C-19 Working Group

Revision 15; 8 June 2020

Plan formal approved by SI on 8 June 2020

Overview

Owing to the ongoing COVID-19 health care crisis, nearly all research at SAO is presently conducted remotely. A small number of staff members have been designated ‘mission-critical’, with most performing essential functions at the OCC, while others maintain critical infrastructure to ensure project readiness and business continuity. On May 18, Massachusetts’ Governor Charles Baker released a four-phase re-opening plan (https://www.mass.gov/info-details/reopening-four-phase-approach). Under this plan laboratory spaces can re-open May 25 in Phase 1: “Limited industries resume operations with severe restrictions”.

Because SAO laboratories and instrumentation groups are most negatively impacted by the present crisis, and this type of SAO research is performed in very low-density spaces, it is slated to re-open first. During this stage, building access will be limited and coordinated, with laboratory groups working either in small sub-groups or in shifts, in which the personnel density should be reduced to roughly 1/3 of pre-COVID-19 capacity, as appropriate, and consistent with current health and safety protocols, and wider institutional guidance. The health and safety of our staff are paramount, and will be prioritized. Each laboratory group will operate under an approved plan. Care will be exercised at all times to minimize infection risk between sub-groups and different groups. Landlords are expected to implement new operational procedures, cleaning standards, and health protocols at our buildings to protect the safety and wellbeing of those working onsite. Participation in this aspect of SAO’s phased re-opening is entirely voluntary; individuals in high-risk categories are not eligible to return in Phase 1.

Guiding Principles

1. Prioritize the health and safety of our staff and associated personnel.
2. Implement social distancing and other best practices whenever possible.
3. Enable laboratory-based research and instrumentation/technical activities to advance while minimizing risk of COVID-19 exposure to staff and the local community.
4. Work that can be performed at a high level in a remote capacity (e.g. observational analysis, modeling, computational, etc.) will continue in that capacity.
5. Focus on highest impact activities and those with specific project and contractual deadlines.
6. Emphasize clear and regular communications of ongoing activities, particularly as they relate to safety or health concerns.

SAO’s commitment to a safe working environment

COVID-19 has created a number of challenges for research centers such has SAO as they seek to reopen. While many group leaders understandably have a strong sense of urgency to have their group’s activities return to normal, it is critical that the health and well-being of our staff and associated personnel — our most important and valuable assets — are protected and that revised practices be put in place to allow for a safe, stable return to the workplace.

To assist our staff, SAO will be:

* Monitoring our facilities to make sure they are fully clean, disinfected and equipped with the resources and protocols for safe conditions. We expect our landlords will provide enhanced cleaning, clear and well posted signage, and prepare common spaces (restrooms, conference rooms, lunch seating etc.) to minimizing the potential transmission of infections. Our building managers will work closely with our staff to ensure that our landlords comply with their commitments.
* Reviewing reopening plans to ensure a safe work environment that protects employees and associated staff. Principal investigators (PIs) and project leaders(PLs) are responsible for creating these plans which must address a number of key implementation elements. Oversight and compliance will be performed at ‘arms-length’ by the DO and the SAO safety group. The safety group will conduct inspections to monitor ongoing operations and compliance.
* Training our staff with COVID-19 best practices including social distancing and hygiene protocols, so they have the knowledge and tools to return to the workplace and perform their work in a safe manner.
* Protecting our staff by providing PPE (e.g., daily-use masks, gloves) and cleaning supplies (e.g. paper towels, disinfectant wipes, hand sanitizer).

Listening to our staff about any safety or other concerns, or if they need advice about the working environment. Staff are encouraged to contact the safety group by phone or by email (safety@cfa.harvard.edu); concerns can also be communicated anonymously via email at https://www.cfa.harvard.edu/internal/covid-19-questions-reopen

* Taking action when an employee reports symptoms, a diagnosis, or expresses concerns about contact with a COVID-19 positive individual. Should you test positive for COVID-19, you should:
	+ Stay home and get well. Follow your healthcare providers’ advice.
	+ Notify the SI Coronavirus Response Team of the positive result at

si-coronavirusinfo@si.edu with “POSITIVE TEST” in the subject line. Include a description of what you are reporting, a phone number you can be reached at, and a team member will respond to you within an hour.

* + In addition to e-mailing: please call the 24-hour Smithsonian Communications Center at 202-633-9300 so the SI Public Health Officer can be notified.

If you are sick and have been told to stay home by a health care provider, but have NOT been tested for COVID-19, stay home and get well. Follow your healthcare provider’s advice. Notify the SI Coronavirus Response Team at si-coronavirusinfo@si.edu for updated recommendations and visit the website. Any other concerns should be directly to our safety officer.

The role of project leaders and SAO in developing reopening plans

PIs and PLs are in the best position to create specific implementation plans for resumption of their group’s research, technical, and instrument development activities. These individuals should customize plans to address research or project specific situations and circumstances. In turn, the SAO safety group and Director’s Office (DO) are in the best position to assess these proposed plans so as to ensure uniformity of implementation and compliance with institutional and public health guidelines.

This guidance will almost certainly evolve with time. Our understanding of the COVID-19 virus is changing rapidly, and we are still learning about how it spreads and the severity of the illness it causes. To this end, the CDC and OSHA regularly issue updated information. Our plans are therefore subject to further refinement and revision as new information becomes available. The guidance provided here is only designed to address laboratories-based programs. With few, if any exceptions, non-laboratory research, along with administrative functions, should continue to work remotely until further notice.

Laboratory staffing, access, and use of shared facilities

1. Limit laboratory access to essential personnel and prohibit non-essential visitors.
2. Prohibit use of most common/shared areas, such as kitchens, etc.
3. Prioritize time-sensitive and project-specific tasks.
4. Adjust expectations and timelines in light of reduced staffing, access, and efficiency.
5. Continue to leverage remote, on-line engagement opportunities whenever possible, even when individuals are located in close physical proximity, e.g. the same building.
6. Reduce the density of researchers/engineers in the laboratory at all times by creating sub-groups or by using staggered work schedules, as appropriate.
7. PIs/Pls should consider skill sets when creating sub-groups, so smaller groups are able to operate effectively and self-sufficiently in the absence of input from a larger team, or in the event that one sub-group is required to self-isolate.

Best practices to reduce transmission of COVID-19

Our overarching concern is the health, safety, and well-being of our staff, students, fellows, and associated personnel. COVID-19 is a highly infectious disease with no known cure and a high mortality rate compared to influenza. As a result, it is necessary to rely on a variety of mitigation and containment strategies to greatly reduce infection and transmission until a vaccine becomes available. Specifically, to minimize the spread of COVID-19 in the workplace, it is essential to considerably reduce interactions between subgroups/teams and minimize the use of shared spaces and contact with high-touch surfaces. Specific practices include:

1. **Minimize close contact between individuals in each laboratory.** Whenever possible, occupants should social distance (minimum of six feet between each other). Lab operations where it is not possible to social distance are to be identified in each Lab Safety Plan (LSP), as well as, any engineering, work practice or administrative controls, and/or additional PPE. Any operation requiring the use of a filtering facepiece (e.g., N95, KN95 or other) must be identified in each LSP and requires Respiratory Protection Training provided by the Safety Office.
2. **Use of a face mask that covers your mouth and nose is mandatory. If safety glasses are required for your work, they must not be shared.** A face mask or surgical mask is required in all shared spaces, inside and out of the building. Groups should always have additional, unused masks available for use.
3. **Frequent hand washing (for at least 20 seconds) is essential.** Hand washing should be done before and after work breaks and shifts; when entering and exiting the laboratory or shared space;after touching equipment or surfaces, after blowing the nose, coughing, or sneezing; after using the restroom; before eating or preparing food; and after putting on, touching or removing face coverings**.** Research has shown that this simple step is one of the most effective measures to reduce the spread of the virus. If hand washing is not available, alcohol-based hand sanitizers with at least 60% ethanol or 70% isopropanol can be used.
4. **Cleaning of laboratories becomes the responsibility of the research or technical staff**. Staff will collect all trash and place sealed bags outside of each laboratory for pick-up. Doing so will minimize the possibly of exposure by custodial staff by direct or indirect means. In addition to a face or surgical mask and safety glasses, disposable gloves should be worn while doing this.
5. **High-touch and shared equipment and surfaces will be routinely disinfected.** Shared equipment and surfaces such as tables, keyboards, etc., should be cleaned and disinfected before and after each use. Similarly, care should be exercised when contacting high-touch surfaces such as door knobs. Although frequent disinfection of these surfaces is conducted during the day by the landlord cleaning staff, it is a good idea to use a paper towel to avoid touching these surfaces directly. Please refer to Appendix A regarding guidance on cleaning and disinfection procedures and appropriate materials.
6. **Use of gloves may provide a false sense of security.** Use of disposable gloves, as specified in each LSP is required when handling hazardous materials. These should also be worn when conducting work in the labs that involves touching equipment or surfaces, however, should be immediately disposed and not worn throughout the facility. Avoid touching your face to reduce surface-hand-face transmission.

Communication and safety are paramount during these times

1. Participation in this phase of SAO’s re-opening either by the PI/PL or any associated staff is entirely voluntary.
2. Individuals in high-risk categories are encouraged to self-identify; such individuals are not eligible to return during Phase 1.
3. Staff are required to perform a self-assessment each workday (see Appendix B). Any staff member who is feeling unwell for any reason is prohibited to enter a SAO building. By entering a SAO building an individual is explicitly attesting he/she is symptom free.
4. Once finalized, the PI/PL should provide each group member with the team’s plan, and, as appropriate, work schedule. They should also provide this document in its entirety.
5. Until further notice, all procedures and protocols in the team’s re-opening plan should be considered an extension of their existing lab safety plan.

A failure to abide to your group’s approved re-opening plan may result in a reduction or revocation of access privileges.

Contingencies in the event of illness

PIs/PLs should be prepared for the possibility that one or more members in our group may eventually be impacted directly or indirectly by COVID-19. Ensure all members are aware both of their reporting obligation and the process by which one self-reports (see Appendix A). Consider contingencies to mitigate impact on project goals and timelines.

Plan for further disruptions

PIs/PLs should be prepared to rapidly scale back or even cease your group’s activities with little advanced warning. Given present uncertainties and the distinct possibility of a rapid increase in re-infection rates, consideration should be given to efforts that can be wound down relatively quickly with little manpower, and, in doing so, would not have a negative collateral impact on institutional resources. Compile tasks that could be performed remotely by your team, and, if possible, defer these in the event of another shutdown to maintain project continuity whilst minimizing use of administrative leave.

CfA COVID-19 website and information

Please refer to https://www.cfa.harvard.edu/covid-19/information-and-response for information and guidance regarding the COVID-19 outbreak as it relates to the ongoing work of the Observatory.

**Instructions and template for resumption of in-person activities by laboratories and instrumentation groups at SAO. This plan is based heavily on one created by JHU.**

An approved plan, in addition to an updated and approved project Lab Safety Plan, is required prior to re-opening any SAO laboratory. Emphasis should be placed on activities that cannot be performed via telework or remotely. In-person group meetings and use of many common spaces are not appropriate during Phase 1 and are to be explicitly avoided in the initial re-opening. Participation in Phase 1 is entirely voluntary. A more complete description of best practices, access and use of facilities, including the prohibition on non-essential visitors, contingencies, etc. can be found in the Phase 1 “new normal” document that precedes this template. The Massachusetts Control Plan (Appendix A) includes SAO compliance with mandatory safety standards for operation in the COVID-19 re-opening period. Specific topics covered in Appendix A include social distancing, hygiene protocols, staffing and operations (including steps required if diagnosed with COVID-19), and cleaning and disinfection.

All normal laboratory safety protocols should be maintained and personnel should be reminded of current safety policy and resources. As required by MA guidelines, personnel must receive COVID-19 training prior to re-entering the laboratory and COVID-19 guidance is to be considered an extension of your current safety policy, not in place of. Individuals must provide evidence that all training is up-to-date. Principal investigators (PIs) or Project leaders (PL) are required to communicate this plan and all associated documentation in its entirety to their staff. Failure to abide by these guidelines may result in a reduction or revocation of laboratory access privileges. If there is a change in plans (e.g. new personnel, equipment, etc.), PI/PLs are expected to submit an updated operating plan for re-review.

PI/PLs must provide a re-opening plan to the DO by noon, Wednesday, May 27, if they hope to re-start lab activities by June 1. This plan should address the following:

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| **Plan element** | **Plan Specifics** |
| Requesting party | Provide PI/PL information including emergency contact |
| Impacted areas | List building(s), floors, and rooms requested for use |
| Personnel  | List of individuals who’s in-person presence is essential. Employees in high-risk categories are ineligible to return in Phase 1.* + Has any essential individual traveled outside MA or outside the US in last 4 weeks? (Note this is an on-going consideration / reporting requirement) Does any individual have plans to travel?
	+ Is the laboratory training (including mandated COVID-19 return to work training) for you and each member of your staff up-to-date?
	+ Does each essential individual agree to perform a self-assessment each work day (Appendix B)?
 |
| Physical space plan | Provide details of how physical distance will be achieved.• Establish max occupancy for lab based on current MA/SI guidelines.• Establish workspace markings (distances) where appropriate, using floor plans or sketches of work space when possible.• Provide separate sections for specialized/shared equipment that need different personnel distance guidelines and markings.• Provide guidance on ancillary work spaces (e.g., benches, supply cabinets, refrigerators, and secondary equipment etc.) and any other features of the lab that require distance plans and appropriate marking for the personnel. |

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| Operating Logistics | The PI/PL is responsible for creating a system whereby it is known in near real-time who is in the lab and when they are in the lab.• If cohorts (sub-groups) will be utilized, the cohort groups should be provided. If a staggered or shift work is required, please provide template schedules with allotted timeslots (see attached Excel spreadsheet). Other options are alternate days / shifts/ in all cases, but in all staffing scenarios there should be staggered reporting / departing times to avoid over-occupancy.• Work (open) hours for the lab should be stated.• Logistics for special shared equipment. |
| Cleaning | Provide a plan for how your lab will remain clean.Areas include but are not limited to trash, bench/work areas, touch spots, equipment, and general housekeeping. All trash should be placed in sealed bags and left outside of the lab. |
| PPE needs | Re-opening requires appropriate PPE and cleaning materials.• List materials required before re-opening.SAO is procuring the necessary PPE and cleaning materials for Phase 1, and putting in place a mechanism to deliver these supplies based on need to each laboratory prior to re-opening. |
| Shutdown Protocol | The PI/PL should provide a plan for how to shut down the lab safely inminimal time. Include protocols for shutting down, cleaning, and restarting a lab should someone in our lab test positive for COVID-19 or if there is a positive test in their household. |
| Communication, compliance and safety | Clear and regular communications by the PI/PL, particularly related to safety or health concerns, are paramount.Any safety concerns, either individually or collectively, should by communicated to safety@cfa.harvard.edu or submitted anonymously to https://www.cfa.harvard.edu/internal/covid-19-questions-reopen |

**Appendix A: Massachusetts COVID-19 Control Plan**

All businesses in the state of MA must develop a written control plan outlining how its workplace will comply with the mandatory safety standards for operation in the COVID-19 reopening period. This template may be filled out to meet that requirement. Control plans do not need to be submitted for approval but must be kept on premise and made available in the case of an inspection or outbreak.

All individually listed businesses must complete a control plan, even if the business is part of a larger corporation or entity.

BUSINESS INFORMATION

Business name: Smithsonian Astrophysical Observatory (SAO)

Check if part of a larger corporation √ Smithsonian Institution (SI)

Address: 100 Acorn Park Drive, Cambridge, MA 02138

Contact information (Owner/Manager): TBS

Contact information (HR representative), if applicable: TBS

Number of workers on-site: 152

SOCIAL DISTANCING

√ Ensure all persons, including employees, customers, and vendors remain at least six feet apart to the greatest extent possible, both inside and outside of workspaces.

√ Establish protocols to ensure that employees can practice adequate social distancing.

√ Post signage for safe social distancing.

√ Require face coverings or masks for all employees (Cloth face coverings are worn to and from the facility; a surgical mask to be worn inside the facility is provided each day to staff.)

Implement additional procedures:

* Remote work and virtual meetings will be continued whenever possible.
* Lab access is pre-approved by management; limited to badge-controlled personnel; prioritized for time-sensitive project-specific tasks; and planned to allow for social distancing.
* Non-essential visitors are prohibited.
* Lab activities, where it is not possible to social distance, are identified in specific Lab Safety Plans with control methods specified.
* Any operations requiring a filtering facepiece respirator (e.g. N95) require Respiratory Protection employee training.
* Work shifts, schedules, and break times are staggered and offices limited to one person at a time to ensure 6-feet of physical distance between individuals during movement throughout the facility, which should be in a single-file with a 6-foot distance between each worker, where possible, and to avoid congregations of workers in parking areas.
* Cohorting should be considered when examining work shifts. This may reduce the spread of COVID-19 in the facility by minimizing the number of different individuals who come into close contact with each other.
* Minimize the use of elevators with more than one individual at a time.
* Do not linger or socialize in common areas; social distancing must be maintained in these areas.

HYGIENE PROTOCOLS

√ Provide hand washing capabilities throughout the workplace.

√ Ensure frequent hand washing by employees and provide adequate supplies to do so.

√ Provide regular sanitization of high touch areas, such as workstations, equipment, screens, doorknobs, restrooms throughout work site.

 Implemented additional procedures:

* Do not use lab phones or other personnel’s phones, desk, tools, or equipment.
* Do not share safety glasses.
* The use of conference rooms is discouraged; virtual meetings are encouraged. If a conference room must be used, limit time to a quick meeting of ten people or less with a 6-foot separation distance between individuals. Disinfect chairs and tables before and after use.
* Limit copy machine/scanner use; scan from home if possible. If required, save all copying and scanning for once/day.
* Minimize use of break rooms. Ensure 6-foot separation distance between individuals. Disinfect chairs and tables before and after use.
* Do not use break room appliances, or utensils. Use extreme caution when using water coolers.
* Use refrigerators only for storage of sealed food items for individual consumption that day. Do not return items to the refrigerator after use.
* Do not share food items in break rooms.
* Use paper towels to turn faucets on and off.
* At 60 Garden. St and 160 Concord Ave., multi-stall restrooms are used one person at a time.
* Personal cooling fans can increase the spread of aerosolized viruses and are therefore not allowed.
* Cover your cough or sneeze with a tissue, then throw the tissue in the trash and wash your hands.

STAFFING & OPERATION

√ Provide training for employees regarding the social distancing and hygiene protocols.

√ Ensure employees who are displaying COVID-19-like symptoms do not report to work.

√ Establish a plan for employees getting ill from COVID-19 at work, and a return-to-work plan.

Implemented additional procedures:

* High risk staff (due to age or underlying conditions) should work from home.
* If you have been tested for COVID-19 and have received a positive result, follow Smithsonian Institution (SI) policies for reporting COVID-19, which includes:
	+ Stay home and get well. Follow your healthcare providers’ advice.
	+ Notify the SI Coronavirus Response Team of the positive result at si-coronavirusinfo@si.edu with “POSITIVE TEST” in the subject line. Include a description of what you are reporting, a phone number you can be reached at, and a team member will respond to you within an hour.
	+ In addition to e-mailing: please call the 24-hour Smithsonian Communications Center at 202-633-9300 so the SI Public Health Officer can be notified.
* If you are sick and have been told to stay home by a health care provider, but have NOT been tested for COVID-19:
	+ Stay home and get well. Follow your healthcare provider’s advice.
	+ Notify the Coronavirus Response team for updated recommendations and visit the website. You are only considered a COVID-19 case if have received a positive diagnosis through laboratory testing.
	+ Follow the coronavirus precautions during any illness even if you have not received a lab-confirmed diagnosis.

CLEANING & DISINFECTION

√ Establish and maintain cleaning protocols specific to the business

√ Ensure that when an active employee is diagnosed with COVID-19, cleaning and disinfecting is performed.

√ Prepare to disinfect all common surfaces at appropriate intervals.

Implemented additional procedures:

* Disinfection of facility surfaces, such as, common door handles, switches, railings, elevator touch surfaces, etc. is done by the landlord.
* Disinfection of equipment and doorknobs in individual offices, shared lab equipment and surfaces, shared office equipment (e.g. copy machine, scanner), conference room tables and chairs, handles of shared refrigerators and vending machine touch surfaces is done by SAO staff as used.

# Environmental Protection Agency (EPA) *List N: Disinfectants for Use Against SARS-CoV-2*” (the virus that causes COVID-19), must be used. List N can be found at:

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

List N includes the time each disinfectant must remain on the surface. Be sure to leave the disinfectant in use on the equipment or surface for the specified time before wiping it.

* Use disposable nitrile or vinyl gloves while disinfecting and conducting operations involving high-touch surfaces in labs and immediately dispose of gloves. Do not wear gloves throughout the facility.

CONTACT INFORMATION

For any building-specific issues, please contact the appropriate individual listed below

**Building Coordinators:**

Charlie Hickey, 60 Garden St.

Muriel Hodges, 160 Concord Ave.

Karen McLaine/Billy Duggan, CDP

Chris Eagan, Wayside

**For any safety questions or concerns, please contact**

Janice Pacenka, SAO

Nancy Doherty, Harvard

**For any PPE requests, please contact**

James Shaw, Logistics Coordinator

**For deliveries or pick-up, please contact**

Mike McIsaac, Shipping and Receiving

**For any HR questions or concerns, please contact**

Laura Conway, HR Director

**Appendix B: Self-assessment to be performed each workday**

1. Have you been within 6 feet of a person with a lab-confirmed case of COVID-19 for at least 5 minutes, or had direct contact with their mucus or saliva, in the past 14 days?
2. Have you experienced any of the following symptoms?
* Fever
* Cough or sore throat
* Shortness of breath or trouble breathing
* Chills or repeated shaking with chills
* Muscle aches
* Nausea, vomiting or diarrhea
* Loss of smell or taste, or a change in taste
* Headache

**If you answered ‘Yes’ to either question, you should not report to work. As appropriate you may wish to speak to your health care provider.**

**Appendix C: Training Completion Certification**

I have read the Phase 1 Return to “New Normal” for SAO Laboratory, Technical, and Instrument Development Groups Guide and understand my roles and responsibilities consistent with Smithsonian Institution and Massachusetts COVID-19 safety protocols. I understand that my participation in this phase of reopening is voluntary. I also understand I play a key role in ensuring the health and safety for myself and others, and agree to follow these protocols.

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Print User's Name Division/Department

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User’s Signature Date

Please sign and return to SAO Safety at safety@cfa.harvard.edu