

University at Buffalo
COVID-19 Plan
September 10, 2020
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Introduction

As part of the next step in the university's Health and Safety Guidelines, UB has begun random COVID-19 pooled surveillance testing of students, faculty and staff. Partnering with Upstate Medical Center, randomized pooled surveillance testing at UB is helping the university further monitor and respond to the prevalence of COVID-19. Upstate Medical individually tests samples from positive pooled tests.

Campus Demographics

With the intentional plan to reduce or limit campus population density for the Fall 2020 semester, UB has made efforts to reduce the number of residential and non-residential students on campus as well as the number of faculty and staff. By reducing the occupancy rates in residence halls and campus apartments by approximately 40%, the number of residential students now on campus is 4,600.

UB has also limited in-class student instruction to 25% capacity, which has also contributed to reducing the number of non-residential students on campus daily to approximately 2,200. As an example, only 890 students attended in-person classes on the North Campus at 10 a.m. on the first day of classes as compared to approximately 6,800 students on the same day and time in 2019.

The in-person workforce has been reduced by at least 50%. This reduction in density includes faculty, staff, and vendors to approximately 3,000 or fewer on campus daily. As an example, of the 2,226 faculty teaching for Fall 2020, 441 are teaching in-person only.

Testing Types and Frequency

Wastewater (WW) Testing. Currently, the University at Buffalo is developing recommendations for wastewater surveillance testing. Dr. Michael Cain, Dean, Jacobs School of Medicine and Biomedical Sciences, has assembled UB's Health Guidelines Committee to develop recommendations for a wastewater testing plan as part of our overall COVID-19 surveillance programs. This group is considering numerous factors still to be determined including: 1) the number of locations for sampling; 2) testing frequency; 3) and what additional testing protocol will be used if WW results in positive signal.

The committee includes Dr. John Tomaszewski, Chair of Pathology and Anatomical Sciences at the Jacobs School of Medicine; Dr. Thomas Russo, Chief of Infectious Diseases at the Jacobs School of Medicine; Jean Wactawski-Wende; Dean and SUNY Distinguished Professor, UB

School of Public Health and Health Professions; and staff from UB Facilities and Environment, Health and Safety.

Pooled Testing. The University at Buffalo has initiated pooled surveillance testing utilizing Upstate Medical testing protocols and training.

A stratified random sampling plan has been implemented based on the following three subpopulations of individuals who have differing degrees and types of on-campus in-person interactions:

- 1) Students who reside in campus residence halls and apartments during the Fall 2020 semester.

Supplemental population: Two residential halls/apartments are selected weekly for testing of residents.

- 2) Students who live off-campus within the greater Buffalo area during the Fall 2020 semester.

Supplemental population: Students in specific programs (e.g. health science clinical programs) with higher potential for exposure are selected for weekly testing.

- 3) University faculty and staff who live in the greater Buffalo area with some degree of identifiable on-campus in-person interactions during the Fall 2020 semester.

Supplemental population: Employees from particular units (e.g., University Police, Campus Dining, libraries, Campus Life) with higher potential exposure are selected randomly for weekly testing.

The following individuals are excluded from this sample:

- Faculty and staff who do not have identifiable consistent on-campus in-person interactions during the Fall 2020 semester in its entirety, i.e., fully remote faculty or staff. These individuals would not directly contribute to disease spread on campus. In addition, those not coming to campus either have medical reasons or may be living remotely and would have difficulty in coming onto campus as they have chosen, for whatever reason, to stay remote.
- Individuals who are already known to be currently infected with the SARS-COV-2 virus.
- Athletes from the student population due to testing protocols currently in place. Data from student-athletes are used in conjunction with the data gathered as part of the testing procedures described in this document.

Sample size is based on the precision of the associated estimates which may be conveyed using the expected confidence interval half width (CIHW). CIHW is set to 2 percentage points as it provides a compromise between feasibility constraints and having adequate precision. The required sample size for a given CIHW is a function of the true unknown prevalence value and the sensitivity and specificity of the diagnostic test to be utilized for sample testing. Based on available data it is expected that the true prevalence is less than 1%. The required sample size increases for values of the true prevalence as they approach 50% from either side. Thus, the required sample size at 1% will provide a conservative calculation. For values of sensitivity and specificity, 84% and 99%, respectively, were assumed. Using the method in Humphry, Cameron, and Gunn (2004), we see that a sample size of 251 per stratum is required. Allowing for missingness of 10% of testing values, a total of approximately 279 individuals per stratum will be randomly selected to participate in testing (**See Appendix A**).

Nota bene: In addition, during the month of September, approximately 70 student-athletes were individually tested per week. During the months of October – December approximately 500 student-athletes will be individually tested weekly.

Within each of the three stratified subpopulations, supplemental populations (which began the week of September 28) and athletics testing a minimum of 1,050 tests will be completed per week.

Individual (I) Testing. UB Athletics is conducting individual testing for asymptomatic student-athletes.

As stated in the above section, during the month of September, approximately 70 student-athletes were individually tested per week (25% of in-season team rosters). During the months of October – December approximately 500 student-athletes will be individually tested weekly.

In total: a minimum of 1,050 weekly-pooled tests and individual tests will be conducted during the semester.

Residential symptomatic students will be tested at UB's Student Health Services by campus personnel. No individual testing will be handled by an off-campus provider.

Plan Logistics

For UB's Pool Surveillance testing, Mr. Joe Raab, UB's director of Environment, Health and Safety is responsible for the logistics, chain of custody, training and PPE related to UB's COVID-19 response on campus.

UB's emergency management unit has an inventory of PPE and ensures the university has the necessary inventory to conduct testing safely pursuant to county, state and federal protocols.

For UB's pooled surveillance testing, University Events is coordinating testing sites. University Events has expertise in event coordination.

UB is utilizing Upstate Medical surveillance testing protocol and is following all of Upstate's training and educational guidelines. For further details about surveillance testing protocols and process, please refer to **Appendix B and C**.

Employee Testing

Employees are included as a cohort in our pooled surveillance testing as described in previous section.

Isolation and Quarantine Protocols

Tom Tiberi, Director of Campus Living is coordinating UB's isolation and quarantine process. Associate Director, Chris Bragdon is the backup coordinator. Currently, UB has two residence halls designated for isolation and quarantine for positive cases or suspected positive cases involving students. Isolated and quarantined students are separated by floor. Total capacity for isolation and quarantine is 280. Additional isolation and quarantine space would be provided through off-campus lodging. Off-campus students and employees are advised to quarantine or self-isolate at their residence and are monitored by the Erie County Department of Health.

Healthcare for isolated students is provided by UB's Student Health Services and via telemedicine services.

Additional details are listed on UB's COVID-19 [health and safety guidelines web page](#).

Plan Data Management

The primary contact for UB's testing data management is Mr. Craig Abbey, Vice Provost in the Office of Institutional Analysis. Stratified randomized sample is determined using UB person number. The UB person number allows Mr. Abbey to track the population sample.

UB is committed to protecting the health and safety of the university community while remaining focused on our academic, research and community service mission. Ensuring the safety of the campus community is paramount as UB evolves its response to the COVID-19 pandemic. A primary source of information related to UB's planning and response to COVID-19 is the university's [COVID-19 website](#) which includes the latest updates, guidelines for health and safety, plans for a safe return to campus, responses to Frequently Asked Questions (FAQs), and links to additional online resources available to the university community.

UB is also keeping the community up to date on the number of cases within the UB community through its online [COVID-19 Dashboard](#). These data include the current status of UB On-Campus Isolation/Quarantine cases.

Contact Tracing

The Erie County Department of Health is conducting contact tracing of COVID-19 positive cases related to UB. UB students have volunteered with the Erie County Department of Health to train and participate as contact tracers. However, the Erie County Department of Health remains the lead agency locally for this endeavor and is responsible for determining the number of contact tracers required for the region at any given time. If a student who is living on-campus has tested positive and has a roommate, UB immediately activates our process to notify the roommate and move the student into quarantine. As appropriate, Erie County Department of Health is coordinating with UB to assist when necessary with contact tracing.