



STOP THE SPREAD

NIH Safety Guidance & COVID-19 Safety Plan

*for Working Onsite During the
Coronavirus Pandemic*

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*



National Institutes of Health

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List of Changes from the Previous Version

September 2021 Version

- Guidance for government travelers updated, including a reference table
- Acceptable mask changed to 2-layer mask to reflect the CDC changes
- Hold time for natural decay reduced to 24 hours to bring in line with CDC
- Hyperlinks update where necessary
- Update CC mask policy description
- Removed restrictions on use of respirators with exhalation valves to reflect new research from NIOSH that demonstrates their efficacy

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 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 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.

The CDC recommends that even fully vaccinated people wear masks indoors to reduce the spread to the SARS-CoV-2 Delta variant. Fully vaccinated means two weeks after the last dose needed to complete the vaccination series (which differs based on manufacturer). While the NIH acknowledges the CDC as the Nation's expert on public health for day-to-day interactions of the public, the NIH must also consider how their guidance applies to our circumstances. The NIH is home to the largest research hospital, with vulnerable patient populations that may be immune compromised or have other conditions that increase their risk of severe disease or death. Additionally, our workforce also consists of persons with medical concerns, and even if those persons are vaccinated, they remain vulnerable to more serious COVID-19 disease. The data on vaccine efficacy, transmissibility of the variants and infectious doses of the SARS-CoV-2 virus are still emerging. Furthermore, the NIH also recognizes that the Occupational Safety and Health

Administration (OSHA) has established expectations for the workplace regarding COVID19 that require employers ensure that their workplace is as free of recognized hazards (including COVID19) as feasible. To protect our staff to the best possible level, we must maintain a combination of risk mitigation elements for our entire workforce. Finally, in January 2021, President Biden issued an executive order stating “on-duty or on-site Federal employees, on-site Federal contractors, and other individuals in Federal buildings and on Federal lands should all wear masks.” For these reasons, the NIH will maintain some masking requirements deemed necessary to protect the NIH workforce. Specifically, the NIH will still require masks be worn when inside any NIH owned or leased facility. Outdoors, personnel should wear masks if they cannot maintain 6’ or more of physical distancing.

Finally, in public health emergencies, it is important that all persons follow these recommendations 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 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 inside any NIH owned or leased facility or when outside and 6’ of physical distancing cannot be maintained, 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.

OSHA Emergency Temporary Standards

In June 2021 the Occupational Health and Safety Administration issued an Emergency Temporary Standard (ETS) for Healthcare Facilities (29 CFR 1910.502) and a mini-respiratory protection ETS (29 CFR 1910.504). The guidance outlined in the document should be considered mandatory for locations that are covered by this standard. The following locations shall adhere to the guidance in this document:

- Clinical Center Patient Care Areas
- Clinical Center Hospital Support Services
- The NIH Bethesda Campus COVID-19 Carline Testing Site

- Contractors entering the NIH Patient Care or Hospital Support Services areas
- NIH Fire Department when emergency health services are provided

Other locations that provide non-hospital, ambulatory care (e.g., any vaccine clinic, asymptomatic testing site, or OMS clinic outside the clinical center) are considered exempt from the OSHA standards because all personnel and visitors entering those sites are screened for COVID-19 symptoms and excluded if they have suspected or confirmed COVID-19. **This should not be construed to mean that physical distancing, masking, population densities or other guidance in this document is not required, but rather that those locations that are covered by the standard will be subject to additional regulatory scrutiny under the standard.**

Specific elements covered by the OSHA ETS includes a requirement for a **COVID-19 Safety Plan** that includes workplace hazard assessments, input from non-managerial personnel, monitoring for plan effectiveness, and methods to minimize transmission of the virus causing COVID-19. This document will serve as the COVID-19 Safety Plan for areas requiring it under the OSHA ETS. Links to Workplace Hazard Assessments and Standard Operating Procedures are included in Appendix VIII of this document.

COVID-19 Safety Coordinators

The ETS requires that the employer identifies COVID-19 Safety Coordinators. The NIH COVID-19 Safety Coordinators for the NIH are listed below.

Location (Areas of Responsibility)	COVID-19 Safety Coordinator	Contact
NIH Clinical Center	Hospital Epidemiologist	301-827-9089
NIH ORF and ORS services supporting the Clinical Center	Division of Occupational Health and Safety Director	301-496-2960
NIH Car-Line Testing Site	Division of Occupational Health and Safety Director	301-496-2960
NIH Fire Department	Division of Fire and Rescue Services Chief	301-496-2372

The COVID-19 Safety Coordinator’s role is to implement and monitor the COVID–19 plan. The COVID–19 safety coordinators are knowledgeable in infection control principles and practices as they apply to the workplace and employee job operations. The safety coordinators are NIH personnel that have the authority to ensure compliance with the COVID–19 plan.

COVID-19 ETS Requirements Summary and Reference

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
Patient Screening and Management	Requires that access to facilities be limited and that visitors are screened for suspected or confirmed COVID-19 cases. Also Includes Patient management strategies	<p>This document, Symptom Monitoring and Reporting Requirements (page 14)</p> <p>Appendix VIII – Hazard Assessments and Standard Operating Procedures</p> <p>The COVID-19 Phone Screening Tool is completed for Clinical Center patients within 48 hours prior to arrival, followed by screening upon entry to Building 10, and again for CRIS Emerging Infections Screening upon arrival to Clinic/Patient Care unit</p> <p>Coronavirus (COVID-19) Fact Sheet for NIH Clinical Center Patients and Visitors</p> <p>New COVID-19 Testing Plan for Clinical Center Inpatient Admissions</p> <p>Update to Patient Visitor Policy</p> <p>Clinical Center verify CDC’s patient management strategies are incorporated: Infection Control During COVID-19 (Inpatients and Visitors)</p> <p>Contract language drafted for incorporation into all contracts supporting healthcare service at the NIH. Require multi-employer workplace agreements related to infection control policies and procedures, the use of common areas, and the use of shared equipment that affect employees at the workplace. See 1910.502(n)(1)(v)</p>
Standard and Transmission-Based Precautions	Develop and implement policies and procedures in accordance with CDC regarding standard and transmission-based precautions	Appendix VIII – Hazard Assessments and Standard Operating Procedures (page 50)

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
Personal Protective Equipment (PPE)	Mandate facemasks and their proper wearing, provide and ensure PPE usage when performing aerosol-generating procedures on suspect or confirmed COVID-19 patients, provide respirators and other PPE in accordance with standard and transmission-based precautions, allowance of voluntary respiratory usage per 1910.504	<p>Face Coverings: This document, Facial Coverings, (page 19)</p> <p>This document, Appendix IV – Risk Matrix for Workplace Operations (Page 40) Appendix V – Recommended PPE Decision Chart (page 45)</p> <p>Appendix VIII – Hazard Assessments and Standard Operating Procedures (page 50)</p> <p>Clinical Center Guidelines for Use of Masks for Patient Care</p> <p>Clinical Center Guidelines for Use and Care of Face Shields</p> <p>Clinical Center Guidelines for Extended Use of N95 Respirators</p> <p>NIH Respiratory Protection Program</p> <p>Voluntary Respirator Use Information and Certification</p>
Aerosol-Generating Procedures (AGP)	Where there are suspected or confirmed COVID-19 cases, limit staff to essential employees; Perform procedures in an airborne infection isolation room (AIIR), if available, and	<p>Clinical Center Intranet Hospital Epidemiology Emerging Infections Diseases webpage</p> <p>Clinical Center Infection Control Guidelines</p> <p>Managing Symptomatic Patients in the Clinical Center:</p> <p>Bringing Patients with Active and Suspected COVID-19 Infection (PUIs) to the Clinical Center</p> <p>Testing Symptomatic Patient (Inpatient / Outpatient)</p> <p>Transport of COVID-19 Patients and PUIs</p> <p>Discontinuing Enhanced Respiratory Isolation</p>

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
	clean and disinfect surfaces and equipment once the procedure is completed	<p>Bronchoscopy</p> <p>Department of Perioperative Medicine Preoperative Screening for COVID-19</p> <p>GI Endoscopy</p> <p>Interventional Radiology</p> <p>Metabolic Clinical Research Unit Studies</p> <p>Nasal Endoscopy</p> <p>Pulmonary Function Testing</p> <p>Tracheostomy</p> <p>Managing Recovered COVID-19 Patients:</p> <p>Clinician Fact Sheet</p> <p>Additional Resources for Clinical Center Staff:</p> <p>COVID-19 Surveillance Testing for Inpatients – Staff Fact Sheet</p> <p>Inpatient Visitors: Rooming-In</p> <p>Managing CC Patient Visitors During the COVID19 Pandemic: Requesting an Exception</p> <p>Mask and Face Shield Reminder</p> <p>Trach and Neck Stoma Patients: COVID-19 Source Control and COVID-19 Testing</p> <p>See also this document, Appendix VIII (page 50)</p>
Physical Distancing	Maintain 6’ of physical distancing whenever possible	This document, Physical Distancing (page 22)

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
Physical Barriers	Where physical distancing cannot be maintained, use physical barriers to limit exposure to droplets	This document, Requirements and Considerations for the Use of Barriers (page 28)
Cleaning and Disinfection	Follow CDC guideline regarding disinfection and cleaning of areas	This document, Guidance on Cleaning and Disinfection (page 27), Clinical Center: Policies require that spaces are thoroughly disinfected between patients.
Ventilation	Maximize fresh air in the HVAC system and utilize MERV-13 or higher filters for the HVAC system	ORF COVID-19 Ventilation memo
Health Screening and Medical Management	Screen employees daily at no cost to the employee (self-monitoring is acceptable). Each employee must report COVID-19 confirmed and suspected illness, or symptoms to the employer. Employers must notify all employees	This document, Symptom Monitoring and Reporting Requirements (page 14) SAFER-COVID Tool Contact tracing and notifications: This document, What Happens When Someone Tests Positive? (page 14) Clinical Center: Appendix VIII – Hazard Assessments and Standard Operating Procedures (page 50) COVID-19 Staff Self-Isolation Guidance Periodic Testing of Asymptomatic CC Staff Map of Testing Site for Asymptomatic CC Staff

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
	who were not wearing respirators and/or required PPE of any COVID-19 exposure at the workplace. Personnel removed for COVID symptoms must be paid by the employer	
Vaccination	Vaccines offered to employees are at no cost and paid time-off is given for vaccinations and side effects	This document, COVID-19 Vaccine Program, page 8 NIH COVID-19 vaccination plan, https://employees.nih.gov/pages/coronavirus/vaccination-plan-nih-staff.aspx https://employees.nih.gov/pages/coronavirus/vaccination-requirements.aspx
Training	Training for personnel and contractors on the elements of this plan	The NIH Safety Guidance Video, available in English online in the Learning Management System (LMS) is required for all personnel prior to entry into physical workspaces. Safety Guidance Video Technical Tips
Recordkeeping	Requires establishment of a COVID-19 log and make records available to employees	This document, What Happens When Someone Tests Positive? (page 14)
Reporting	Any death or hospitalization of an employee due to COVID-19 must be	OMS and TAB OSHA Injury Reporting Requirements Procedure (available upon request)

OSHA ETS Requirement	Requirement Summary	NIH Policy or Plan Reference
	reported to OSHA within 24 hours of the employer being notified	
Medical Removal from Workplace	If an employee is confirmed, diagnosed, or suspected of having COVID-19 by a licensed healthcare provider, or is experiencing certain symptoms, they must be immediately removed from the workplace and kept away until return to work criteria are met	If an NIH staff member tests positive for COVID-19, specific steps are taken , including communication from OMS to the supervisor that the staff member cannot report to work

This plan has been shared with the NIH Occupational Safety and Health Committee (OSHC), the Office of Research Facilities Safety Committee, the Office of Research Services Safety Committee, the Clinical Center Safety Committee, and federal collective bargaining unit representatives. Feedback from these committees, which are composed of managerial and non-managerial staff has been used to ensure this plan is acceptable and feasible.

Personnel wishing to provide additional feedback on this plan and to provide input on its continual improvement may provide feedback through their IC Safety and Health Committees, their designated IC Safety and Health Specialist, The NIH Reporting Hazardous Conditions website, or through the COVID-19 Reporting tool. This plan will be reviewed quarterly to ensure it is relevant and that provided resources in the plan are current.

Training.

All affected NIH personnel shall receive training on this plan and 29 CFR 1910.502. All health care personnel and healthcare support personnel, as well as impacted contractors must take this

training. This training will be hosted on the NIH Learning Management System (LMS) and provide employees training on:

- COVID–19, including how the disease is transmitted (including pre-symptomatic and asymptomatic transmission), the importance of hand hygiene to reduce the risk of spreading COVID–19 infections, ways to reduce the risk of spreading COVID–19 through the proper covering of the nose and mouth, the signs and symptoms of the disease, risk factors for severe illness, and when to seek medical attention;
- Employer-specific policies and procedures on patient screening and management;
- Tasks and situations in the workplace that could result in COVID–19 infection;
- Workplace-specific policies and procedures to prevent the spread of COVID–19 that are applicable to the employee’s duties (e.g., policies on Standard and Transmission-Based Precautions, physical distancing, physical barriers, ventilation, aerosol generating procedures);
- Employer-specific multi-employer workplace agreements related to infection control policies and procedures, the use of common areas, and the use of shared equipment that affect employees at the workplace;
- Employer-specific policies and procedures for PPE worn, including:
 - When PPE is required for protection against COVID–19;
 - Limitations of PPE for protection against COVID–19;
 - How to properly don, doff, and properly use PPE;
 - How to properly care for, store, clean, maintain, and dispose of PPE; and
 - Any modifications to donning, doffing, cleaning, storage, maintenance, and disposal procedures needed to address COVID–19 when PPE is worn to address workplace hazards other than COVID–19;
- Workplace-specific policies and procedures for cleaning and disinfection;
- Employer-specific policies and procedures on health screening and medical management;
- Available sick leave policies, any COVID–19-related benefits to which the employee may be entitled under applicable federal, state, or local laws, and other supportive policies and practices (e.g., telework, flexible hours);
- The identity of the safety coordinator(s) specified in the COVID–19 plan;
- The requirements of this section; and
- How the employee can obtain copies of this section and any employer specific policies and procedures developed under this section, including the employer’s written COVID–19 plan

Additional training will be provided by the supervisor regarding specific tasks. If changes are made to this plan or to job-specific protocols additional training will be provided. Any employee that does not demonstrate knowledge, understanding or skill implementing this plan will be required to attend additional training.

If, at any time during or after the training, personnel have questions about this program, they can contact their COVID-19 Safety Coordinator(s) named above.

Contractors

This plan, as it applies to the OSHA ETS, should be shared with affected contractors. Contractors are expected to comply with this plan. Employer-specific multi-employer workplace agreements related to infection control policies and procedures, the use of common areas, and the use of shared equipment that affect employees at the workplace must be established. These agreements will specify that contractors must comply with the NIH Safety Guidance and COVID-19 Safety Plan for Working Onsite During the Coronavirus Pandemic and must share their company COVID-19 Safety Plans to the extent they impact expectations of NIH and other contract personnel at the affected site.

Anti-Retaliation

It is the policy of the NIH that no one at the NIH shall be discharged or discriminated against for exercising their rights under the OSHA ETS or for engaging in actions required by the ETS or any other applicable federal standard.

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 (e.g., office) 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 in any NIH owned or leased facility. Masks must also be worn outside on any NIH campus when 6' of physical distancing cannot be maintained. Face coverings are a fundamental part of preventing the spread of coronavirus. When you wear a face covering, you reduce the dispersion of aerosols and 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 MUST NOT report to work. Immediately contact Occupational Medical Service (OMS) for an evaluation by [completing the screening questionnaire](#). Please contact your supervisor to discuss your leave or duty status. If you experience severe symptoms, you should immediately contact your healthcare provider.

Any employee that experiences COVID-19 symptoms or is suspected to have COVID is expected to report those symptoms to the NIH OMS. Additionally, employees must report any positive COVID-19 result.

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](#).

Risk Factors for Severe Illness.

COVID-19 can affect anyone, and the disease can cause symptoms ranging from mild to very severe. Some populations are more likely than others to become severely ill. Of note are elderly personnel, persons with underlying medical conditions (e.g., diabetes, obesity, COPD, etc.), and pregnant or recently pregnant personnel. However, it is important to remember that ANYONE can contract COVID-19 and become severely ill, including younger populations and vaccinated people. The CDC defines severe illness for COVID-19 to mean that a person with COVID-19 may need hospitalization, intensive care, or a ventilator to help them breathe or they may even die.

What Happens When Someone Tests Positive?

Every employee (contract and federal) who receives a COVID-19 test result indicating current infection must report that result to OMS immediately at OMSmonitoringprogram@mail.nih.gov. 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. Contact tracers confirm the employee's account with the supervisor, if indicated, obtain relevant contact information, and initiate the risk assessment of contacts (usually the same evening). The utmost care is taken not to identify the worker to others in the workplace. Within 24 hours of receipt of a new positive test result by OMS, an OMS clinician provides a form to the supervisor stating a general health condition precludes affected staff 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.

Information from contact tracing is used to notify specific personnel that may have had high risk (i.e., greater than 15 minutes) contact with COVID-19 personnel while not wearing PPE. It is also used to notify personnel that may have been in a location where a COVID-19 patient was present. These notifications are aimed at improving awareness for potentially exposed personnel so that they may make educated choices regarding their personal health monitoring. All notifications are made ensuring that no personal health information (PHI) is shared. Notifications will be made using phone calls and e-mail for notifications of high-risk exposures. Email, postings on NIH internet and intranet sites, and signs posted in affected locations will be used for

personnel that may have been in an area where a positive case was present but did not have high-risk contact with those personnel.

Staff are excluded from returning to their onsite workspace for the minimum duration of their infectious or at-risk period (see ETS [1910.502\(l\)\(4\)](#)). Institutional policies may extend the exclusion period to protect vulnerable patient and employee groups. Decisions regarding an employee's return-to-work after COVID-19-related medical workplace removal are made by OMS providers. Removal from the workplace can be shortened for high-risk contacts and persons presumptively positive for COVID-19 if they have an appropriately timed negative PCR COVID-19 test. NIH provides this testing at no cost to employees. Medical removal protection benefits apply unless an individual refuses an offered COVID-19 PCR test (1910.502(l)(4)(ii)(B)(3)1910.502(l)(4)(ii)(B)(3)1910.502(l)(4)(ii)(B)(3)). Medical removal benefits include continuation of full pay and regular benefits while accommodated by working remotely or in isolation, or if accommodation is not feasible, with up to \$1400 per week compensation (1910.502(l)(5)(iii)(A)1910.502(l)(5)(iii)(A))1919. The latter is offset by any contemporaneous outside income, employer-funded compensation program (e.g., sick leave or administrative leave) (1910.502(l)1910.502(l)(5)(iv)). An employee will not suffer any adverse action as a result of COVID-19-related medical removal ([1910.502\(l\)\(5\)\(v\)](#)).

All work associated COVID-19 cases are logged within 24 hours. The COVID-19 log contains, for each instance, all information required by 1910.502, including the employee's name, one form of contact information, occupation, location where the employee worked, the date of the employee's last day at the workplace, the date of the positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced. This information is a confidential medical record. However, personnel may request their record by contacting the NIH Occupational Medical Service. A redacted version of all cases is also available upon request.

COVID-19 Vaccination Program

In December 2020, the first COVID-19 vaccines were made available to the NIH Community. The NIH Office of Research Services (ORS) manages the NIH COVID-19 Vaccine Program for NIH staff in coordination with the NIH Clinical Center and others. The goal of the NIH COVID-19 Vaccine Program is to minimize workplace transmission of SARS-CoV-2, the virus that causes COVID-19, and to provide OSHA-required protections such as paid leave to obtain vaccination and to accommodate potential side effects after vaccination ([1910.502\(m\)](#)). NIH vaccination paid leave options also include up to 4 hours of excused absence to receive/accompany a family member during normal tour hours for each individual dose of the vaccine and 2 administrative workdays for those who experience/must assist a family member who experiences side effects as a result of the vaccine. NIH has applied the Centers for Disease Control and Prevention (CDC) Recommendations to NIH's unique infrastructure for our frontline workers. The NIH Vaccine Plan follows the Return to Physical Workplace categories and is outlined [here](#). NIH vaccines are offered free to all NIH personnel and badged contractors.

Personnel with patient contact are required to have a COVID-19 vaccination. The NIH vaccination policy and requirements can be found at <https://employees.nih.gov/pages/coronavirus/vaccination-requirements.aspx>.

Even with the vaccination program, the safety procedures outlined in this document must still be adhered to at all times. The vaccines are not 100% effective, and the best way to decrease transmission and reduce risk is to wear face coverings, stay physically distant, maintain low densities and to always ensure thorough cleaning and handwashing, both on and off the NIH campuses.

Staffing Plans

The NIH Coronavirus Response and Recovery 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 Response and Recovery Team 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 Response and Recovery Team 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.

General Travel Guidance

Recommended and required infection control and prevention measures for NIH employees during and after travel, or after having guests in your home, are based on risk of exposure to SARS-CoV-2, the virus that causes COVID-19. 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 continues to be associated with increased risk of exposure to SARS-CoV-2 even as highly effective vaccines offer more protection. Fully vaccinated travelers are less likely to get and spread COVID-19 and the CDC has recently revised its guidance for [fully vaccinated domestic](#) and [international travelers in light of the increased transmissibility of the Delta variant](#).

Whenever you are travelling, or you are gathering with people outside your household or pod, it's important that you check for changes in CDC guidance, and follow the most current [CDC Guidance to reduce the risk to yourself and others](#).

Based solely on CDC recommendations, [fully vaccinated](#) asymptomatic domestic travelers are not required to test before or after travel (unless their destination requires it) or to quarantine after travel. However, the [CDC-issued COVID testing requirement](#) remains in effect for international travelers coming to the United States regardless of vaccination status. Before boarding their flight, air passengers departing from any foreign country to the U.S. must provide a negative viral COVID test from within three calendar days prior to departure or [documentation of COVID recovery](#) within the past 3 months. Fully vaccinated returning [international travelers](#) are not required to self-quarantine on arrival in the United States, but should get tested within 3-5 days of their return.

However, keeping the NIH safe requires additional measures because of our vulnerable patient and worker population. Determining when it is safe for you to return to NIH facilities depends on the level of risk of exposure within two weeks of your coming to campus, presence of symptoms, and whether you are [fully vaccinated](#). See “Instructions for Personal and Official Government Travel” below for more details.

Travel destination, or the location of origin of visitors, is a factor to consider when evaluating risk of exposure to SARS-CoV-2. The NIH uses the [CDC COVID Data Tracker](#) and the [CDC COVID Travel Recommendations by Destination](#) webpages in making risk determinations. Other State health departments and reputable media outlets are also 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>.

Best Practices for all Travelers

- Get fully vaccinated
- Wear a properly fitted mask
- Adhere to physical distancing, facial covering, and hand hygiene at all times. Consideration should be given to double masking or other methods to improve fit and filtration of face coverings.
- Avoid unnecessary risk and take steps to lower it when you cannot avoid traveling.
- Understand the risks that you are taking, e.g., activities, destinations, or modes of transportation, and maintain awareness of ill persons in your vicinity.
- Report exposure and illness and do not come to work until you have been evaluated.

- 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 such as bars, casinos, movie theaters, and gyms and large gatherings such as concerts, sporting events and re-unions or parties with 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.

Practices that may decrease the risk of travel-associated COVID-19 exposure

- Use private vehicles and avoid of high-use facilities and surfaces (e.g., public restrooms).
- Avoid crowded areas or quickly traversing when it cannot be avoided.
- Travel with 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), including use of methods to improve the fit and filtration of your facial covering, and > 6ft distancing.

Safety Recommendations for Personal Travel

Based on recent evidence that shows that fully vaccinated people are less likely to get and spread COVID-19, but are still vulnerable to infection from variants, the CDC has updated its travel guidance. NIH employees who engage in personal travel (especially to [high-risk areas](#)), or spend time closely associating with friends or family outside of their household or pod from high-risk areas, should take the following measures, dependent on their vaccination status and whether the travel is domestic or international:

General

The HHS considers a person fully vaccinated when:

- At least 2 weeks have passed since receiving the second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or
- At least 2 weeks have passed since receiving a single-dose vaccine, such as Johnson & Johnson’s Janssen vaccine
- **If you don’t meet these requirements, you are NOT fully vaccinated under HHS policy. Keep taking all precautions until you are fully vaccinated.**

If you have an underlying condition or are taking medication that weakens your immune system, you may NOT be fully protected even if you are fully vaccinated. Even after vaccination, you

may need to continue taking special precautions. Talk to your healthcare provider and contact OMS if you have any questions or concerns.

Regardless of vaccination status, you should not travel (without a negative COVID test) or return to work (without clearance by OMS) if you or any of your travel companions:

- Are sick with symptoms of COVID-19 (even if fully vaccinated against COVID-19 or have recovered from COVID-19 in the past).
- Have suspected or diagnosed COVID-19 (even if you don't have symptoms)
- Have been around someone with suspected or diagnosed COVID-19 in the past 14 days (even if they did not have symptoms).

Definitions

- **Active monitoring** – A program of post exposure monitoring where you are required to keep a symptom log and follow up daily with OMS regardless of symptoms. An OMS representative will contact you daily. You are not allowed to be present in NIH facilities if you are in active monitoring. Individuals who are assessed to have high-risk exposures will typically be assigned to an active monitoring program. Active monitoring usually lasts 14 days after exposure but may be ended early with an appropriately timed negative PCR based test for COVID – 19. NIH provides this testing at no cost to employees and contractors. You may also be tested for free at many locations in the community under public programs or private insurance. Medical removal benefits under the OSHA Emergency Temporary Standard for COVID - 19 will apply if you are a healthcare worker.
- **Isolation** – A procedure that separates people who are sick with a contagious disease from people who are not sick. You will be placed in isolation if you are diagnosed with COVID – 19 or have symptoms suggestive of COVID – 19 pending further evaluation. Isolation is usually voluntary, but in a public health emergency, officials have the authority to isolate people who are sick. If you become sick with COVID – 19, OMS will ask you to self-isolate at home if you are not ill enough to be admitted to a hospital. Your County Public Health Authority may order you to isolate. For most people with COVID-19 illness, isolation and precautions can generally be discontinued 10 days after symptom onset and resolution of fever for at least 24 hours, without the use of fever-reducing medications, and with improvement of other symptoms. Medical removal benefits under the OSHA Emergency Temporary Standard for COVID will apply if you are a healthcare worker.
- **Quarantine** – A procedure that separates people who have been exposed to a contagious disease from unexposed people. Quarantine can be voluntary, but in a public health emergency, officials have the authority to quarantine people who have been exposed to an infectious disease. If you have a high-risk exposure to COVID – 19, OMS will ask you

to self-quarantine at home. Depending on the circumstances, your County Public Health Authority may order you to quarantine. Removal from the workplace can be shortened for high-risk contacts and persons presumptively positive for COVID-19 if they have an appropriately timed negative PCR COVID-19 test. NIH provides this testing at no cost to employees and contractors. You may also be tested for free at many locations in the community under public programs or private insurance. Medical removal benefits under the OSHA Emergency Temporary Standard for COVID will apply if you are a healthcare worker.

- **Self-monitoring** – A program of post exposure monitoring where you are asked to carefully watch for COVID-19 symptoms and promptly self-isolate, report to OMS via [OMS Symptom Questionnaire](#), and obtain testing if symptoms develop. Individuals who are assessed to have low risk exposures are typically assigned to self-monitoring. Self-monitoring usually lasts 14 days after exposure but may be ended early with an appropriately timed negative PCR based test for COVID – 19. NIH provides this testing at no cost to employees and contractors. You may also be tested for free at many locations in the community under public programs or private insurance.

Domestic Personal Travelers

- If you are **fully vaccinated with an FDA-authorized vaccine, it is recommended that you:**
 - Implement COVID-19 mitigation strategies during travel and at the destination including:
 - Wearing a mask over your nose and mouth when high risk exposures are possible. Masks are required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States and in U.S. transportation hubs such as airports and stations.
 - Avoiding crowds and staying at least 6 feet/2 meters (about 2 arm lengths) from anyone who is not traveling with you to the extent feasible.
 - Avoiding indoor dining (especially buffets) to the extent feasible and refraining from entering bars, casinos, movie theaters, gyms, concerts, or sporting events.
 - Washing your hands frequently or using hand sanitizer with at least 60% alcohol.
 - Continue COVID-19 mitigation strategies after travel including:
 - Self-monitoring for COVID-19 symptoms with immediate isolation, reporting to OMS via [OMS Symptom Questionnaire](#), and testing if symptoms develop.

- Following all state and local recommendations or requirements.
- Obtain a COVID test 3-5 days after completing travel and prior to returning to the physical workplace at an NIH facility. Alternatively, you may complete 14 days of self-monitoring while teleworking (with your supervisor's permission and an approved telework agreement). COVID testing can be done through the asymptomatic testing program at an NIH facility or with a PCR based test in the community (under private insurance). In the interim, if able to, use telework to conduct work duties. If you are unable to telework, contact your supervisor for options such as excused absence, sick or annual leave, or emergency leave (if available).
- If you are **unvaccinated or partially vaccinated, you should:**
 - Get tested 1-3 days before travel and cancel travel plans if testing is positive.
 - Implement COVID-19 mitigation strategies during travel and at the destination including:
 - Wearing a mask over your nose and mouth. Masks are required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States and in U.S. transportation hubs such as airports and stations.
 - Avoiding crowds and staying at least 6 feet/2 meters (about 2 arm lengths) from anyone who is not traveling with you to the extent feasible.
 - Avoiding indoor dining (especially buffets) to the extent feasible and refraining from entering bars, casinos, movie theaters, gyms, concerts, or sporting events.
 - Washing your hands frequently or using hand sanitizer with at least 60% alcohol.
 - Continue COVID-19 mitigation strategies after travel including:
 - Self-monitoring for COVID-19 symptoms with immediate isolation, reporting to OMS via [OMS Symptom Questionnaire](#), and testing if symptoms develop.
 - Getting tested with a viral test 3-5 days after travel AND stay home and self-quarantine for a full 7 days after travel (this is a CDC requirement).
 - Even if you test negative, stay home and self-quarantine for the full 7 days (this is a CDC requirement).
 - If your test is positive, isolate yourself to protect others from getting infected (this is a CDC requirement).

- Staying home and self-quarantining for 14 days after travel if you don't get tested (this is a CDC requirement).
- Avoiding being around people who are at increased risk for severe illness for 14 days, whether you get tested or not (this is a CDC requirement).
- Following all state and local recommendations or requirements.
- Obtain an additional COVID test at least 7 days after completing travel and prior to returning to the physical workplace at an NIH facility. Alternatively, you may complete 14 days of self-monitoring while teleworking (with your supervisor's permission and an approved telework agreement). Your second COVID test can be obtained through the asymptomatic testing program at an NIH facility or via a PCR based test in the community (under private insurance). In the interim, if able to, use telework to conduct work duties. If you are unable to telework, contact your supervisor for options such as excused absence, sick or annual leave, or emergency leave (if available).

International Personal Travelers

- If you are **fully vaccinated with an FDA-authorized vaccine, you should:**
 - Understand and follow all airline and destination requirements related to travel, testing, or quarantine, which may differ from U.S. requirements. Failure to follow the destination's requirements may result in denial of entry and requirement to return to the United States.
 - Implement COVID-19 mitigation strategies during travel and at the destination including:
 - Wearing a mask over your nose and mouth when high risk exposures are possible. Masks are required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States and in U.S. transportation hubs such as airports and stations.
 - Avoiding crowds and stay at least 6 feet/2 meters (about 2 arm lengths) from anyone who is not traveling with you to the extent feasible.
 - Avoiding indoor dining (especially buffets) to the extent feasible and refraining from entering bars, casinos, movie theaters, gyms, concerts, or sporting events.
 - Washing your hands frequently or using hand sanitizer (with at least 60% alcohol).
 - Providing a negative COVID-19 test result no more than 3 days prior to boarding their return flight to the United States or documentation of recovery from COVID-19 in the past 3 months before you board a flight to

the United States. This is required of all air passengers coming to the United States, including U.S. citizens and fully vaccinated people.

- Continue COVID-19 mitigation strategies after travel including:
 - Reporting return from travel and potential high-risk exposures via [OMS Symptom Questionnaire](#).
 - Self-monitoring for COVID-19 symptoms with immediate isolation, reporting to OMS via [OMS Symptom Questionnaire](#), and testing if symptoms develop.
 - Obtaining a viral test for COVID 3-5 days after travel (this is a CDC requirement).
 - Following all state and local recommendations or requirements.
- Obtain an additional COVID test at least 7 days after completing travel and prior to returning to the physical workplace at an NIH facility. Alternatively, you may complete 14 days of self-monitoring while teleworking (with your supervisor's permission and an approved telework agreement). If you are not symptomatic, you may get your test through the NIH asymptomatic testing program or via a PCR based test in the community (under private insurance). In the interim, if able to, use telework to conduct work duties. If you are unable to telework, contact your supervisor for options such as excused absence, sick or annual leave, or emergency leave (if available)
- If you are **unvaccinated or partially vaccinated, you should:**
 - Get tested 1-3 days before travel and cancel travel plans if testing is positive. Additionally, they should understand and follow all airline and destination requirements related to travel, testing, or quarantine, which may differ from U.S. requirements. Failure to follow the destination's requirements may result in denial of entry and requirement to return to the United States.
 - Implement COVID-19 mitigation strategies during travel including:
 - Wearing a mask over your nose and mouth. Masks are required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States and in U.S. transportation hubs such as airports and stations.
 - Avoiding crowds and stay at least 6 feet/2 meters (about 2 arm lengths) from anyone who is not traveling with you to the extent feasible.
 - Avoiding indoor dining (especially buffets) to the extent feasible and refraining from entering bars, casinos, movie theaters, gyms, concerts, or sporting events.

- Washing your hands frequently or using hand sanitizer (with at least 60% alcohol).
- Providing a negative COVID-19 test result no more than 3 days prior to boarding your return flight to the United States or documentation of recovery from COVID-19 in the past 3 months before you board a flight to the United States. This is required of all air passengers coming to the United States, including U.S. citizens and fully vaccinated people.
- Continue COVID-19 mitigation strategies after travel including:
 - Self-monitoring for COVID-19 symptoms with immediate isolation, reporting to OMS via [OMS Symptom Questionnaire](#), and testing if symptoms develop.
 - Getting tested with a viral test 3-5 days after travel AND staying home and self-quarantine for a full 7 days after travel (this is a CDC requirement).
 - Even if you test negative, stay home and self-quarantine for the full 7 days (this is a CDC requirement).
 - If your test is positive, isolate yourself to protect others from getting infected (this is a CDC requirement).
 - Staying home and self-quarantining for 10 days after travel if you don't get tested (this is a CDC requirement).
 - Avoiding being around people who are at increased risk for severe illness for 14 days, whether you get tested or not (this is a CDC requirement).
 - Following all state and local recommendations or requirements.
 - Obtain an additional COVID test at least 7 days after completing travel and prior to returning to the physical workplace at an NIH facility. Alternatively, you may complete 14 days of self-monitoring while teleworking (with your supervisor's permission and an approved telework agreement). Your second COVID test can be obtained through the asymptomatic testing program at an NIH facility or via a PCR based test in the community (under private insurance). In the interim, if able to, use telework to conduct work duties. If you are unable to telework, contact your supervisor for options such as excused absence, sick or annual leave, or emergency leave (if available)

Instructions for Official Government Travel (OGT)

General

The surge of COVID-19 cases across the country due to the Delta variant has resulted in revised NIH policies regarding Official Government Travel (OGT). **Effective August 18, 2021, non-mission critical OGT is on hold. Mission critical OGT is still possible but will be restricted to fully vaccinated staff only.** These limitations will be re-assessed periodically based on COVID - 19 case levels. The explanation of fully vaccination status, definitions, and other instructions listed in the [General](#) section of *The Instructions for Personal Travel* apply to OGT as well.

Requirements for Domestic OGT

Supervisors are responsible for assessing the risk of travel and for ensuring that all applicable NIH requirements are met by the traveler before, during, and after travel.

The overall risk determination for the trip and the recommended and required practices will be determined based on the highest risk level of any location visited. This includes intermediate stops such as airport layovers. If the risk level is listed as Unknown, consider the location High Risk. The recommended and required practices will be annotated in the comments section of the travel order along with a statement that supervisor has discussed the practices with the traveler and that he or she agrees to abide by them. If a trip is approved more than 2 weeks in advance, it is a best practice to reassess the risk level immediately prior to departure and adjust recommended and required practices accordingly. If the case rate has increased to the High-Risk level, it may be appropriate to postpone the trip.

Additional Requirements for International OGT

International Travelers:

- Must understand and follow all airline and destination requirements related to travel, testing, or quarantining, which may differ from U.S. requirements. Failure to follow the destination's requirement may result in denial of entry and require return to the United States.
- Must provide a negative COVID-19 test result no more than 3 days prior to boarding their return flight to the United States or documentation of recovery from COVID-19 in the past 3 months before they board a flight to the United States. This is required of all air passengers coming to the United States, including U.S. citizens and fully vaccinated people.
- Must report return from travel and potential high-risk exposures via [REDCap Survey](#) within 24 hours of return.
- Must self-monitor for COVID-19 symptoms with immediate isolation, reporting to OMS via OMS Symptom Questionnaire, and testing if symptoms develop.

- Must obtain a viral test for COVID 3-5 days after travel (this is a CDC requirement).
- Must follow all state and local recommendations or requirements.
- Must obtain an additional COVID test at least 7 days after completing travel and prior to returning to the physical workplace at an NIH facility. Alternatively, they may complete 14 days of self-monitoring while teleworking (with their supervisor's permission and an approved telework agreement). The second COVID test can be obtained through the asymptomatic testing program at an NIH facility or via a PCR based test in the community (under private insurance). The traveler must provide their supervisor proof of a negative test prior to return to the physical workplace. In the interim, if able to, use telework to conduct work duties. If you are unable to telework, contact your supervisor for options such as excused absence, sick or annual leave, or emergency leave (if available).

Notes

Asymptomatic testing is available in Maryland (Bethesda-Building 10, Baltimore-Bayview Research Center, NCI-Frederick (Ft. Detrick and ATRF), and NCI-Shady Grove, North Carolina (NIEHS Campus), Montana (RML) and Arizona (NIDDK-Phoenix). Go to this [website](#) to schedule an asymptomatic test.

If you develop a [fever or symptoms suggestive of COVID-19](#), you must not come on campus. Instead, 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

Activity Hazard Assessments

An Activity Hazard Assessment (AHA) is a step-by-step review of a task that examines hazards that exist at each step and identifies controls that will eliminate or reduce the potential exposure to that hazard. These AHAs must be documented and should focus on COVID-19 associated risk but should not be limited to COVID-19 hazards exclusively. For example, when assessing a hands-on training for a research fellow, consideration should be given to potential SARS-CoV-2 exposures, but should also consider other hazards such as chemicals, sharps, or lasers.

When identifying the potential for SARS-CoV-2 exposure, supervisors should collaborate with the staff performing the task to determine when potential exposure points exist. Focus on scenarios where physical distancing is not possible, or close contact is required for greater than 15 minutes. Additionally, the AHA should consider space ventilation and whether multiple personnel may occupy the space for an extended period. Physical distancing alone may not be an adequate control in a space where there is low ventilation and personnel occupy the space for hours. Also consider where equipment is likely to be shared.

The AHA should also include controls for exposure. The hierarchy of controls (i.e., the order of most reliable to least) is:

- **Elimination:** If the task or step is unnecessary, consider not doing it. This removes the potential for exposures. However, this is often not an option. For the previously mentioned training example, if a fellow could demonstrate proficiency in a task, it may not be necessary to conduct the training.
- **Substitution:** Identify an alternate means of accomplishing the goal that involves lower risk of exposure. For example, consider revising the training to have self-guided or remote training where appropriate and supplement with specific, short duration, in-person training where self-guided training or remote training is inadequate.
- **Engineering Controls:** This involves the use of mechanical equipment to control exposure to hazards. Examples might include maximizing air exchanges in rooms where personnel must work closely together, using a down-draft table when demonstrating surgical techniques, or conducting work at a chemical fume hood or biological safety cabinet to reduce potential exposures.
- **Administrative Controls.** The use of procedures and practices to reduce risk of exposure. In the example of training a fellow to perform a task, this could involve procedural requirements to observe from a distance and only step into close proximity when direct intervention or hands-on instruction is required. It may include directives that prohibit group trainings and limit interaction to one-on-one training. Administrative controls also include disinfection schedules, scheduling tools, and population density limitations.
- **Personal Protective Equipment.** This should be considered the last line of defense and should be in place in case other controls fail. For reducing SARS-CoV-2 exposure, this would include procedure/surgical masks, gloves, and where appropriate, respirators. Additional PPE controls beyond the standard requirements of the document should be considered for any work that requires personnel to work in close proximity for greater than 15 minutes.

After the AHA has been conducted and controls have been identified, personnel must then be trained on the controls identified in the AHA to ensure they are properly implemented. Training on the AHA should be documented by the supervisor.

Lastly, an AHA should be considered a “living document.” The AHA should undergo routine reevaluation to determine the effectiveness of the controls, the training of the personnel using the controls, and the potential for improving to more effective mitigations on the hierarchy of controls. DOHS recommends that these controls be reevaluated after the first implementation,

revised to capture lessons learned, and then reevaluated at least once per year. The AHAs should also be reviewed and revised after any incident where employees were exposed to a hazard. The DOHS is available to assist with developing your AHAs.

The following sections provides requirements for specific environments. These should be considered when developing the controls in your AHAs.

Facial Coverings

Facial coverings are required to be worn by all staff and visitors, including in common areas and conference rooms. Personnel in an enclosed office with floor-to-ceiling walls are exempt from the mask requirements while in their office with the door closed. Staff and visitors must also wear masks on any NIH outdoor property when 6' of physical distancing cannot be maintained. 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. The NIH recommends face coverings have:

- a minimum of three breathable layers, including a synthetic fiber (preferably non-woven) layer, and
- a formable nose piece (i.e., wire or malleable plastic) to allow for forming a tight fit around the nose.





Face shields worn alone (without a facial covering underneath) are 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 (or worn under) the provided 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.

Improving Fit and Filtration for Face Coverings

Selection and use of a proper face covering is the most important decision for protecting the public and personnel from SARS-CoV-2. A properly selected and worn face covering will have two or more layers of washable, breathable fabric and have a tight fit along the edges where the mask meets the skin. Based on recent research, the CDC has provided information on techniques to improve the fit and filtration of face coverings. The main enhancement options include 1) knotting and tucking of surgical masks, 2) mask fitters/braces, and 3) double masking. Each identified option has limitations, and it is important that the appropriate strategy for the specific task or work environment is selected. Fit and filtration enhancement may be appropriate in the following scenarios:

- Indoor settings where physical distancing is not feasible, and personnel will work in close proximity for more than 15 minutes
- Where population densities will briefly (less than 60 minutes) exceed 1 person per 125 square feet
- When work requires travel in a shared vehicle (e.g., animal transport)
- Public settings such as public transportation or grocery stores

Each option is discussed in greater detail below. The DOHS is available to provide consultation regarding the appropriate enhancements based on worksite Activity Hazard Assessments (AHAs). Please note that these guidelines apply primarily to non-patient care areas. It is important to note that the Clinical Center has published an update on the use of masks within the Building 10 complex. In general, this guidance should not supersede that [policy](#). For specific questions on mask requirements and risk assessment as it pertains to patient care protocols, please consult Hospital Epidemiology.

Knot and Tuck of Procedure/Surgical Masks. This is a technique, as opposed to additional equipment. By tying knots in the ear loops (near the weld points on the mask) and tucking the ends inside the mask, the gaps that often exist at the corners of the mask are closed, reducing leakage. Research indicates that this can effectively reduce 95% of cumulative exposure to personnel when all personnel in a space use this technique. Personnel require instruction to properly tie the knots and tuck the ends. This solution is excellent for mentoring and teaching scenarios where scientists must demonstrate hands-on research skills. It will also be very helpful for procedures where personnel must work in close proximity for greater than 15 minutes. (e.g., surgical procedures, imaging, etc.).

Mask Fitters. These are simple frames that are worn **over** cloth or disposable face coverings (not KN95s or N95s). They hold the mask tightly to the face around the nose and mouth. They are simple to use, effective on a wide variety of face coverings, and are easily cleanable if they are constructed of silicone or other non-porous material. There is a significant cost associated with these devices and they require training on wearing, disinfection, and storage. Free plans for 3D printed versions are available through a variety of online resources.

Double Masking. The addition of an additional mask layer may have significant benefits if done properly. Specifically, the use of a three-layer cloth mask over a disposable procedure/surgical mask helps improve the seal of the mask to the face and improves droplet filtration. Like knotting and tucking, research shows increased effectiveness at reducing cumulative exposure (i.e., approximately 95%) when all personnel are properly double masking. This additional cloth mask should not be used when performing laboratory work including work with biologicals, chemicals, radioactive material and animals, or anywhere animals are present, as only disposable masks are currently permitted for these tasks in any research setting on campus. NOTE: Double masking should not use two disposable masks as this will not improve the fit of the mask to the face and may reduce effectiveness. Also, double masking does not apply to layering two N95s or two KN95s over each other. Only a cloth mask over a disposable mask has been demonstrated to improve fit and filtration.



Limitations. The CDC acknowledges that some personnel may experience challenges when using some of these practices or equipment to improve fit and filtration. Personnel may experience breathing issues due to the increased filtration layers. In some instances, these enhancements may cause masks to obscure the wearer's vision. Personnel that experience these conditions should stop the work they are performing and seek alternative means of reducing their potential exposure.

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. NIH recommends that laboratory and administrative areas not have more than one person per 125 net square feet of space. For more detailed guidance on how to maintain physical distance in the workplace, see the section in this document called Guidance for Personnel in Specific NIH Workplaces beginning on page 26. The NIH maintains a 49% campus/ building capacity. This

decrease in density recommendation does not supersede or change the density by building or campus, which must comply with the Executive Order. Additionally, this recommendation may need to be adjusted dependent on the space configuration and all areas need to accommodate 6-foot physical distancing requirements. Spaces with poor ventilation should contact DOHS for further assistance in determining a safe occupancy limit.

These recommendations will be updated as more groups return to the physical workspace, as more therapeutics become available, and as vaccination rates improve. 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](#). See also page 3 of [OSHA's COVID-19 Healthcare Worksite Checklist & Employee Job Hazard Analysis](#) for assistance in implementing physical distancing measures.

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 when soap and water are not readily available. 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 Safety 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

Although recent research has indicated that transmission of SARS-CoV-2 is less likely than initially believed, there is still some potential for infection from contacting contaminated surfaces. As such, high-contact surfaces should be cleaned daily. This includes door handles, shared office and lab equipment, and light switches. These surfaces must be cleaned using a proper disinfectant.

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. It is important to note that potential transmission of the virus that causes COVID-19 from surfaces is very low. The CDC changed [guidance on cleaning](#), indicating that if someone was in a space while contagious, after 24 hours, the area only needed normal levels of cleaning. The NIH SOP has been updated to be in line with this guidance.

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 April 8, 2021, but is subject to change.

NSN	ITEM DESCRIPTION
6840016212002	BLEACH, GERMICIDAL CLOROX, 121 OZ (EPA 67619-32)
684000L041921	DISINFECTANT, CLOROX, SPRAY, 19 OZ (EPA 67619-21)
684000L041923	DISINFECTANT, CLOROX, SPRAY, 32 OZ (EPA 1677-235)
684000L041924	DISINFECTANT, 409, SPRAY, 32 OZ
792000L041925	DISINFECTANT, WIPES, CLOROX, 35-COUNT (EPA 5813-79)
792000L041927	DISINFECTANT, CIDECON PLUS, WIPES, 180-COUNT
793000L012082	DISINFECTANT, OPTI-CIDE, SPRAY, 24 OZ (EPA 70144-1)
793000L043454	DISINFECTANT, LYSOL POWER SPRAY, BATHROOM CLEANER, 22 OZ (EPA 675-55)
793000L043457	DISINFECTANT, LYSOL POWER, WIPES, 35-COUNT (EPA 777-114)
793000L046458	DISINFECTANT, LYSOL, WIPES, 80-COUNT (EPA 777-99)
793000N202314	DISINFECTANT, ECOLAB VIRASEPT (EPA 1677-226)
793000N203081	DISINFECTANT, HYDROGEN PEROXIDE, WIPES, CLOROX HEALTHCARE, 95-COUNT (EPA 67619-25)
793000N203082	DISINFECTANT, HYDROGEN PEROXIDE, SPRAY, CLOROX HEALTHCARE, 22 OZ (EPA 67619-24)
793000N203083	DISINFECTANT, HYDROGEN PEROXIDE, PULL TOP, CLOROX HEALTHCARE, 22 OZ (EPA 67619-24)
793000N203084	DISINFECTANT, HYDROGEN PEROXIDE, REFILL, CLOROX HEALTHCARE, 1 GAL (EPA 67619-24)
793000N203085	BLEACH, GERMICIDIAL, WIPES, CLOROX HEALTHCARE (EPA 67619-12)
793000N203086	DISINFECTANT, BLEACH GERMICIDAL, SPRAY, CLOROX HEALTHCARE (EPA 56392-7)
793000N203087	DISINFECTANT, BLEACH GERMICIDAL, PULL-TOP, CLOROX HEALTHCARE (EPA 56392-7)
793000N203088	DISINFECTANT, BLEACH GERMICIDAL, REFILL, CLOROX HEALTHCARE (EPA 56392-7)
793000N203089	WIPES, DISINFECTANT, CLOROX, 75-COUNT (EPA 67619-25)

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.

Cleanable or disposable solid physical barriers are required at each fixed work location outside of direct patient care areas (e.g., entryway/lobby, check-in desk, triage, hospital pharmacy windows, bill payment) where each employee is not separated from all other people by at least 6 feet of distance.

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 Marshal 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 Marshal 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 administrative space. 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

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. 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 with the door closed. 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 (i.e., cubicles that are separated by less than 6 feet).

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 Marshal 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 125 net square feet per person. These meetings should be limited in duration to one hour or less. Space chairs apart to facilitate physical distancing. Wear face coverings at all times when holding these meetings. Personnel should consider additional measures to improve the fit and filtration of their face covering. 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.

Hosted conferences and visiting external groups may be able to be accommodated for longer term occupancy. When hosting a conference, effort should be made to encourage remote attendance. Groups interested in hosting conferences or external audits lasting longer than one hour should consult with the Division of Occupational Health and Safety. There are many factors that will influence appropriate controls for these events, including the size of space and the duration of occupancy. In general, the larger conference spaces at the NIH (Masur and Natcher auditoriums) will accommodate up to 50 people for conferences with an 8-hour per day attendance. However, considerations such as vaccination rates, travel considerations, and duration of the event may affect the final permissions for the conference.

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 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 work at the NIH safely and successfully, 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

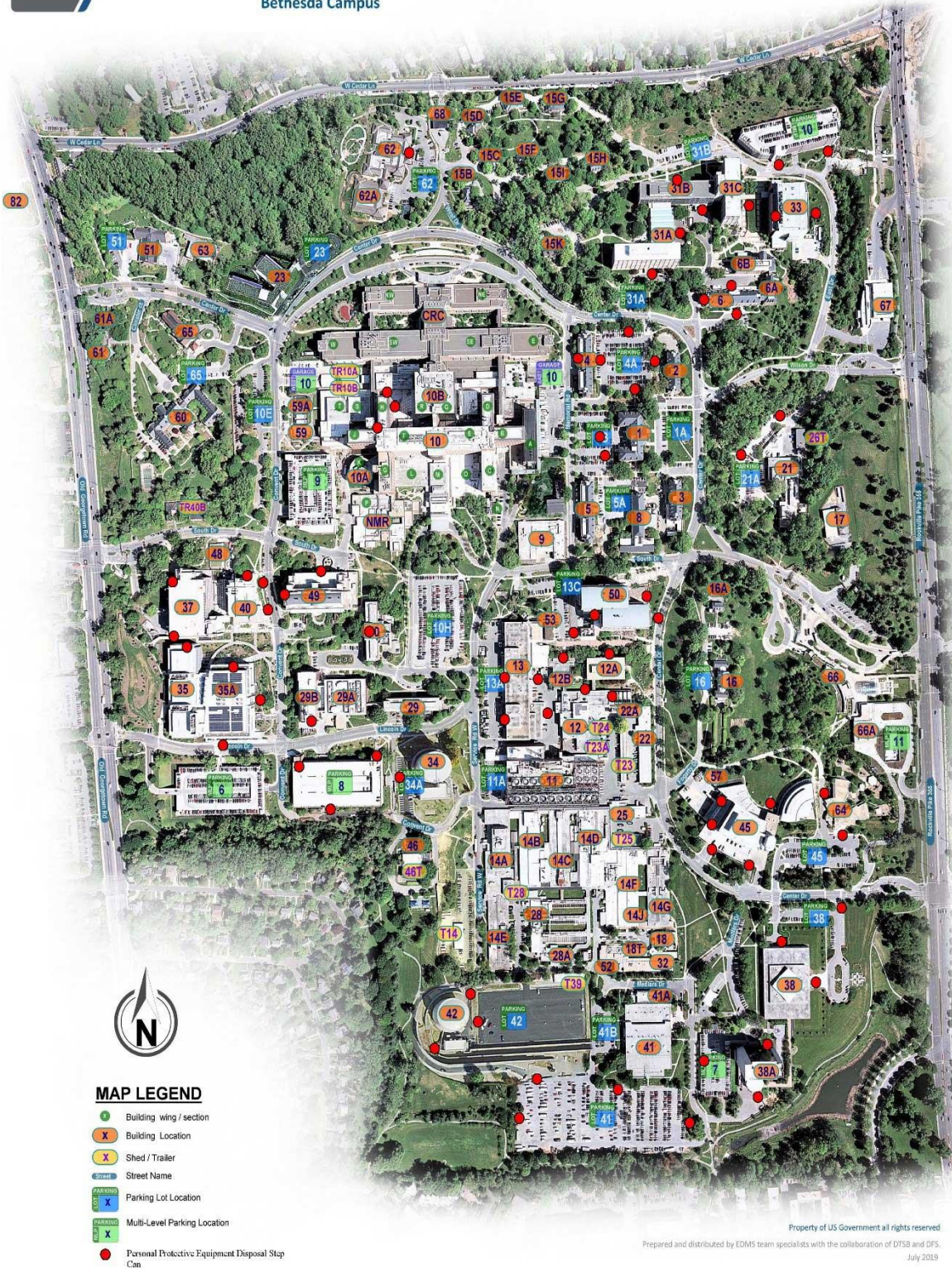
Date

Supervisor Name

Supervisor Signature

Date

Appendix II – Map of Disposal Containers for Face Coverings



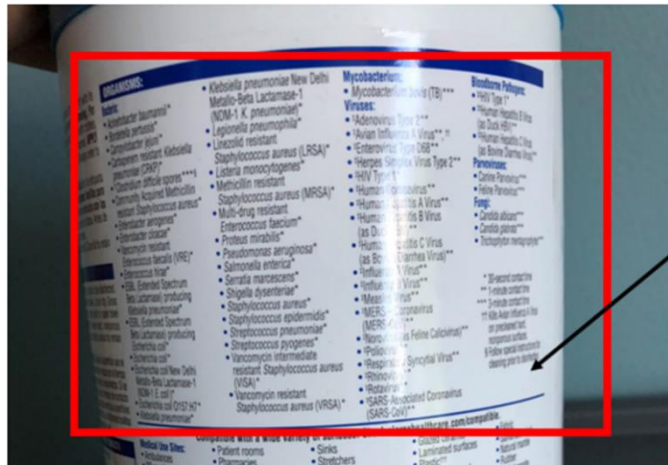
Appendix III – Disinfectant Labels

Reading Disinfectant Labels

It's important to use a disinfectant that is listed on the EPA List N: Disinfectants for Use Against SARS-CoV-2 (COVID-19) <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>

When reviewing a disinfectants label, take note of the following:

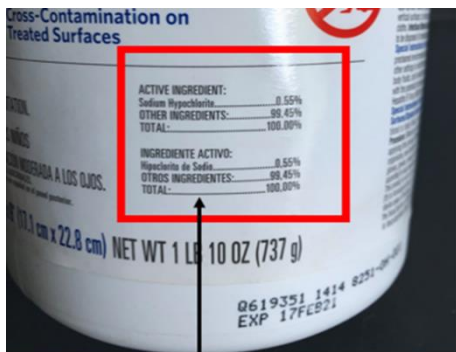
- 1) Active ingredients
- 2) List of microorganisms the disinfectant is effective at killing
- 3) Contact time for the organism of interest (coronavirus)
- 4) EPA registration number (this can be cross-checked for effectiveness against coronavirus using the link above)



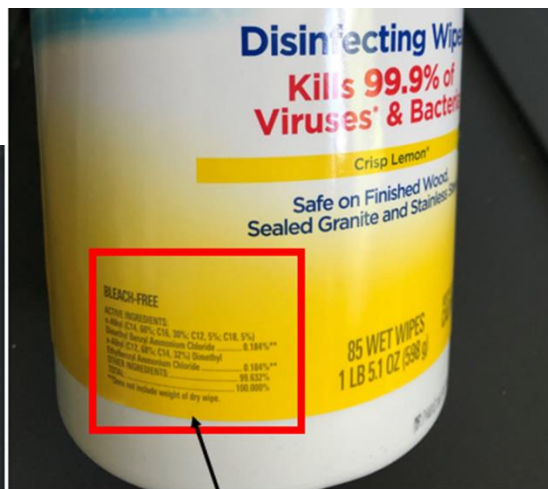
Clorox Germicidal Wipes for Healthcare
<https://www.cloroxpro.com/wp-content/uploads/2018/09/Clorox-HC-Bleach-Grm-Wipes-tech-info-NI-38488.pdf>

List of Microorganisms this Disinfectant will Kill. Look for Human Coronaviruses or SARS Coronavirus

This disinfectant has a contact time of 1 min for human coronaviruses (key located on far right)



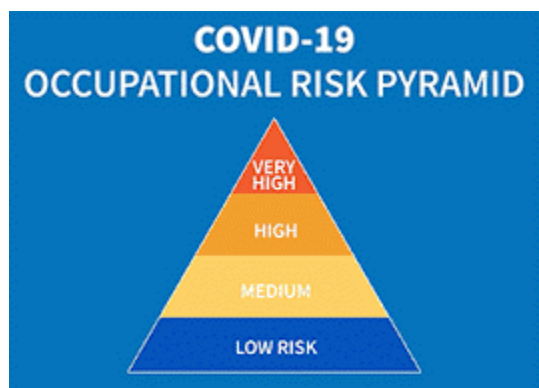
Active Ingredients



Note: Regular Clorox wipes typically do NOT contain bleach or sodium hypochlorite as an ingredient

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}. Recent data has demonstrated that the fit and filtration of face coverings can be improved using simple techniques or equipment. Knotting and tucking of medical procedure/surgical masks, use of mask fitters/braces, and double masking (a cloth mask over a disposable procedure/surgical mask) have been shown to improve the effectiveness of facial coverings. 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 Marshal be consulted prior to install.

Risk Level	Admin/Engineering Controls	Recommended PPE	References
<p>Low</p>	<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>
<p>Medium</p>	<p>Consider addition of partitions that don't disrupt other engineering controls (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>Standard lab PPE plus a medical or surgical grade mask* should be used if within 3-6 feet for less than 15 minutes. Staff should consider knotting and tucking or surgical masks or using a mask fitter to improve mask fit. Face shields should be considered as an additional layer of protection.</p> <p>*ASTM Level 2 or 3 mask¹</p>	<p>https://science.sciencemag.org/content/368/6498/1422</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>

Risk Level	Admin/Engineering Controls	Recommended PPE	References
<p>High Risk</p>	<p>Record close proximity work (date, names, length of time in contact) Avoid standing directly across from others, stagger location. 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.* The knot and tuck method or a mask fitter should be used. Some procedures and patient settings may warrant use of N95s. Lab and animal care personnel should utilize a knot and tuck technique or use a mask fitter/brace. Double masking (cloth on top of disposable) may be appropriate for some areas outside of a lab or animal research setting. Consult DOHS for a risk assessment.</p> <p>*ASTM Level 2 or 3 mask ¹</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>

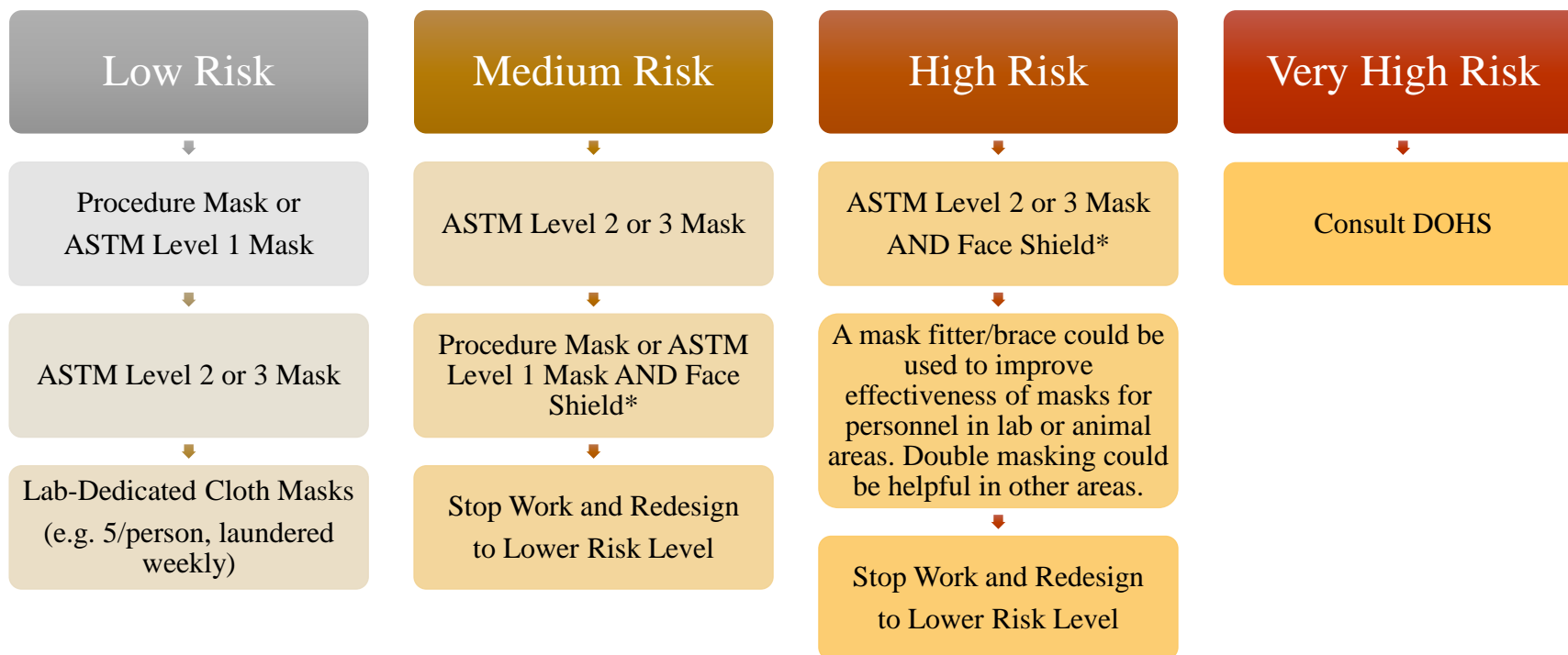
Risk Level	Admin/Engineering Controls	Recommended PPE	References
Very High Risk	<p>All lab work in this category requires pathogen registration with the Institutional Biosafety Committee. Recommendations will be provided upon approval to commence the research</p> <p>Clinical operations should be reviewed 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 determined 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>

¹Face 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 (non-clinical) 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. As a reminder, using the knot and tuck technique can improve the effectiveness of procedure and surgical masks. For more information, reference the section in this document on [Improving Fit and Filtration of Face Coverings](#). 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.

Below are a collection of recommended PPE [available from the NIH Supply Center](#):

PPE Type	Model/Style and Item Number
Cloth Masks	White, NSN #: 846500N203734 Black, NSN #: 846500N203735 Blue w/NIH Logo, NSN #: 846500N203731
Procedure Masks	3M 1820, NSN #: 651500L033173 3M 1820FS, NSN #: 6515013419703 Halyard 47117, NSN #: 651500N203172
ASTM Level 1 Masks	Currently not available through DLS
ASTM Level 2 Masks	Halyard 62115, NSN #: 651500N203171
ASTM Level 3 Masks	Halyard 47107, NSN #: 651500N213170 Halyard 47137 w/visor, NSN #: 846500N204713
Face Shields	Halyard 7.5", NSN #: 846500N203179 Halyard 9.5", NSN #: 846500N203178

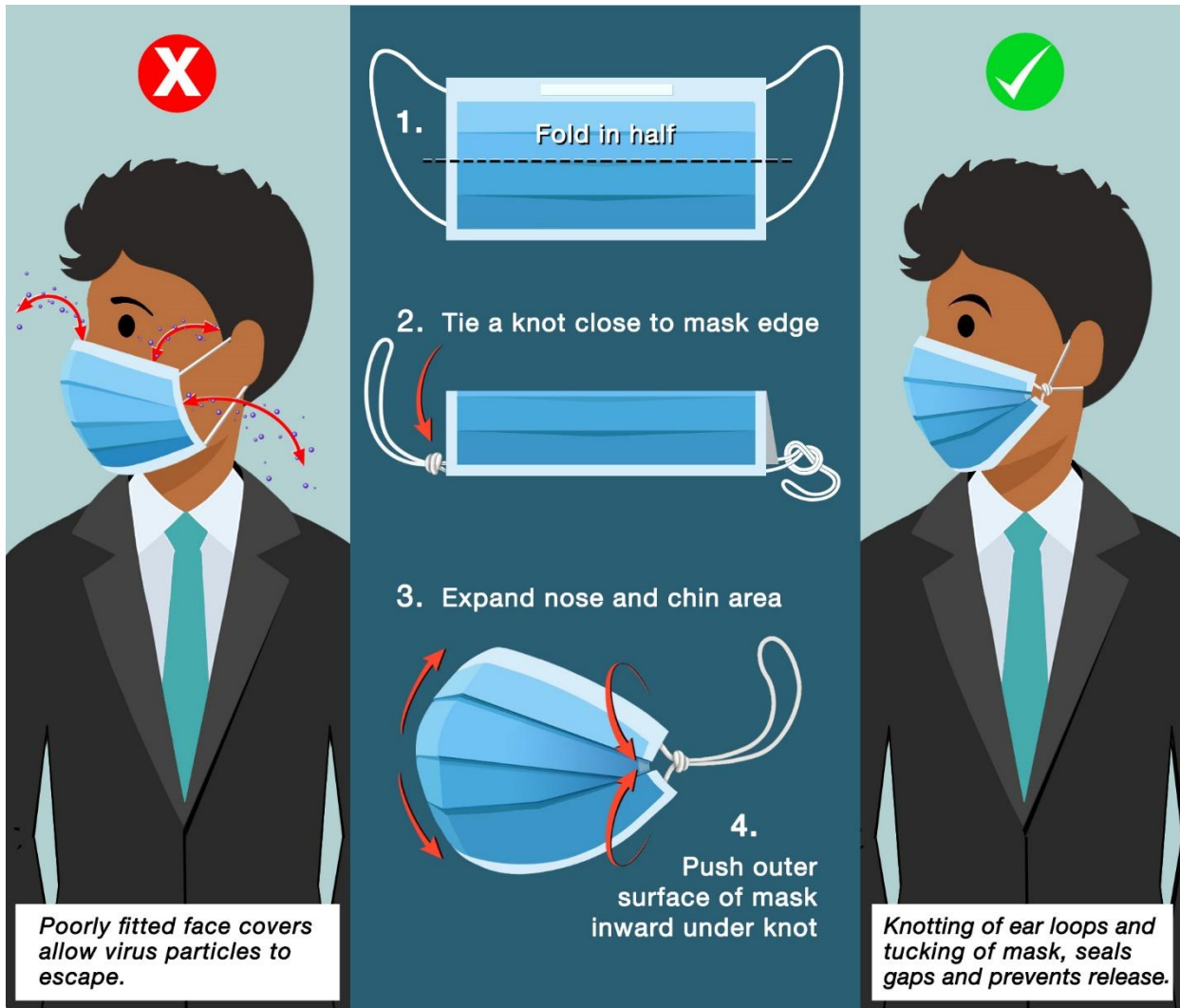
Appendix VI – Knotting and Tucking Procedure

Knotting and tucking is a technique that can greatly enhance the fit of a procedure/surgical mask. By knotting the ear loops near the mask and tucking the loose fabric inside the mask you close the gaps that normally exist around the edges of the mask. Recent research has demonstrated that when two people in the same room use this technique their cumulative exposure is reduced by nearly 95%. A helpful video on this technique can be found at <https://www.youtube.com/watch?v=UANi8Cc71A0&feature=youtu.be>.

There are 4 basic steps to the knotting and tucking technique. They are illustrated below.

1. Fold the mask in half so the bottom corners meet the top corners.
2. Tie a knot close to the mask edge.
3. Expand the mask to its full size, unfurling the pleats.
4. Fold the excess fabric so that it is inside the mask.

It's now ready to wear and will provide a much better seal to your face.



Appendix VII – Selection, Use, Care, and Storage of Mask Fitters/Braces

Selection: Mask fitters/braces should be constructed of a non-porous, easily cleanable material that is compatible with disinfectants that will be used for cleaning them. The device should be constructed from a silicone-based or plastic material, with smooth surfaces, that are easy to clean and disinfect.

Donning a Mask Fitter When wearing a mask fitter there are some important things to consider for ensuring the best fit.

- 1) Clean your hands with soap and water or hand sanitizer before touching the mask.
- 2) Properly place a disposable face covering on you face, securing properly.
- 3) Inspect your mask fitter thoroughly. If there is dirt or debris on the fitter, clean it properly before use. If the mask fitter shows signs of degradation (i.e., tearing, cracking, loss of elasticity, etc.) dispose of it and replace with a new mask fitter.
- 4) Follow the instructions for the style of mask fitter you have (ear loop or bands)
 - a) Mask fitters with ear loops (NOTE: Ear loop mask fitters may cause discomfort for longer use periods. If your work requires extended use (>1 continuous hour) then a mask fitter of this style is not preferred.):
 - i) Hold the mask fitter by the ear loops.
 - ii) Place a loop around each ear.
 - b) Mask fitters with bands:
 - i) Hold the mask fitter in your hand with the top of the mask fitter at fingertips, allowing the headbands to hang freely below hands
 - ii) Place the frame of the mask fitter over the disposable face covering, placing it so that it forms a good fit around the mouth and nose. The frame should not touch skin and the edges of the mask should be outside the frame.
 - iii) Pull the top strap over your head so that it rests on the crown of your head
 - iv) Pull the bottom strap over your head so that it rests at the nape of your neck.
 - v) Do not cross the straps on your head. Crossing these straps will reduce the effectiveness of the seal.
- 5) Try to "tent" your face mask around your mouth such that your mouth does not touch the face mask material and get it wet.
- 6) Adjust the tension to be comfortable but not overly tight. If the straps are too tight it may cause discomfort. The pressure from the frame should be uniform on the mask.

Doffing a Mask Fitter

- 1) Clean your hands with soap and water or hand sanitizer before touching the mask. Avoid touching the front of the mask and mask fitter as the mask may be contaminated. Only touch the ear loops or bands.
- 2) Mask fitter with ear loops: Hold both ear loops and gently lift and remove the mask fitter.
- 3) Mask fitter with bands: First, lift the bottom strap over your head, then pull the top strap over your head.
- 4) Clean mask fitter (see below).

- 5) Clean your hands with soap and water or hand sanitizer.

Cleaning and Disinfection of Mask Fitters

- 1) Mask fitters should be cleaned after each use.
- 2) Use an EPA approved List N disinfectant to thoroughly disinfect the mask fitter. Be certain that the disinfectant contacts all parts of the mask brace and allow for adequate contact time per the disinfectant manufacturer's guidance.
- 3) Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- 4) Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- 5) Components should be hand-dried with a clean lint-free cloth or air-dried.

Storage of Mask Fitters

1. Follow the manufacturer's instructions for proper storage.
2. After the mask fitter is thoroughly dry, place into a sealable, airtight container (e.g. Ziploc Bag ®) to prevent dust from gathering on it.
3. Store in a cool, dry place, out of direct sunlight. The mask fitter should be stored in a manner that does not create folds or creases in the fitter (e.g., flat in a cabinet or drawer, with nothing stored on top of it).
4. DO NOT store in your car, in extreme temperatures, or excessive humidity as this may degrade the mask fitter.

Appendix VIII – Hazard Assessments and Standard Operating Procedures

The NIH has developed a repository for workplace hazard assessments mandated under 29 CFR 1910.502. The employer must conduct a workplace-specific hazard assessment to identify potential workplace hazards related to COVID–19 in all healthcare facilities.

Clinical Center Patient Care Hazard Assessments and Policies and Other COVID-19 documents can be found at: https://intranet.cc.nih.gov/hospitalepidemiology/emerging_infectious_diseases

All other workplace hazard assessments and SOPs can be found at:

<https://orsweb.od.nih.gov/sites/dohs/covidahassops/>

Appendix IX – Areas of Responsibility

Location	DOHS	CC Hospital Epidemiology	Acquisitions/Contracting	ORF	Contractors
COVID-19 Plan					
Carline	X				
Building 10 Patient Care		X			
Contractors			X		X
Patient Screening and Management					
Building 10 All Areas		X			
Carline	N/A				
Asymptomatic Testing Sites	X				
Standard and Transmission-Based Precautions					
Clinical Center - Patient Care		X	X		
Clinical Center - Hospital Support Services - ORF	X		X		
Clinical Center - Hospital Support Services - ORS	X		X		
Clinical Center - Hospital Support Services - Non-OD		X	X		
Carline	X				
Personal Protective Equipment					
Clinical Center - Patient Care		X			
Clinical Center - Hospital Support Services - ORF	X				
Clinical Center - Hospital Support Services - ORS	X				
Clinical Center - Hospital Support Services - Non-OD		X			
Carline	X				
Aerosol Generating Procedures					
Clinical Center - Patient Care		X			

Location	DOHS	CC Hospital Epidemiology	Acquisitions/Contracting	ORF	Contractors
Carline	X				
Physical Distancing					
Clinical Center - Patient Care		X			
Clinical Center - Hospital Support Services - ORF	X				
Clinical Center - Hospital Support Services - ORS	X				
Clinical Center - Hospital Support Services - Non-OD		X			
Carline	X				
Physical Barriers					
Clinical Center - Patient Care		X			
Other	X				
Cleaning and Disinfection					
Clinical Center - Patient Care		X			
Clinical Center - Hospital Support Services - ORF	X				
Clinical Center - Hospital Support Services - ORS	X				
Clinical Center - Hospital Support Services - Non-OD		X			
Carline	X				
Ventilation					
All areas				X	
Health Screening and Management					
Clinical Center - Patient Care		X			
Clinical Center - Hospital Support Services - ORF	X				
Clinical Center - Hospital Support Services - ORS	X				

Location	DOHS	CC Hospital Epidemiology	Acquisitions/Contracting	ORF	Contractors
Clinical Center - Hospital Support Services - Non-OD		X			
Carline	X				
Vaccination					
All areas	X				
Training					
Clinical Center - Patient Care		X			
Clinical Center - Hospital Support Services - ORF	X				
Clinical Center - Hospital Support Services - ORS	X				
Clinical Center - Hospital Support Services - Non-OD		X			
Carline	X				
Recordkeeping					
Clinical Center Staff	X				
Clinical Center - ORF	X				
Clinical Center - ORS	X				
Clinical Center - Contractors	X				
Reporting					
All areas	X				

References:

1. William G. Lindsley, William P. King, Robert E. Thewlis, Jeffrey S. Reynolds, Kedar Panday, Gang Cao & Jonathan V. Szalajda (2012) Dispersion and Exposure to a Cough-Generated Aerosol in a Simulated Medical Examination Room, *Journal of Occupational and Environmental Hygiene*, 9:12, 681-690
2. Raymond J. Roberge (2016) Face shields for infection control: A review, *Journal of Occupational and Environmental Hygiene*, 13:4, 235-242
3. William G. Lindsley, John D. Noti, Francoise M. Blachere, Jonathan V. Szalajda & Donald H. Beezhold (2014) Efficacy of Face Shields Against Cough Aerosol Droplets from a Cough Simulator, *Journal of Occupational and Environmental Hygiene*, 11:8, 509-518
4. Leung, N.H.L., Chu, D.K.W., Shiu, E.Y.C. *et al.* Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med* 26, 676–680 (2020)
5. Derek K Chu, Elie A Akl, Stephanie Duda, Karla Solo, *et al.* Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *The Lancet*, Volume 395, Issue 10242, 2020, Pages 1973-1987
6. Jin Pan, Charbel Harb, Weinan Leng, Linsey C. Marr; Inward and outward effectiveness of cloth masks, a surgical mask, and a face shield. medRxiv 2020.11.18.20233353; doi: <https://doi.org/10.1101/2020.11.18.20233353>
7. Brooks JT, Beezhold DH, Noti JD, et al. Maximizing Fit for Cloth and Medical Procedure Masks to Improve Performance and Reduce SARS-CoV-2 Transmission and Exposure, 2021. *MMWR Morb Mortal Wkly Rep.* ePub: 10 February 2021. DOI: <http://dx.doi.org/10.15585/mmwr.mm7007e1>