:

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