



BROWN

Brown University

PLAN FOR A HEALTHY AND SAFE 2020-21

July 7, 2020

Brown University bases all decisions regarding public health on the best available science and follows at all times guidance from the U.S. Centers for Disease Control and Prevention (CDC) and the Rhode Island Department of Health (RIDOH). Our plans, policies and guidance to Brown community members will adapt and be updated as guidance from those agencies evolves with our understanding of COVID-19.

I. INTRODUCTION AND OVERVIEW

Over the past several months, Brown University — under the leadership of President Christina H. Paxson and Provost Richard M. Locke — has been simultaneously responding to and managing the impact of the COVID-19 pandemic on the extended Brown community and planning for the healthy and safe resumption of academic activities and operations. This document focuses primarily on plans for the upcoming 2020-21 academic year, although it also reviews ongoing planning and implementation of essential work and research taking place on campus during Summer 2020.

In planning for the fall term and beyond, President Paxson established the following guiding principles:

- We are committed to protecting the health of our students and employees.
- We are committed to developing plans with the goal of maintaining the financial well-being of students and employees, especially those who experience the greatest impact.
- We are committed to protecting Brown's mission of education and research, including focusing resources on Brown's highest priorities.
- We are committed to protecting the long-term financial health of the University.
- We are committed to transparency.

In order to ensure that thoughtful and comprehensive planning took place in a manner consistent with these principles, President Paxson formed and charged the following COVID-19 planning groups in April 2020:

Healthy Fall 2020 Task Force

Charged with developing an effective public health plan for Brown University that will, if conditions permit, make it possible for the University to reopen its campus in Fall 2020 with the confidence that the health of its students and employees will be protected.

Academic Continuity Group

Charged with developing plans for reopening research laboratories and libraries, and implementing changes in the academic calendar, curriculum and modes of teaching that will enable Brown to continue to provide a high-quality academic experience for all students.

Personnel Group

Charged with developing plans to safely bring employees back to campus and making decisions about a range of issues affecting support for Brown staff during the pandemic.

Finance and Strategy Group

Charged with assessing the financial impacts of the coronavirus pandemic, and developing strategies to maintain Brown's short-term and long-term financial stability.

The plans presented in this document represent the work of the faculty, students and staff on these groups and many others, all committed to ensuring that Brown operates in a healthy and safe manner throughout the 2020-21 academic year.

II. ACADEMIC PLANS FOR A HEALTHY AND SAFE 2020-21

Central to the University’s mission are teaching and research, and planning has been underway for months regarding how to continue to conduct these activities in a healthy and safe manner for the 2020-21 academic year. The mode of how we will deliver the educational experience at Brown next year will look different than in past years, and it will be based on the best expert advice for safeguarding the health of our community and maintaining Brown’s high standards of teaching and learning.

Initial planning by the working groups was based around three primary scenarios for the coming academic year:

1. A scenario in which Brown follows its normal academic calendar, welcoming all students back to campus in the fall.
2. A scenario in which the University offers three terms of instruction and arranges for undergraduate students to be on campus for two of these terms, thus providing an environment with fewer students on campus at any one time.
3. A scenario in which health conditions are such that the fall semester has to be conducted remotely, with a decision about the spring to be made in the middle of the fall semester.

The planning groups also recognized that there could be various modifications under any on-campus scenario — reduction in class sizes, hybrid online and in-person learning with live-streamed lectures and smaller group discussion sessions, etc. — depending on containment of the coronavirus. And even for an on-campus scenario, Brown planned from the start to deliver education remotely for students unable to return to campus because of travel restrictions or health conditions.

After significant consideration — of the recommendations from all planning groups, the current status of the COVID-19 public health emergency, and the most recent guidance from the CDC and RIDOH — the University has decided to implement the second scenario for the upcoming year:

For the 2020-21 academic year at Brown, the University will offer three terms of instruction, arranging for undergraduate students to be on campus for two of these three terms, providing an environment with fewer students on campus at any one time.

Three-Term Calendar

Key to the selected scenario is operating the University on a three-term academic year calendar, rather than Brown’s typical two-semester approach. Three terms will allow the University to distribute the undergraduate population in a manner that results in far fewer students, and less density, on campus during each term.

As shown in the following table, juniors and seniors will attend during the fall and spring terms, and first-year students will attend during the spring and summer terms. Sophomores will attend fall-spring but could be shifted in full or in part to fall-summer if public health conditions worsen over the course of the fall:

	First-Year	Sophomore	Junior	Senior
Fall		X	X	X
Spring	X	X*	X	X
Summer	X	X*		

*Sophomores may be fall/spring or fall/summer.

The University’s total undergraduate enrollment is about 6,800 students, and we are assuming that approximately 10% will be unable to be in residence due to visa restrictions and other factors. The result of distributing the academic calendar across three terms is approximately 4,600 undergraduate students on campus in the fall term, which will enable the University to open safely in a manner consistent with guidance from the Centers for Disease Control and Prevention (CDC) and Rhode Island Department of Health (RIDOH), as well as the plans detailed in this document.

In the three-term calendar, each term will be slightly compressed at 14 weeks rather than the usual 15. The start of classes each term will be preceded by a “quiet period,” during which students will be expected mostly to self-quarantine within their residences. Each term will include two or three long weekends. However, longer breaks such as fall and spring recess will be eliminated due to calendar constraints and to avoid out-of-state travel. Reading period — the period following the end of classes and prior to final exams that is devoted to study — and final exams will be offered remotely. And in the fall term, students who leave campus for Thanksgiving will not be permitted to return to campus.

The complete academic calendar for Brown’s 2020-21 academic year is included on the University website, with the major dates summarized as follows:

- Fall term classes will begin Sept. 9, 2020. After Thanksgiving break (which will begin at noon on Nov. 25), there will be a weeklong remote reading period from Nov. 30 to Dec. 4, followed by a remote final exam period from Dec. 7-11.
- Spring term classes will begin Jan. 20, 2021. Remote reading period will begin April 12 and will be followed by remote final exams April 19-23.
- Summer term classes will begin May 12, 2021. Remote reading period will begin Aug. 2 and will be followed by remote final exams Aug. 9-13.

Eligible students may opt to complete one or both of their terms remotely, and during “off” terms, students will not be enrolled at Brown and can pursue internships, research programs or other academic/professional development opportunities. Even during the semesters when they are not enrolled, returning students will continue to be covered by the University’s Student Health Insurance Plan (SHIP) or their family coverage if they waived SHIP.

Delivery of Instruction

The 2020-21 three-semester model will require transitioning the majority of Brown courses to online/remote/hybrid instruction to ensure health and safety for all members of the community. Faculty will teach their usual course load and will be in residence for two terms (though in rare cases they might choose to spread their teaching across all three). No faculty members will be required to teach in person unless they voluntarily choose to do so, and students can also voluntarily decide to enroll in classes entirely remotely.

All academic departments are currently planning their curriculum and course offerings to accommodate the three-term calendar. This planning is guided by the following assumptions:

- Courses with more than 20 students will be offered remotely.
- Most gateway/prerequisite courses will be offered in more than one term to ensure that students can meet concentration and graduation requirements. These courses can be offered online asynchronously and augmented with in-person recitation/lab sessions.
- Departments will consider course sequencing to ensure availability of graduation and concentration requirements.
- Departments will prioritize fulfilling concentration requirements, including capstones.
- Departments will ensure the availability of service courses and courses that support interdepartmental concentrations.
- Departments will consider courses that are required for external requirements (e.g., accreditation, pre-med preparation).
- Departments will plan to schedule first-year courses in the spring and summer terms.
- Departments will develop opportunities (i.e., independent study) for other classes on campus during summer term.
- Departments will schedule first-year seminars during all three terms in order to make them available online in the fall, prior to first-year students’ arrival on campus, as well as in the spring and summer, when students will be in residence.
- Departments will offer essential courses for doctoral students in fall and spring to preserve summer for fieldwork/research.

As noted in the assumptions above, all courses with enrollments of more than 20 students will be offered virtually through delivery mechanisms such as Zoom and Panopto. Doing so for these, as well as for courses with smaller enrollments, will allow students who cannot come to Providence due to visa restrictions or personal choice to enroll online, and will provide faculty who may wish to teach remotely the ability to do so. In addition, it will enable the University to adapt more quickly to changes in public health circumstances, such as short-term stay-at-home orders that might be issued by the state of Rhode Island.

In order to retain interpersonal connections, which are the hallmark of a Brown education, faculty, instructors and teaching assistants will conduct small group sessions in person whenever possible or, in some cases, through a hybrid model of virtual and in-person methods of delivery. A digital teaching and learning subcommittee established by Provost Locke is working with all faculty to determine the best methods for remote instruction.

The provost and deans remain in the process of assessing the class schedule and meeting patterns for the coming academic year to most effectively support these necessary methods of instruction delivery.

Academic Planning — Health and Safety

For academic year 2020-21, all students will be given the option to take courses remotely, whether they are on campus or not. Additionally, all faculty will be given the option of instructing in person or remotely, whether or not they are on campus. The limit on in-person class sizes to 20 or fewer students will enable safe distancing of students and instructors within classrooms, and we have developed plans for every classroom space that allow for 6-foot or greater separation between individuals.

In addition, exiting students and instructors will be asked to wipe down physical property (desks, chairs, lecterns, etc.) between class sessions. Incoming students and teachers will be instructed to repeat the wipe-down of physical property before the start of a class. Students and faculty will have 10 minutes between courses to pass through corridors safely and exit/enter buildings. Signage throughout physical spaces will instruct individuals to practice safety while moving through a building and to avoid congregating in large groups and loitering. Effort will be made to stagger classroom use to avoid large congregations of individuals in a building between class periods. All students (as well as faculty and staff) will be given three reusable face masks that they must wear at all times on campus when they cannot continuously maintain social distancing, including in the classroom.

Graduate and Medical Education

Graduate students (doctoral and master's) will enroll primarily in the fall and spring terms, although we anticipate that significant numbers of new international students may need to defer arrival due to expected delays in visa processing. Most of the essential graduate courses will be delivered in fall or spring. In most programs, summer is traditionally used for fieldwork, full-time lab research or internships. Graduate students who are unable to come to campus in September will be given the option to defer either for one term (with or without an online start in the fall) or for one year, or to begin the program online and join on-campus part way through the fall term. In all other respects, graduate instruction will be similar to the plans described for the undergraduate program above.

Medical education is substantively different from undergraduate and graduate programs in many respects, including the fact that third- and fourth-year instruction takes place almost entirely in Brown's affiliated hospitals and is subject to the plans and policies of those institutions. The Warren Alpert Medical School (AMS) has adopted the following guiding principles for delivering the medical curriculum in the coming year:

1. Continue to deliver an innovative, evidence-based curriculum that creates an optimal educational experience for all medical students.
2. Use a variety of pedagogical methodologies including, but not limited to, lecture, small groups and clinical experiences.
3. Adhere to best practice guidelines from the CDC and RIDOH in regard to physical distancing and other safety precautions.

In order to do so for first-year medical students (beginning on Aug. 3, 2020), AMS will:

1. Conduct all large group lectures virtually through delivery mechanisms such as Zoom, Panopto and Brainshark. (Note: As the first year, first term typically progresses, up to 50% or more of students watch recorded lectures rather than attend lectures in person.)
2. Conduct small groups in person or, in some cases, through a hybrid model of virtual and in-person methods of delivery.
3. Continue with the clinical skills component of the first year in person, using social distancing guidelines to ensure safety of students, faculty and standardized patients (for example, reducing the number of students in clinical skills suite rooms by 50%).
4. Continue students working with mentors in the clinical setting for a half day per week (with appropriate personal protective equipment provided).
5. Conduct anatomy laboratory sessions using a mix of prosections and mobile applications.
6. Administer examinations either: (1) remotely using Zoom or artificial intelligence applications; or (2) in person, adhering to guidelines from CDC/RIDOH on appropriate physical distancing.

For second-year medical students (beginning on Aug. 5, 2020), AMS will:

1. Conduct all large group lectures virtually through delivery mechanisms such as Zoom, Panopto and Brainshark. (Note: In the second year, many students typically watch recorded lectures rather than attend lectures in person).
2. Conduct small groups in person or, in some cases, through a hybrid model of virtual and in person.
3. Continue with the clinical skills component of the first year in person, using social distancing guidelines to ensure safety of students, faculty and standardized patients (for example, reducing the number of students in clinical skills suite rooms by 50%).
4. Continue students working with mentors in the clinical setting for a half day per week (with appropriate personal protective equipment provided).
5. Administer examinations either: (1) Remotely using Zoom or artificial intelligence applications; or (2) in person, adhering to guidelines from CDC/RIDOH on appropriate physical distancing.

For third- and fourth-year medical students (first term began on May 26, 2020), AMS has done the following:

1. Appropriate personal protective equipment has been provided for all students at the same level as other health care providers in the setting in which students are working for all clinical rotations that began on May 26, 2020.
2. Any didactic sessions for students (typically groups of 12 or less) are conducted either in person (usually at hospital sites) or virtually (if a larger group).
3. Written (multiple-choice) examinations are proctored remotely via Zoom.
4. Objective Structured Clinical Examinations are administered in AMS's clinical skills suites with appropriate precautions (a 1:1 ratio of students to standardized patients, with each individual wearing masks).

Brown has a highly complex residential campus, where the educational and social experience of students, and related activities, often take place outside the classroom. As noted in the introduction, President Paxson charged the Healthy Fall 2020 Task Force – composed of students, faculty and staff – with responsibility for developing an effective public health plan for Brown that will make it possible for the University to reopen its campus in the fall with the confidence that the health of students and employees will be protected to the best extent practicable. Task force recommendations were made based on the guidance of medical experts and public health protocols for managing infectious diseases of pandemic proportions, and also in collaboration with the Rhode Island School of Design, given our overlapping student populations and close physical proximity. The plans presented in this section reflect the recommendations of the task force.

Education and Prevention

Essential to the healthy and safe daily life of any community, and especially to a campus community with thousands of undergraduate students, is the presence of a robust and effective prevention and public health education campaign. This campaign, largely directed toward students but of relevance to all members of our community, will include basics, such as the need for handwashing and wearing masks, and also broader issues such as the importance of undergoing testing as requested, social distancing and assisting with facility cleaning. The public health campaign will be critical to all of our efforts and activities, and especially with regard to student social functions and other activities that take place with less supervision than classroom or laboratory activities, such as off-campus parties and other gatherings where we will need to rely on students' understanding and acceptance of public health guidance. Specifically, the University plans to:

- Prior to the beginning of the fall term, develop and launch a major public health campaign involving everyone in the community, especially students.
- Provide targeted, ongoing education and training on expectations for different groups, individual and collective responsibilities, rationale, best thinking and practices, connection to resources, etc.
- Undertake a sustained and long-term social marketing and education campaign that evolves in tandem with the course of the pandemic. This campaign will have central messages that are tailored to different audiences, including students, staff, faculty, alumni and parents. There will be a specific focus on messaging to at-risk populations. This will include in-person messaging and print materials, digital and social media, emails, etc. This effort will be coordinated by Brown's internal marketing and communications team, and social media buys and print materials will be purchased with external vendors.
- Create a broad-based community mobilization effort that is coordinated with the communications campaign. This effort will be designed to encourage individual responsibility and actions in an effort to promote health, both on campus and in the surrounding community.
- Mandate required training for everyone prior to their return to campus, and continue the campaign once campus is reopened. This training will be succinct (less than 5 minutes in video format) and cover the general expectations and new rules, with more specifics to come as constituencies return to campus. These guidelines will be continuously reinforced throughout the term in a variety of ways (emails, faculty announcements in class, posters, etc.).
- A steering group will be tasked with staying up to date on new regulations, recommendations, restrictions and guidance. All information pertaining to different populations is expected to be centralized in one place so that everyone can refer to it.

Associate Professor Amy Nunn of the School of Public Health and Tanya Purdy, director of BWell Health Promotion, will lead the implementation effort in coordination with the Office of University Communications. Students will be involved as interns (through the President's Office), peer health educators (more than 100 in Health Promotion), collaborators with Residential Peer Leaders (RPLs) and Orientation student leaders, as well as through outreach to the various student government bodies.

Testing, Contact Tracing and Modeling

The U.S. Equal Employment Opportunity Commission has stated that “the COVID-19 pandemic meets the direct threat standard” of a substantial risk of harm if present in the workplace. Accordingly, critical to maintaining a healthy and safe community during a pandemic is identifying and stopping the community spread of virus at the earliest possible stages.

The University has already implemented a COVID-19 Workplace Safety Policy (described later in this document), which establishes a variety of policies to mitigate the risks, including mandating the wearing of face masks unless an exception applies, and prescribing protocols for Brown community members to follow when they feel sick, have tested positive for SARS-CoV-2, the virus that causes COVID-19, or been exposed to someone with COVID-19. In support of this policy, Brown will implement a coordinated testing and contact tracing program this summer and fall with the goal to prevent community spread. The program includes the following elements:

- Brown has contracted with a third-party vendor to perform routine testing, starting with a pilot this summer for all essential on-site faculty, staff and graduate students. The summer pilot is mandatory and includes baseline testing of all of these individuals and then follow-up random sample testing. We anticipate learning a great deal from this summer pilot, which will in turn inform specific testing plans for the fall. We intend in the fall to test all students on re-entry to Brown, as well as continue periodic routine testing. This will allow a better understanding of the initial incidence of COVID-19 in the population and how it changes over the year, as well as identify the proportion of asymptomatic positives and the proportion with potential immunity to the disease over time. This testing will use the least invasive and reliable means possible to reduce the burden on the student population.
- Brown will perform testing of symptomatic students at University Health Services (UHS) using nasopharyngeal swabs, as it has been doing, and samples will continue to be sent to Lifespan labs for processing. UHS staff will require standard clinical personal protective equipment to perform the tests. An alternate testing site will be identified on campus for UHS to perform tests during the day in order to avoid congestion of symptomatic students at UHS facilities where students are coming for other unrelated issues.
- Brown has identified staff in UHS and University Human Resources who are responsible for assisting with contact tracing of students, faculty and staff who test positive for SARS-CoV-2. All of these individuals are completing the “COVID-19 Contact Tracing” training program provided by Johns Hopkins University through Coursera. They will use an established protocol (see Appendix A) to follow up on all positive SARS-CoV-2 tests in students, faculty and staff, identifying potential Brown community contacts using available digital applications and through virtual interviews of those with positive SARS-CoV-2 swabs. It is intended that these contact tracers will work in coordination with RIDOH’s own contact tracing efforts. Numbers of trained contact tracers will be adjusted throughout the year based on demand, but we anticipate about six full-time contact tracers will be sufficient for our student population and two for our employee population.

Informing these plans are initial epidemiological models developed for our expected campus residence hall population in the fall term, which predict a maximum of five newly infected students detected on any given day, though we anticipate that would translate into a maximum of 50 (symptomatic) tests being run on any given day. We also are planning for a maximum of 30 infected students requiring isolation at any given time. Assuming three to five contacts per infected student requiring quarantine, we are preparing for approximately 180 quarantine/isolation rooms for students. (Note that the numbers needed are likely to be far less for most of the term.) Students who live in private off-campus apartments will also be treated, tested and contact traced through UHS but will be able to isolate in their apartments.

Given that testing methods and evidence regarding their efficacy is rapidly developing, the University will closely monitor these developments and will take advantage of whatever is the latest and most reliable testing strategy available.

Dining

Planning with regard to Brown Dining Services has included attention to both how to feed students in a safe and sustainable manner, including students in isolation or quarantine, and how to protect the health and safety of dining workers in the workplace. Dining Services priority operations now and in the fall will be oriented toward providing food to students, and overall dining facilities will be limited and operating on a takeout and pickup basis only. Dining options for faculty and staff on campus will be limited to self-serve vending machines in fixed locations, which will be sanitized multiple times daily, and pickup/delivery via the Brown Faculty Club or Blue Room campus dining facilities. We have advised faculty and staff to anticipate limited food options on campus and to plan to bring their own lunch or other meals/snacks from home (non-refrigerated or in a personal cooler).

With regard to student dining services and support, our plans include the following:

- We will continue to be grab-and-go only in the fall.
- We will open the four largest dining hall units for food pickup — Sharpe Refectory, Josiah's, Andrews Commons and Verney-Woolley — and assign students to specific units and times to manage lines and reduce density among customers.
- We are exploring transitioning existing food cart operations to a vending program.
- We will offer a more limited number of meal plans for fall term with double the standard amount of flex points in each plan (to be used at eateries and vending).
- We will continue a robust and aggressive health and safety plan based on our Spring 2020 experience, including social distancing among staff, mandatory face coverings and intense cleaning.
- We plan to expand socially distanced in-person dining options as health and safety circumstances and state guidance permit.

Housing

The three-term academic calendar provides many benefits to reduced density on campus, including with regard to residence halls. The University has developed plans for a variety of housing models, including both generally and specifically for isolation and quarantine needs. Overall, our approach to housing is guided by the general principle of reducing density, allowing for largely single-occupancy of rooms in the fall term, and limiting and assigning the number of students using common restroom facilities. We anticipate utilizing approximately half of our available residential capacity — as it pertains to the number of beds on campus — in the fall term. In addition to the benefits of reduced density to limit the transmission of virus, these plans limit the number of students who are living in proximity to each other by establishing smaller, identifiable “pods” to reduce the number of students who need to be quarantined when an infection is positively identified. While the final plans for housing will be determined and communicated over the course of the summer, we anticipate the following:

- De-densified housing based on single-room occupancy in the fall term and types of bathrooms for appropriate ratios of students to bathroom facilities to reduce density of use.
- Allocation of an adequate number of beds for isolation and quarantine based on modeling described above under the Testing, Contact Tracing and Modeling section.
- Potentially identifying additional beds in either apartment buildings or hotels as needed.
- Enhanced cleaning by University custodial staff of all bathrooms (from our standard once a day to twice a day).
- Allowing limited use of common spaces with clear signage on occupancy, social distancing requirements and enhanced cleaning.

Cleaning

Critical to all campus facilities, and in particular dining and residence halls, will be intensified levels of cleaning by University custodial staff. The Department of Facilities Management has developed, with the assistance of external consultants, a detailed plan for extra custodial support that underlies both our academic operations and overall campus plans. An overview of the Healthy Fall Reopening 2020 Plan for Brown University Buildings is included with this report as Appendix B. The plan will:

- Follow current CDC and Occupational Safety and Health Administration guidance and align cleaning frequency.
- Adjust cleaning and disinfecting needs based on type of occupancy, intensity of use and hours of operation, resulting in increased routine cleaning and disinfection.
- Deploy touchless devices: soap and sanitizer dispensers, paper towels, faucets, door access, etc.
- Continuously monitor and determine additional staffing needs (internal and external) based on enhancements, and realign existing staff to the shift that will provide the most effective service.
- Use products that meet Environmental Protection Agency disinfection criteria.
- Encourage students, faculty and staff to keep their personal items (e.g., cell phones, laptops and other electronics) and personal work and living spaces clean.

- Encourage students, faculty and staff to use disinfectant wipes to wipe down shared desks, lab equipment and other objects and surfaces before use.
- Ensure there is adequate ventilation when using cleaning products.
- Clean and disinfect all high-touch surfaces listed below on a regular and documented schedule, performed Monday through Friday twice a day and daily on weekends:
 - Chair handles and backs
 - Podiums
 - Toilet and urinal flushometers
 - Trash receptacle tops and handles
 - Paper towel and toilet tissue dispensers
 - Sink faucets and handles
 - Table tops
 - Mailboxes
 - Tablet arms and brackets
 - Kiosk buttons
 - Light switches
 - Stair rails
 - Elevator buttons outside and inside elevator cabs
 - Toaster oven fronts and handles
 - Water fountains and hydration stations
 - Vending machine buttons
 - Microwave front buttons and handles
 - Refrigerator handles and doors

A daily cleaning and disinfecting supervisor checklist has been developed to enable Facilities managers and supervisors to check off assignments as they are completed, and this will also serve as a record of the date and time of inspection. All data will be compiled and reviewable by senior management via dashboards and reports, and the resulting documentation will comply with RIDOH standards and guidance.

When an occupant of a Brown University building is suspected or has been confirmed as a positive case of COVID-19, the Facilities Management team will follow a predefined plan and procedure in response. A building-specific online questionnaire has been developed to gather all needed information and determine what areas must be cleaned or disinfected. Brown's Environmental Health and Safety office will assist in making a determination on what portions of the building should be evacuated and/or occupants temporarily relocated, as well as perform specialty cleaning in coordination with a third-party services provider that may be required for laboratory spaces. This work will follow CDC guidelines and recommendations for wait times, cleaning and disinfecting procedures.

The University has also taken steps to increase air exchanges and fresh air ventilation in buildings, and will be flushing domestic water lines on a regular basis:

- The majority of Brown's research and laboratory spaces operate with 100% outside air supply, with air exchange rates that meet or exceed American Society of Heating, Refrigerating and Air Conditioning Engineers standards relative to COVID-19 guidance. For these buildings, Facilities Management will continue to perform regular preventive maintenance and evaluate filtration requirements to reduce airborne transmission and inspect filters to ensure they are within service life and appropriately installed. Where applicable, demand-controlled ventilation (DCV) has been disabled and outdoor air ventilation minimum settings have been increased, resulting in greater levels of fresh outdoor air introduced. The University has also improved central air filtration.
- The University's academic, administrative and classroom spaces operate with a variety of mixed air ventilation systems. Most of these systems are intended to provide comfort control only. In these areas Facilities Management will perform regular preventive maintenance and evaluate filtration requirements to reduce airborne transmission and inspect filters to ensure they are within service life and appropriately installed. In addition, run times for air handling systems (where available) have been increased to enhance air filtration and DCV has also been disabled, where applicable, in these buildings.
- The University is taking the following steps to reduce the risk of illness being transmitted through the water system: (1) regular flushing of domestic water lines to sinks, toilets, showers, traps and seals; (2) flushing or, where required by RIDOH, closing drinking water fountains and hydration stations; and (3) continuing with Brown's water treatment program for mechanical systems.

Move-in Planning

As a residential campus, the move-in period at the beginning of the fall term is a logistical and organizational priority in any year. In the context of COVID-19, the necessity of precise organization and maintaining social distancing is paramount. Our plans include the following to adjust a crowded process into one that allows for social distancing:

- Minimize interactions and allow for social distancing — modeled on the consolidation of students who remained on campus in early April.
- Stagger the move-in schedule by geography and residence hall, staged over several days.
- Provide detailed signage for drop-off and check-in instructions and explore the possibility of using professional movers to assist students and families.
- Allow students to ship some belongings pre and post move-in to make move-in day more efficient.
- Limit the amount of belongings students can bring with them and/or limit the number of people who may accompany the student to campus.

Orientation

Closely related to move-in is the orientation of new students. Because first-year students will come to campus for the spring and summer terms, the on-campus orientation of entering students will take place in January 2021. The University will also:

- Provide more programming before students arrive than in a typical year, using student orientation leaders and Residential Peer Leaders to deliver remote, virtual programming and unit-based community building prior to arrival.
- Take advantage of the quiet period after students arrive to conduct remote, virtual programming.
- Hire 100 student orientation leaders to facilitate remote, virtual orientation in small groups.
- Extend programming into the term.
- Explore opportunities for some small group in-person opportunities post-arrival.

Extracurricular Events

Students live full lives at Brown, engaging in a robust offering of events, organizations, clubs and activities outside of the classroom. For the most part, guidance and policy in this area will mirror that for academic classes, such as reduced capacity of spaces, social distancing, hand washing, mask-wearing and other public health best practices. Given the range of extracurricular activities at Brown and the leadership role students play in planning and carrying out events, the following principles and recommendations will be implemented:

- Student leaders, with oversight and guidance from the Student Activities Office, will plan and manage extracurricular activities and programs in a manner consistent with University and state public health guidance and restrictions, such as maximum crowd size, face coverings and other social distancing requirements.
- We will communicate regularly to student leaders who will need to monitor those communications as they plan events, given that public health guidance and social distancing requirements may change frequently.
- The University will prepare for the likelihood that at least for the fall term, in-person events will be limited and small, and travel to and from the campus will not be possible. Non-essential visitors will be discouraged from coming to campus. Student leaders and the offices that advise them should plan for the fall with that assumption.
- We will conduct a summer survey of student leaders and organizations with basic information about the anticipated guidelines and social distancing requirements and ask for their feedback and input about how they will plan events and programs; challenges and opportunities they foresee; and support they will need to be successful.
- We will identify spaces available for extracurricular activities and programs (following the reservation of spaces needed for academics, given the need to locate classes in larger rooms than normal) with information about their capacity and other characteristics readily available to student leaders and organizations. This may include outdoor spaces if possible, including potentially unused athletic spaces.
- If intercollegiate athletics are cancelled, the importance of those teams and games to both individual students and the community as a whole will be acknowledged, and efforts will be made to realize the community-building benefits of intercollegiate athletics, even if their activities are limited by the NCAA and/or the Ivy League.

High-risk Populations

Our planning has especially taken into account (1) student populations that are most susceptible to challenges associated with engaging with the University in person; and (2) guiding principles for policy development and planning for the fall to center support for these student populations. Based on CDC guidance regarding persons who need to take extra precautions based on their risk for severe illness as a result of COVID-19, we recognized the dynamic nature of the student populations at Brown and the University's commitment to providing members of our community with the opportunities and resources needed for success. Our planning in this regard includes the following considerations:

- Medical (e.g., students with pre-existing health conditions, students with varying abilities, etc.)
- Geographic (e.g., students from areas with higher rates of infection and international students)
- Financial (e.g., students from low-income families, those facing food insecurity, etc.)
- Identity-based (e.g., undocumented students, LGBTQ students, those with especially challenging home situations, etc.)

We have defined three time periods where support for students will be critical: preparing students to return to campus (in person or through remote learning); supporting students once the term has begun; and supporting students' transition to leave campus at the conclusion of the term.

Preparing Students to Return to Campus (In Person or Through Remote Learning)

- We will develop a process for students to identify resources and support as a member of one or more of the populations listed above.
- We will create resources for Campus Life staff (student support deans, student centers, etc.) in partnership with academic deans (College, Graduate School, Medical School) to guide their discussions with students.
- We will tailor communications for each population listed above, ensure that information is consistent across all University offices and centers, and share information broadly to ensure it is easily accessible.

Supporting Students Throughout the Academic Year

- We will maintain consistent communication as circumstances shift and available resources change for each of these populations.

Supporting Students' Transition from Campus

- We will develop plans to support students who may be returning to challenging home environments.
- We will maintain consistent communication as circumstances shift and available resources change for each of these populations.

Equity and Diversity/Student Support

Brown's planning efforts have included an examination of (1) issues of equity and inclusion associated with re-engaging in person; (2) guiding principles that should center equity and inclusion in all critical recommendations made by the Healthy Fall 2020 Task Force; and (3) initiatives to expand knowledge of the disparate impact of COVID-19 and tools to support individuals who are experiencing the secondary and tertiary effects of the pandemic. Recommendations we plan to implement in this area include the following considerations and principles:

- It is imperative to consider diversity, equity and inclusion in all policies, plans and communications. We acknowledge and will plan to address the effects of the disparate impact of COVID-19 on different communities.
- Populations most greatly impacted may have unique situations that will require additional support structures. Some examples include the following: Students will need mechanisms to request and receive support if family members are impacted by COVID-19 (e.g., experiencing stress due to family deaths or widespread illness at home) and related impacts of the pandemic (e.g., increase in domestic violence, unemployment). Faculty will need to understand the potential for increased trauma as a result of the pandemic on particular communities and know how to provide

support when this trauma impacts academic performance and teaching assistant responsibilities for graduate and medical students. Even with the resumption of in-person classes, continued remote teaching should take into consideration the varying home-life situations that students face and ensure accommodating those realities (e.g., some students may be in situations where keeping a camera turned off during a Zoom lecture is an important element of managing their home life).

- Bias reporting mechanisms will need to be even more broadly advertised to support communities who may experience an increase in bias incidents (e.g., people of Asian descent who have been experiencing an increase in bias, people who are from communities that are disproportionately impacted by COVID-19, etc.).
- There is a need to develop resources for educating the greater community about historical and systemic racism that created the context for the disparate impact of COVID-19. Some examples of focus areas include: history of racism in medicine, ethics, income/wealth, work, and psychology/mental health; social determinants of health; data on the impact of COVID-19 in the U.S. by race; and how these factors may contribute/manifest in our students' feelings around their own personal treatment on campus, i.e., value/worth.
- It will be important to create continued opportunities for African American, Latinx, Native American and Asian communities to develop a sense of solidarity and allyship.
- We should leverage the Campus Life student centers to maintain community for returning students and build a sense of community for new students (graduate and undergraduate).
- There is a need to recognize concerns raised regarding underrepresented staff populations, acknowledging that underrepresented staff bring an expanded dimension of community on campus and offer unique support to underrepresented students.
- We should create alternatives if holiday recesses are not viable (especially for collective communities that thrive from connecting with their home communities).
- It must be a priority to continue to provide remote student support services (e.g., Counseling and Psychological Services, academic counseling, programming) for students who do not return to campus.
- We should create a cohesive communication strategy to clarify plans for students and provide more constant communication that addresses all facets of the community (students, faculty and staff).
- It will be imperative to maintain a fund for students who have unanticipated short- and long-term financial challenges as a result of COVID-19.

Personal Protective Equipment and Supplies

The University maintains an active inventory of personal protective equipment (PPE) and supplies for a wide range of activities and functions. In light of COVID-19, in advance of the fall term Brown will purchase the following additional universal supplies for distribution to all its students, faculty and staff (with the exception of hospital-based faculty and students who have different infection prevention needs):

- cloth face masks: three face masks per individual, with a maximum estimated population of 16,000 individuals;
- hand sanitizer: two (4 oz) tubes per individual, per term while on campus; and
- sanitizing wipes: one container per individual, per term.

Additional PPE is being procured for specialized needs, such as daily use by University Health Services personnel for clinical care, daily COVID-19 testing on campus, and use by Brown Emergency Medical Services for transport of potentially infectious patients. These supplies include:

- surgical and N95 face masks;
- face shields;
- gowns (either disposable or reusable); and
- non-sterile gloves.

We will ensure an adequate supply of the following PPE for the following groups of staff with specific infection prevention needs:

- Dining Services: face masks, gloves (when needed) and disinfectant wipes;
- Facilities Management: face masks, gloves (when needed) and disinfectant wipes; and
- Environmental Health and Safety: face masks and gloves (when needed).

The specific PPE needs will vary based on the specific assignments of each staff member, and in general are not expected to be significantly different from current operations as a result of the COVID-19 pandemic.

We have in place guidelines for outside contractors on the types of PPE that are required for them to work on campus. This will vary by job description and scope of work, but will generally be similar to the types of PPE that Brown is purchasing for its own staff for similar types of activities.

IV. WORKPLACE SAFETY POLICY AND RESEARCH OPERATIONS

Although nearly all students left campus in mid-March and the University has been operating in large part remotely since that time, essential functions have continued to be performed on campus on a daily basis. These operations include Public Safety, Dining Services, Residential Life, University Health Services, Facilities Management, Environmental Health and Safety, and others. To ensure the work of these essential staff is conducted in a safe manner in accordance with RIDOH and CDC guidelines, the University established the COVID-19 Workplace Safety Policy. The policy will be updated as guidance and our knowledge of the virus change, and it applies to all faculty, students, staff, visitors and guests. The policy is an important component of the University's overall plan as it demonstrates the principles, practices and detailed policies we are putting in place to ensure the health and safety of our community members.

Among other topics, the policy addresses the following important areas:

- Social distancing — critical to disrupting spread of infection.
- Face masks and coverings — required unless an individual is in a room alone such as a laboratory or private office, or for a documented personal health exception. Reusable face coverings will be provided to all approved on-campus personnel.
- Frequent hand washing and increased cleaning of facilities.
- Maintaining logs of daily contacts and self-monitoring for symptoms.
- Staying home and notifying University Human Resources directly when an individual experiences symptoms, tests positive or has been exposed to someone with COVID-19.
- Training that must be completed and an acknowledgement form signed to ensure all employees and students are aware of their role in implementing relevant procedures and protocols.
- Procedures for community members who test positive or have been exposed or have symptoms of COVID-19.
- Informational signage and posters to educate employees, students and visitors about how to protect themselves, posted in places where they are most likely to be seen, including in restrooms and building entrances.
- Expectation that all community members will engage in daily symptom monitoring and stay away from campus if they experience symptoms associated with COVID-19.

In June 2020, the University also began the process of gradually resuming research operations in laboratories and other campus facilities. With health and safety as our continued priority, we developed the Resuming Work in Research Facilities Principles and Procedures: Stage 1 protocol, to provide guidelines for resuming research in laboratories safely.

As additional on-campus operations resume in preparation for the fall semester, Brown expects that some employees who have been working remotely will return to campus locations. All departments that have been working remotely and demonstrate a compelling need to return to campus will be asked to submit for approval specific plans appropriate to their area and function, consistent with the University's COVID-19 Workplace Safety Policy. And no member of the community will be able to return until they have completed and signed an employee acknowledgment that affirms their understanding and acceptance of the policy.

Currently, the work arrangements limiting on-campus operations to essential personnel and those employees authorized to return through the approval process outlined in the COVID-19 Workplace Safety Policy extend through Aug. 14, 2020. Even so, to reduce the density of faculty and staff on campus, Brown anticipates that it will sustain into the fall semester telecommuting arrangements for many employees who are able to work remotely. The University will notify all employees of specific changes or timeline extensions regarding telecommuting as decisions are made — until then, managers should continue to establish telecommuting work assignments with their employees on an ongoing basis, based on each department's operational needs.

V. OTHER PLANNING CONSIDERATIONS

This section addresses a few items of importance that are not detailed elsewhere in the document:

- **Changes in State Guidance Regarding Crowd Sizes:** Our planning generally is structured to follow CDC and RIDOH guidance, and we are accustomed to changing policies and practices as needed when that guidance changes. Our overall approach to gathering sizes in classrooms and events will align with what is allowed by the state, and we can readily adjust in either direction given that all of our classes will be available online. We do not anticipate difficulties in managing our operations at the various levels of possible group sizes, including 10, 25, 50 and 100+.
- **Travel Restrictions:** University travel policy follows federal and state laws and guidance at all times and will continue to do so in the coming academic year. Brown's detailed international travel policy guided our decisions in Spring 2020 regarding closing of certain study abroad programs when conditions in those countries warranted. All current travel restrictions — international and domestic — are available on the University's website and will be updated as guidance and circumstances require. We have planned for a "quiet period" at the beginning of each term, which will serve as a quarantine time for students and others traveling to Providence from domestic and international locations, and Brown will be conducting mandatory COVID-19 testing during this period.
- **Limiting the Number of Contacts per Individual:** In the fall term in particular, the reduced density of the student population on campus will necessarily reduce the number of potential individual contacts. Identified pods in the residence halls; limitations and public health restrictions governing social functions and events; moving large classes online; the public health education campaign; and other measures described in this plan will further contribute to limiting the number of contacts per individual.
- **Plan for an Outbreak on Campus:** If a cluster of individuals who are COVID-19 positive is identified on the Brown campus, we are prepared to take immediate, appropriate action in coordination with RIDOH. There are a number of measures incorporated in our overall strategy that will aid in this effort. The public health education campaign will raise awareness among our community regarding the importance of social distancing, face coverings, hand washing and self-monitoring for symptoms. Testing of symptomatic students in University Health Services and timely results of those tests will aid in the identification of virus on campus, isolation of students who are sick and quarantine of their contacts. Given that all of our courses will be available online, students in isolation or quarantine will be able to continue with their academic work, making it easier for students to be out of contact with others. The routine testing program on campus will be critical to identifying incidences of COVID-19 across our community — including faculty and staff — and taking immediate action to reduce the chances of community spread. We feel confident that these measures, taken together, will enable the University to operate in a safe and healthy manner and avoid an outbreak. If one were to occur, we would immediately isolate and quarantine affected individuals, close and clean involved facilities, and take any other corrective measures guided by RIDOH and the CDC.
- **Flu Vaccine Clinics:** The University operates highly effective flu vaccine clinics for faculty and staff each fall as well as making the vaccine readily available to students through University Health Services. The participation in both of these programs is high — last fall more than 1,100 employees (faculty and staff) received their flu shot through Brown. However, given the likelihood that regular flu season will compound the challenges of dealing with COVID-19 this coming year, we will increase our education and outreach efforts to ensure that everyone who is able obtains a flu shot.
- **COVID-19 Facilities Planning:** Specific planning is currently underway for a variety of facilities on campus, including the on-campus testing site. Signage is being utilized in research buildings and will be posted in other buildings as they reopen, including classrooms, libraries, dining facilities, administrative office buildings and outdoor spaces.

1. Identify students infected with confirmed COVID-19

- a) Broad education regarding symptoms of disease, prevention, testing locations and hours, etc.
- b) Availability of testing at no out-of-pocket cost to the student at a convenient location on campus for students with symptoms of COVID-19
- c) Student isolated temporarily pending results of COVID-19 test. If negative, student should be given clear follow-up and return instructions as well as social distancing education.
- d) If positive, student immediately isolated in temporary housing
 - i. Single room/bathroom housing required for students
 - ii. Education provided on precautions to take during self-isolation

2. Contact tracers will identify contacts of students with confirmed COVID-19, determine whether they are symptomatic or asymptomatic, and provide them with guidance

- a) World Health Organization (WHO)/CDC/RIDOH guidance will be used to define contacts: anyone who interacted with the confirmed case during the 2 days before and 10 days after the onset of symptoms in one of the following ways:
 - i. Face-to-face contact within 3-6 feet for more than 15 minutes
 - ii. Direct physical contact
 - iii. Provided care without using proper personal protective equipment
- b) Positive cases forwarded to contact tracers daily (or twice daily) who reach out virtually to confirmed case (phone, text, video chat, email, etc.)
- c) Contact tracers ask confirmed case to develop list of everyone they can remember who fit the above criteria and enter into secure database.
- d) Contact tracers prompt confirmed case with likely contacts such as roommate, significant other, close friends, study partners, etc.
- e) If mobile contact tracing app available, data from app can be used to identify other potential contacts.
- f) On-campus wireless node contact social maps may also be helpful to identify additional contacts (after screening data to ensure it meets the definition of contact above)
- g) Contact tracers reach out electronically to all individuals listed as contacts in database within 24 hours of confirmed case.
 - i. Contacts are informed that they have been in contact with someone with COVID-19 and asked if they have had any symptoms of the disease since the date of their contact (name of individual is not provided, but date(s) of contact will be).
 - ii. If contact has had symptoms, they are asked to go immediately to a testing location to be tested themselves and then self-isolate as in Step 1 above. Contact tracer may inform testing location that individual is coming for testing. (Alternatively, if resources are available, contact could be asked to self-isolate and someone sent to their home to perform the testing.)
 - iii. If the contact has had no symptoms and
 - 1. is a student, they are asked to quarantine if possible in their own housing or provided with a single/room bathroom until 14 days has passed since their last contact with the confirmed individual
 - 2. is a staff member, they are asked to quarantine at home for 14 days since their last contact with the confirmed individual
 - 3. Is a community member, their information should be provided to RIDOH who will initiate follow-up procedures
- h) If contact tracers are unable to reach all contacts virtually within 24 hours, they should continue to follow up daily until contact is established. Alternative means should be considered if contact tracers are unable to reach all contacts virtually.

4. Isolation and Quarantine Procedures

- a) Students living off campus with their own room/bathroom should isolate or quarantine in their own home.
 - i. They should be provided with an excuse from attending in-person classes and other activities on campus.
 - ii. They should be provided with education on how to stay healthy and reduce transmission within their home, and when to seek medical attention based on WHO/CDC/RIDOH guidance.
- b) Students in dorms requiring temporary isolation while tests are pending or in quarantine will need all of the above and also to be provided with alternative housing:
 - i. Alternative housing should at a minimum include a single room with its own adjoining bathroom.
 - ii. Daily delivery of meals must be arranged.
 - iii. Access to virtual psychological counseling also recommended given the stress of isolation.
- c) Students in dorms with confirmed COVID-19 could potentially be housed in a double room or two-room apartment with another student with confirmed COVID-19 and a single bathroom if space was limited.

5. Active Follow-Up

- a) Confirmed cases in isolation should be contacted virtually on a daily basis by contact tracers to track their symptoms.
 - i. If concerning signs develop, a virtual visit should be scheduled with a health provider
 - ii. If danger signs are present, EMS should be called.
 - iii. Once confirmed cases' symptoms have resolved and they have been asymptomatic for at least 3 days with a normal temperature, they leave isolation, provided that at least 10 days have passed since the onset of their symptoms.
- b) Contacts in quarantine should be contacted virtually on a daily basis by contact tracers to track their symptoms
 - i. If they develop symptoms, they should immediately be tested (either at a predefined testing site, or in their residence if resources allow).
 - ii. If resources allow, asymptomatic contacts in quarantine could be tested at some set point, such as 3-5 days after their last contact with the confirmed case.
 - iii. If a contact in quarantine tests positive for COVID-19, contact tracers should immediately inform them and identify a list of everyone they have been in contact with since 2 days before they developed symptoms or had a positive test, using the criteria for contact provided above.
 - iv. If a contact in quarantine who develops symptoms tests negative for COVID-19, they should likely be retested in 48 hours to confirm the negative test. If still negative, they should wait out the remainder of their quarantine period before leaving quarantine.

Healthy Fall Re-Opening 2020 Plan for Brown University Buildings

Like all individuals and organizations, Brown University has experienced a significant shift in operations over the past weeks and months related to the COVID-19 pandemic. As we work together to reopen University buildings, Facilities Management remains dedicated to its mission of maintaining Brown's core values in reopening buildings and facilities, as safety will continue to be paramount.

Outlined below is an overview of our University building reopening plan. The operations outlined here will be carried out by Brown Facilities Management in partnership with Environmental Health and Safety (EHS), Strategic Sourcing, Office of University Communications, University Health Services and key department stakeholders, faculty, students and staff. We appreciate your patience and collaboration.



CLEANING & DISINFECTING

Cleaning, disinfecting of spaces and ongoing enhanced cleaning

- Maintain cleaning and disinfecting practices in accordance with CDC and EHS approvals.
- Perform cleaning of indoor spaces that have been unoccupied.
- Perform routine cleaning and disinfecting of spaces that have been occupied.
- Perform enhanced cleaning and disinfecting of frequently touched indoor surfaces.
- Disinfect areas if possible cases arise, per direction of EHS and University Health Services.
- Maintain routine cleaning practices of outdoor areas.
- Assist laboratories with cleaning products as supplies allow.
- Provide break rooms with cleaning products as supplies allow.
- Maintain hand sanitizer stations at major building entrances, elevator stops and high traffic areas.



PREPARE THE BUILDINGS

Operational pre-return inspections, HVAC and domestic water system checks

- Ready building mechanical, electrical, plumbing and monitoring systems
- Flush domestic water lines
- Reset building occupancy schedules and demand control ventilation.
- Improve central air filtration and seal edges of filters to limit bypass.
- Install hand sanitizer stations in designated locations.
- Perform necessary building inspections and repairs.



PREPARE THE GROUNDS

Maintain safe, clean and healthy landscapes and grounds

- Inspect areas around buildings for trash and debris and remove accordingly.
- Ensure all building entrances and loading docks are clear of litter and debris.
- Continue to mow lawns and fields.
- Inspect parking lots and clear of litter and debris.
- Continue tree management and care.
- Maintain off-campus properties



SUPPORT DISTANCE SPACE LAYOUTS

Assist Customer/occupant social distancing practices for decreasing density, adjusting traffic patterns

- Support facility space usage changes for social distancing.
- Assist customers in evaluating reduction in capacity of spaces – e.g., decreasing chairs in a conference room.
- Provide necessary signage regarding the importance of social distancing as needed.



OVERSIGHT OF CONTRACTORS & VENDORS

Campus building and maintenance contractors

- Engage contractors and vendors in back-to work plan
- Ensure continued compliance by contractors of the on-campus work protocols for construction.
- Ensure indoor and outdoor construction projects are being inspected by Facilities staff for compliance.



CUSTOMER/OCCUPANT RESPONSIBILITIES

Recommended customer/occupant actions

- Review, share and monitor compliance.
- Reconfigure indoor and outdoor spaces to allow for social distancing.
- Assist in identifying high-use entrances and traffic areas.
- Remove and/or clean high-touch shared tools such as computer keyboards, whiteboard markers, remote controls, etc.
- Assist in controlling the building entry points, including deliveries.
- Comply with signage guidelines.

Brown Facilities Management

The most efficient way to request service is by calling the FM Service Response Center at 401-863-7800.