

## Guidelines for Reopening Laboratory-Based Research: Phase 2

The following guidelines are effective starting July 1, 2020. They are intended to facilitate the resumption of additional on-campus research activity in laboratories, in particular outlining criteria for scheduling more than one person per research group. In no case should they be interpreted to permit behaviors that violate our overarching obligation to protect the health and safety of the community. They have been developed by the Research Continuity Working Group in consultation with the COVID-19 Task Force, the Health/Epidemiology Working Group, and campus partners, and incorporate best practices from peer institutions. These guidelines will continue to be revised as necessary, e.g., due to changing circumstances or local and State requirements or based on institutional experience. In particular, we will use data from the Health Screening Tool, as well as local and State epidemiological data, to inform future decisions to expand or restrict access.

Please note that under the leadership of Dean of Libraries Susanne Mehrer, the libraries are engaged in a separate process to plan for ramping up on-campus activities, including limited access to research materials likely starting in the first half of July. Additional details will be announced as soon as possible. In the meantime, the Library will continue to make items from its physical collections available via curbside pick-up.

As noted in phase 1b, non-faculty scholars who require brief access to office space or facilities, but whose faculty supervisors/advisors are not operating phase 2 protocols, may apply to the Department (for Dartmouth employees and non-faculty appointees) or Dartmouth-Hitchcock (D-H) Office of Research Operations (ORO) (for D-H employees) for *de minimis* access (e.g., one hour per visit; <3 visits per week). Distancing and disinfection protocols must be observed. The application should specify which rooms will be accessed and when, and individuals issuing approvals should avoid scheduling more than one individual per room at the same time. The approving offices will provide additional guidance on how to request permission.

All research activity must comply with the requirements outlined below, but numerous other requirements also apply, including NH State Guidance, as well as the Dartmouth and D-H guidelines, such as Dartmouth's "Employee Guide for Working on Site" and the documents on the COVID-19 websites for Dartmouth (link [here](#)) and D-H (intranet link [here](#)). The guidelines below supplement, and also summarize, key aspects of these overarching requirements. However, the summaries provided here do not override or limit restrictions imposed by those guidelines.

### **A. Who may be on campus for laboratory research?**

1. As long as we remain in the "highly limited" or "limited" risk levels, all individuals who can perform their work remotely must continue to do so.
2. Undergraduate students may not engage in on-campus research during phase 2 until further guidance is available.
3. No visitors, including visiting scientists, are allowed in Dartmouth buildings without a formal appointment at Dartmouth. Please also see the D-H guidelines for visitors (intranet link [here](#)).
4. Currently, individuals who have been living outside of the Upper Valley (or their usual residence), who have used public transportation, or who have traveled internationally must

self-quarantine for 14 days before resuming research activities on campus. Anyone who travels domestically must follow current guidance (available at the Dartmouth COVID-19 [website](#)) before returning to work.

5. Individuals may not work on campus or at D-H/DHMC if they have been:
  - a. diagnosed with COVID-19 or exposed to someone with a confirmed case of COVID-19, unless the researcher has been approved to return to work by a public health official and their supervisor/advisor; or
  - b. instructed to refrain from attending work by Dartmouth College Health Services, D-H, or by a public health official.
6. In compliance with NH State guidelines, any individual who is scheduled to be on campus must report their temperature (and answer five health-screening questions before beginning work. Currently, all Dartmouth researchers (including those working at D-H/DHMC until further notice) must check-in via Dartmouth's online screening tool ([link here](#)) before beginning work, and comply with any guidance provided by the online screening tool, including a recommendation not to report to work and to notify their supervisor or advisor. Individuals who do not have access to a thermometer at home may visit a temperature-screening station. See Dartmouth's COVID-19 [website](#) for latest information. A list of screening stations (current as of June 23) can be found at this [link](#). Temperature scans are currently also performed at all D-H entrances.
7. Individuals who are scheduled to perform research on campus, but are concerned about health risks, may request a disability-based accommodation through existing institutional processes. Dartmouth employees and students should refer to this [link](#). D-H employees should refer to this [link](#).

#### **B. Requirements while on campus.**

1. As noted in the preamble, all overarching rules for each campus (Dartmouth and D-H) apply, including in particular, the importance of good hygiene practices.
2. In particular, all individuals must observe rules governing the use of face coverings consistent with public health guidance, including CDC recommendations. The current Dartmouth policy on face coverings is available at this [link](#)). Currently, at D-H sites, face coverings are required except in closed, one-person offices.
3. All individuals must adjust their behavior to minimize the risk of transmitting the virus. Some specific examples:
  - a. Access only those rooms that are required for work. Do not use common areas (e.g., break rooms, kitchens, classrooms, and conference rooms) unless they have been specifically designated (with appropriate signage) for use.
  - b. Do not congregate and minimize the time spent in public spaces (e.g., bathrooms, entryways, corridors).
  - c. Wash hands if moving between rooms or pieces of equipment.
  - d. Elevators: Only one person at a time may be in each elevator.
  - e. Stairs: Please observe one-way rules if posted.
  - f. Bathrooms: Occupancy should be limited to the extent compatible with physical distancing requirements.
4. At this time, pets may not be brought to campus. No animals are allowed in Dartmouth buildings with the exception of service animals and service animal trainees.

### C. Requirements in the laboratory

1. Before research activities commence under phase 2 guidelines, departments must develop an overall phase 2 research plan, outlining expectations for hygiene, and specifically addressing procedures to ensure appropriate physical distancing in shared spaces (e.g., corridors, shared equipment rooms or alcoves). If necessary, scheduling mechanisms for shared equipment should be developed. These and all other requirements will apply to all laboratories, including those that choose to continue operating under phase 1 occupancy (1 person/lab).
2. Departments (or for D-H employed faculty, the Office of Research Operations) are also responsible for ensuring that laboratories have updated their phase 1 research plans to meet the requirements outlined below and for submitting documentation to EHS before phase 2 research activities begin.
3. During phase 2, each research group may have more than one individual on campus at a time, but must use a scheduling system to ensure that no individuals are scheduled for overlapping shifts at lab benches or other workspaces that are within the same room and within six feet of each other at any point along their length. For example, simultaneous occupancy is not permitted for:
  - both benches in a single bay (back-to-back)
  - benches in adjacent bays that are separated by open shelving
  - benches that connect at a corner
  - workspaces that are side-by-side on a single long bench.
4. If more than one person may be present in a closed laboratory, a face covering must be worn by all individuals. Consistent with Dartmouth and D-H policies, face coverings must also be worn at all times in open-concept labs and in any shared or public spaces, including shared equipment rooms.
5. To the extent possible, use online communication to supplement in-person “buddy systems.”
6. If a research group already has individuals working in the laboratory under an exception, that exception will continue, but additional individuals can be scheduled only at benches or workspaces that meet the physical distancing requirement outlined in item C.3.
7. Until there is a change in the building disinfection requirements currently part of the State of NH Universal Guidelines, researchers permitted to work under these phase 2 guidelines may only work in the laboratory during approved opening hours for research buildings, to enable facilities staff to provide required disinfection of common areas. Unless otherwise announced for a particular building, research hours are Monday – Friday from 8:00 am – midnight (7:00 am – midnight starting Monday, July 6) and Saturdays and Sundays from 8:00 am – 5:00 pm.
8. To ensure adherence to the physical distancing rule and to permit contact tracing if needed, each research group must use a trackable scheduling mechanism (e.g., Google calendar, Thayer Lab Scheduler), must keep a record of who has been in the lab, and must provide the schedule to institutional officials as needed for contact tracing purposes related to COVID-19. Scheduling should allow appropriate time between experiments to complete disinfection by the departing and the incoming lab members. The time required may vary depending on the complexity of the protocol, but in general should not be less than 30 minutes.
9. Before any member of a research group is scheduled to return to work on campus during phase 2, the Principal Investigator must have completed or updated the COVID-19 laboratory safety protocol worksheet (linked [here](#)) and submitted it to the Department (Dartmouth-

employed faculty) or the D-H ORO (D-H employed faculty), cc to all lab members. At a minimum, the protocol must:

- a. Identify the individual in the laboratory who will serve as the designated COVID-19 contact person, for lab members and Dartmouth officials. This can be more than one individual. Changes or additions relative to any phase 1 submission should be flagged.
- b. **For phase 2:** Within section 1 on the phase 2 EHS worksheet, identify the lab member(s) (PI and/or designee) who will be tracking health-screening compliance. If a phase 1 protocol was previously submitted, please update box 1.
- c. List all lab members. If a plan was submitted for phase 1, changes or additions should be flagged. Each PI must also enter any new information (e.g., additional lab members) electronically through the NetID tool linked [here](#).
- d. List all rooms that will be accessed. If a plan was submitted for phase 1, changes or additions should be flagged.
- e. Specify any procedures necessary to restart equipment safely.
- f. Describe disinfection of all work areas and equipment with an approved EPA disinfectant (see list [here](#)) by each individual before starting and after completing work. The disinfection protocol must meet EHS guidelines and must be developed in consultation with all lab personnel. The guidelines are linked [here](#). **For phase 2:** This section (box 7 on the phase 2 EHS worksheet) should describe required disinfection every two hours of high-touch surfaces within the lab (e.g., DI water supplies, shared centrifuges, water baths, refrigerator handles), whenever more than one person is in the lab. If a phase 1 protocol was previously submitted, please update box 7.
- g. **For phase 2:** Describe scheduling procedures that ensure no overlaps between working areas that are within six feet of each other (box 9 on the phase 2 EHS worksheet). Individual rooms that are physically separate (including floor-to-ceiling walls) may be scheduled independently of adjacent spaces within the lab. If a phase 1 protocol was previously submitted, please update box 9.
- h. Have been discussed and reviewed by all members of the laboratory prior to submission.

Except for emergency situations, any subsequent changes to the COVID-19 laboratory safety protocol must be communicated to all laboratory members and to EHS prior to implementation.

10. Each day, principal investigators must confirm that their lab members have passed the online health screening before they begin their shifts. A confirmatory email listing only the final recommendation (cleared for work or not) will be sent to the individual's PI automatically upon completion of the online screen. Compliance will be monitored, and willful or repeated compliance failures may lead to revocation of phase 2 privileges for the non-compliant labs.
11. Each individual who wishes to perform laboratory work during phase 2 must first review the EHS training video (link [here](#)) and email confirmation to the PI. Individuals who had previously viewed the EHS training video do not need to watch it again.
12. Laboratories are responsible for providing gloves and other personal protective equipment that may be required for their work. Stockrooms will have limited supplies available.
13. For situations in which individuals must work closer than six feet apart (e.g., training, two-person experimentation), EHS must review and approve a plan to ensure appropriate protective measures for each of the following situations:

- a. Research groups that work in shared laboratories (e.g., open labs in Burke, LSC, Williamson, Rubin, etc.) to ensure that adjacent laboratories do not schedule overlapping shifts for benches or work spaces that are not at least six feet apart.
- b. Core facilities or shared resources with users from multiple research groups.
- c. Laboratories in which safety or training considerations require the physical presence of two or more individuals at a time (“buddy system”).

14. Key points are summarized in the Appendix.

#### **D. Priorities.**

Laboratories and core facilities may need to prioritize some experiments and users during this period of limited access. To the extent possible, such decisions will be made by the PIs of the labs or the cores. In general, we encourage PIs to consider the following factors:

1. Graduate students and post-doctoral fellows facing deadlines (e.g., fellowship expiration, visa status, imminent completion of thesis research).
2. Junior faculty (especially with promotion deadlines in the near future).
3. Projects with funding concerns (e.g., end of funding, sponsor inflexibility, milestones, or application deadlines).
4. Least demand on limited campus resources (security, core facilities).

#### **E. Future steps:**

We recognize that laboratory-based research is just one part of a complex landscape of scholarly and teaching activities at Dartmouth, all of which have been affected by COVID-19 restrictions. Under the guidance of the COVID-19 Task Force, multiple working groups are considering how best to move forward, in conjunction with deans and academic leaders. A few of these efforts are listed below:

1. As noted in the preamble, a parallel process is underway to coordinate the ramp-up of support from the library system, under the leadership of the Dean of Libraries, including on-site access to research resources.
2. To the extent compatible with our regulatory and ethical obligations, the D-H Health IRB and CPHS will explore permitting resumption of limited in-person interactions in the context of human-subjects research protocols.

## Appendix: Summary of Key Steps for Phase 2 Activity

While all of the above guidelines apply, it is particularly important that PIs address these key requirements before scheduling more than one person in the laboratory under phase 2 guidelines:

- Before multi-person scheduling may commence under phase 2, EHS must approve a departmental plan, and PIs must submit a new/updated phase 2 worksheet to the department (or D-H ORO).
- During “highly limited” and “limited” risk levels, individuals who can work from home must continue to do so.
- Individuals may only be in buildings during research opening hours.
- Checklist:
  - Has your Department (Dartmouth-employed faculty) or the D-H ORO (D-H employed faculty) compiled and shared an EHS-approved a phase 2 access protocol, including hygiene, physical distancing, face coverings, and scheduling of shared spaces?
  - Is your laboratory safety protocol up-to-date and has it been submitted to your department chair, cc to all lab members?
    - If your laboratory is currently operating under phase 1 guidelines, have you revised/updated your lab safety protocol, shared with all group members, and submitted to the Department (Dartmouth-employed faculty) or the D-H ORO (D-H employed faculty)?
    - If your laboratory has not yet operated under phase 1 guidelines, have you developed your lab safety protocol in consultation with all group members, and submitted to the Department (Dartmouth-employed faculty) or the D-H ORO (D-H employed faculty)? The phase 2 worksheet is available [here](#).
  - Does your laboratory safety protocol include a scheduling plan to ensure that lab members are not working at benches or workspaces that are not at least six feet apart at all points along their length (worksheet box 9)? For example, simultaneous occupancy is not permitted for:
    - both benches in a single bay (back-to-back)
    - benches in adjacent bays that are separated only by open shelving
    - benches that connect at a corner
    - workspaces that are side-by-side on a single long bench.

**NOTE:** EHS approval is not required for individual lab protocols prior to commencing work, but changes may be required following review and/or based on observation or experience.

- Each lab member must watch the EHS training video and email confirmation to the PI. If they have done so for phase 1, they have met the requirement.
- Access to shared spaces is possible only in compliance with an EHS-approved Departmental plan.
- All individuals must complete the online health screen (TSA) each day before beginning work. PIs or a designee must monitor compliance (update worksheet box 1 with name(s) of lab monitor(s)). Compliance failures may lead to loss of phase 2 privileges for the lab.
- Work surfaces and shared equipment must be disinfected according to EHS guidelines at the beginning and end of each shift.
- Each PI must develop a schedule to ensure that high-touch surfaces within the lab are identified and cleaned every two hours whenever more than one person is in the lab (box 7 of worksheet).
- Do not access areas not required for work. No shared spaces (conferences rooms, kitchens, alcoves) are available unless EHS-approved signage permits their use.
- All individuals must practice outstanding hygiene consistent with public health guidelines, in order to minimize the risk of the spread of COVID-19.
- Comply with all applicable guidelines (including Phase 2, NH State Guidance, CDC recommendations, Dartmouth, and D-H)