Behavioral Change Approaches to Promote COVID-19 Mitigation Behaviors Among Students

Examples from Institutions of Higher Education

Purpose of This Document

This catalogue provides examples of behavioral change approaches implemented in 2020 by institutions of higher education (IHEs) that chose to remain open in the United States, promoting everyday strategies that reduce the spread of SARS-CoV-2, the virus that causes COVID-19, such as mask wearing, proper hand washing and use of hand sanitizer, social and physical distancing, staying home when sick, and avoiding close contact with those outside your household.

This document is not meant to be prescriptive or be considered as guidance. Rather, this document provides information on existing efforts implemented by IHEs and is not intended to be an endorsement of any one approach. Organizations have different needs and operate in different contexts, influencing which approaches are the best fit; also, the evidence base for approaches implemented by IHEs to promote COVID-19 mitigation behaviors among students remains limited. This catalogue of approaches that IHEs have used can help inform your mitigation plans.

ACHA is working to turn this document into a searchable online directory and is asking for IHEs to submit their programs and policies for inclusion in the directory. Tell us about the approaches that your campus has been successful in using to reduce transmission by filling out this form.

Notice to Readers

The approaches and examples listed in this document were implemented by organizations outside of CDC and without CDC funding; these examples are provided for illustrative purposes and therefore do not constitute a CDC or federal government activity or endorsement. CDC has not independently evaluated the effectiveness of these approaches or examples.

This document does not include recommendations for cleaning, sanitation, ventilation, quarantine/isolation processes, testing strategies, data monitoring, surveillance, or guidance for international travel and study abroad programs. CDC has posted guidance for these strategies specific to IHEs, along with other guidance, resources, and tools, on its website (1).
Introduction

The coronavirus disease (COVID-19) pandemic has touched all aspects of society, and IHEs are faced with the enormous challenge of keeping students, faculty, staff, and community members safe in constantly changing circumstances. Given this uncertainty, it can be challenging to plan and implement successful mitigation strategies. To support planning efforts, this document provides a catalogue of behavior change approaches implemented by IHEs throughout the United States from March to December 2020 to mitigate the spread of SARS-CoV-2.

People associated with IHEs (e.g., students, faculty, and staff) and those living near or serving the IHE community may be vulnerable to COVID-19 because of the large number of people in close quarters on campus. Some aspects of college life are often not conducive to mitigation measures like physical distancing and limiting contact. Taking steps to reduce the spread of SARS-CoV-2 is critical and IHEs need to encourage students and staff to take everyday preventive actions (2). These actions include wearing a mask or mask alternative (3) when around others, keeping at least six feet apart when possible, staying home when sick, appropriately covering coughs and sneezes, cleaning and disinfecting frequently touched surfaces, washing hands often with soap and water or using a hand sanitizer that contains at least 60% alcohol.

IHEs are not a closed community and transmission is not limited to IHE attendees. Staff members, faculty, and students can bring SARS-CoV-2 to campus, home to their families and households, and can spread it to the surrounding community.

To promote safer behaviors and prevent spread of SARS-CoV-2, a community engagement approach (4) is needed to recognize the variety of factors affecting health among IHE staff, faculty, and student populations as well as the communities in which they reside. This approach of involving the community and collaborating with its members has proven effective in public health efforts addressing smoking cessation, obesity, cancer, heart disease, and other health concerns.

Why Behavior Change?

Changing behaviors can improve health and safety of students, faculty, and staff at IHEs and the communities in which they reside. During the COVID-19 pandemic, changes from pre-pandemic behaviors to safer behaviors that decrease COVID-19 spread have been necessary. However, telling people to make changes, even for the sake of their health and safety, is rarely enough to ensure healthy behaviors. Behaviors are rooted in biology, traditions, social norms, and beliefs and behavior change needs to be addressed through a variety of efforts (5).

Behavioral science can provide an evidence-based framework to guide the development and implementation of behavioral change approaches that seek to support adherence to COVID-19 mitigation practices within IHEs and support science-based evaluation of the effectiveness of these approaches. Behavioral change approaches seek to improve health through promotion of desirable behaviors and reduction of undesirable behaviors. Behavioral change approaches are a necessary complement to testing programs and other COVID-19 mitigation strategies.

Models of behavior change, such as the Social Ecological Model of Health (6), the Health Behavior and Health Education models by Glanz, Rime, and Viswanath (various editions) (7), and implementation models like the COM-B system by Michie, Stralen and West (8), identify the need for multiple types and levels of approaches to create and sustain behavioral change. The examples given in this catalogue demonstrate a variety of efforts implemented by IHEs across the United States to promote safer behavior during the COVID-19 pandemic.
Organization of the Catalogue

The examples of COVID-19 mitigation approaches presented here have been arranged in three broad categories: individual, social/cultural, and structural. Within these categories, the approaches have been organized according to how they work to inspire behavior change. Examples have been included from a diverse group of IHEs (e.g., rural, urban, HBCUs) to demonstrate the type of behavior change approach. Some approaches could have been included in multiple categories as there can be overlap in categories, which is consistent with the models listed above.

**INDIVIDUAL-LEVEL APPROACHES**

Prevention efforts aimed at the individual level focus on increasing knowledge and personal actions towards health promotion and risk reduction. Examples of approaches at this level include educational programs about SARS-CoV-2 and COVID-19 as well as motivational interviewing.

Examples of individual-level approaches include:

**EDUCATIONAL MODULES**

Many IHEs developed online educational modules that students were required to complete before arriving on campus for the Fall 2020 semester. These modules covered COVID-19 prevention best practices and the IHE's policies around COVID-19. These modules were intended to contain the information necessary for students to develop the knowledge and skills necessary for behavior change.

**Example:**

The University of Texas at Austin introduced a *Staying Healthy in a Changing Environment* (9) educational module. The module completion was required for all students, staff, and faculty and was offered through the same platform that provided their required Alcohol and Sexual Assault Prevention trainings. The module provided information on navigating the Fall semester given the campus changes due to COVID-19 and protecting physical and mental health. Before students and employees were allowed on campus, the University of Chicago required completion of one of three online COVID-19 training programs (10).

**EDUCATIONAL EVENTS**

IHEs used educational events such as guest speakers, presentations, or non-academic classes to provide an overview of the COVID-19 pandemic, and to highlight best practices and strategies for students and staff.

**Example:**

University of California-Berkeley hosted a virtual fireside chat (11) featuring Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases. Dr. Fauci discussed the impact of COVID-19 on college and university operations as well as the impact of the virus more broadly across the country. Students, faculty, and staff were invited to submit questions in advance for a moderated Q&A. The event was livestreamed on YouTube and Facebook and archived for later viewing.

**MOTIVATIONAL INTERVIEWING**

Motivational interviewing is a collaborative form of communication focused on finding and strengthening an individual’s commitment to change. Some IHEs held sessions to talk with students found to be violating behavioral compacts. These sessions aim at using motivational interviewing and harm reduction techniques to help students adopt healthier behaviors.
Example:
At the University of Connecticut, strict health and safety guidelines (12) include a behavioral compact, health screenings, and community education. Students who do not meet these guidelines, however, don’t face immediate punishment. University administrators meet with students who violate health and safety guidelines and use motivational interviewing to shape their behavior toward safer choices.

Example:
Brown University implemented the BWell Health Promotion campaign by training 250 influential student leaders in motivational interviewing (13) as a bystander intervention technique. This technique builds empathy to change behaviors among students not engaging in COVID-19 mitigation behaviors rather than punishment.

SOCIAL AND CULTURAL (INTERPERSONAL)-LEVEL APPROACHES

Societal and cultural factors help create a climate in which behaviors are encouraged or prohibited. Prevention efforts aimed at the social and cultural level utilize relationships and changing social and cultural norms to influence behavior change.

Examples of social and cultural level approaches include:

MAINTAINING SOCIAL CONNECTEDNESS, PEER SUPPORT, AND MENTORING PROGRAMS

Loneliness and social isolation pose major risks to student mental health and are often noted as reasons why students are reluctant to follow institutional COVID-related guidelines. By designing opportunities for meaningful social connection to replace activities that are restricted or discouraged, institutions have created pathways to compliance that students may be more willing to follow, while supporting student mental health and social development.

Example:
The University of Connecticut launched U-Kindness (14), an initiative intended to inform, engage, and connect with students during the COVID-19 pandemic. The U-Kindness portal provides information on virtual and safely distanced in-person events on campus, ways to connect with other students and student organizations, as well as information and tips on health, stress reduction, and COVID-19 prevention.

Example:
The Columbia University Irving Medical Center, home to the University’s medical, nursing, dental, public health, and other health-related programs, developed CopeColumbia (15) in partnership with their Department of Psychiatry and New York Presbyterian hospital. CopeColumbia provides information and resources related to a wide variety of mental health and wellness issues facing students, including one-on-one support sessions with peers and facilitated, department-specific peer support groups. CopeColumbia also provides peer resources specifically for students providing frontline health care services, and hosts structured town halls on stress, mental health, and other COVID-related concerns.

Example:
The University of Florida has encouraged students to develop and participate in QuaranTeams (16). The QuaranTeam effort asks students to choose a small group of students (like their roommates) with whom they will socialize. The teams work together to set up rules on how to safely socialize, and agree on rules around mask wearing, socializing safely with people outside of their team, protecting those with underlying conditions, and what to do if someone develops COVID-19 symptoms.
STUDENT AMBASSADORS

Student ambassador programs work to establish behavior modelling and to train students as role models and liaisons between their peers and the IHE administration responsible for implementing COVID-19 prevention plans. These positions may be voluntary or paid. These programs may build the bystander intervention skills of ambassadors, train them in health education methods, and increase their knowledge around COVID-19 prevention and mitigation behaviors.

**Example:**
The University of Miami hired a team of Public Health Ambassadors (17) to act as health educators and assist the university administration to educate the campus community on healthy behaviors including physical distancing, wearing face coverings, as well as frequent handwashing and using hand sanitizer.

BEHAVIORAL COMPACTS

Behavioral compacts work by setting expectations for students and community members, and by shaping personal, social, and cultural norms to encourage a commitment to behaviors such as physical distancing, mask wearing, and frequent hand washing. These often include online documentation of agreement prior to returning to campus.

**Example:**
The Ball State University Cardinals Care Pledge (18) asks students to pledge to care for themselves, other students/faculty, the community, and campus. Ball State had an existing Beneficence Pledge, which asks students to commit to social responsibility, and recognize the value and worth of all people. The University was able to encourage appropriate COVID-19 mitigation behaviors such as physical distancing, handwashing, and mask wearing in their pledge by reminding students of the social and moral norms adhered to by the campus community. The pledge also emphasizes respect and compassion, abiding by guidelines and regulations set forth by the university and community, and staying informed and educated about the ongoing pandemic.

WELLNESS DAYS

Incorporating regular wellness days into the academic calendar can support the mental health and well-being of students, faculty, and staff. These could be particularly useful on campuses that have eliminated longer recesses like spring break. Wellness days provide time for students to engage in improving their health and wellness and destigmatize health-seeking behaviors by changing social norms.

**Example:**
Pennsylvania State University (Penn State) identified the need for non-instructional wellness days for students, faculty, and staff to attend to their well-being in the Fall 2020 and Spring 2021 semesters. Campus services would be available, but no classes would be held.

MODELING

Modeling can inspire others to engage in the hoped-for behavior by providing examples from groups such as athletics, student unions, and Greek councils. College athletics are a highly visible and influential aspect of college life and an excellent opportunity to demonstrate behavioral practices necessary for COVID-19 mitigation. Representing the student body, modeling by student unions and their collaborating organizations can be an important strategy for getting student feedback and buy-in. Greek Councils (representing fraternities and sororities) can also be important partners in preventing and mitigating the spread of SARS-CoV-2 by modeling appropriate behaviors and social interactions.
Example:
Texas Christian University engaged the athletics department in their Protect the Purple (19) campaign to motivate students to engage in safer behavior. This campaign encourages students to make safer choices to engage in desired social activities like attendance at sports events.

Example:
Michigan State University released a video with popular athletic coaches and players to encourage mask wearing using the phrase “Masks are the best defense” (20).

Example:
Oberlin College’s Student Union sponsored a mask design contest (21) for students early in the 2020 Fall semester, offering the chance for students to have their own design printed on a personal face mask. Some of the mask designs were featured on the Oberlin Flickr page. Other activities to engage students included a physically distanced debate watch party and a streamed video virtual speaker series on racial equity and diversity (22) and democracy unchained (23).

Example:
University of Alabama used a “train-the-trainer” style intervention by helping student leadership, including fraternities and sororities, conduct their own health promotion efforts. The University provided resources to student organizations, advised them on how to reopen their facilities safely, and helped the organizations train their members (24) on required physical distancing procedures and other important preventive measures. In response, sororities changed their traditional fall rush efforts to a virtual format and cancelled a large party (25) despite the party being approved by the city-council.

SOCIAL AND DIGITAL MEDIA

Social media messaging campaigns and related efforts can help capture the unique needs of each institution’s community, while using a voice and style to which students may be more likely to respond. Schools can capitalize on student strengths and knowledge by supporting efforts that begin within the student body as well as actively seeking out and providing resources to students with interests and skills related to social media and other external messaging.

Example:
University of Missouri contracted with an external organization to identify campus influencers (26) to spread COVID-19 messaging and encourage safer behaviors. These behaviors include everyday protective measures such as mask wearing, hand washing and physical distancing.

Example:
Masks of Northeastern (27) is a project that highlights Northeastern University students wearing unique masks and includes quotes from the students on why they wear a mask. The high-quality profile photos and quotes are featured on the Northeastern News page. This type of effort can change social norms by engaging students in social media to share positive behavior and influence their peers.

Example:
Graduate and undergraduate Communications and Public Relations students at Boston University knew that their and their peers’ number one goal was to remain on-campus and not be sent home early due to increasing cases of COVID-19. They designed the F*ck It Won’t Cut It (28) campaign around this goal and used bold, relatable messaging to dispel myths, address key topics of student interest, and remind their peers of the part they play in maintaining the school’s ability to continue in-person operations. Because the campaign operates separately from official University channels, they can address more controversial issues like sex, drug use, and partying from a harm-reduction
Don't Go Viral is a university-led campaign that focuses on things like wearing a mask, seeking COVID-19 medical help if symptoms appear, and getting tested. Don’t Go Viral has been designed to appear in heavily trafficked places where it will be seen by all members of the University community.

Example:
Don’t Pass it Back is a digital campaign from Texas A&M University that encourages mask use. The campaign was formed over the summer in collaboration with the Division of Student Affairs, Texas A&M Athletics, and the Division of Marketing and Communications. Speaking about the campaign, Student Body President Eric Mendoza described wearing a face mask as an act of selfless service: “The new face covering policy is a key part of ensuring students can come and stay on campus. Wearing a face covering is an act of selfless service and a simple first step all students can take to help protect the most vulnerable among us.”

COMMUNITY AND STRUCTURAL-LEVEL APPROACHES

Community and structural approaches focus on the built-environment, policies and procedures. The built-environment includes the physical makeup of where we live, learn, work, and play—our homes, schools, businesses, streets and sidewalks, open spaces, and transportation options. The built environment can influence overall community health and individual behaviors. Efforts at this level can promote safer behaviors through changes to buildings and outdoor environments. Policies and procedures can influence behavior change by providing instructions on the required behavior and outlining consequences for non-compliance.

Examples of structural-level approaches include:

POLICY CHANGES: STUDENT HOUSING AND MOVE-IN STRATEGIES

Dedicating staff and creating policies specific to housing logistics can help reduce anxiety and create a seamless transition when students need to isolate or quarantine. Students may be more willing to disclose potential exposure and follow guidelines if processes are transparent and supportive of their needs. Alternative move-ins are an example of enabling safer behavior through environmental and social restructuring. By making a negative COVID-19 test a prerequisite for desired activities, like returning to campus to see friends or moving into student housing (e.g., dormitories, fraternities, and sororities), students may prioritize safety behaviors in order to maintain their negative status.

Example:
The University of Oklahoma required all students to have a negative COVID-19 test before moving into student housing. Home mail-in tests were sent to all students scheduled for move-in to facilitate the process. Additionally, students were required to complete an online health screening. Once results were received, student housing officials notified students of their approval and provided information about move-in procedures.

Example:
Macalester College implemented a post-move-in Quiet Period. For two weeks after move-in, every member of the community minimized their in-person interactions both on and off campus. All classes were held remotely, and no in-person extra-curricular activities were permitted. Small group gatherings were allowed as long as physical distancing was maintained, and dining halls were in operation with to-go and socially distanced dine-in options. After two rounds of COVID-19 testing, no students living on-campus tested positive, so the school began to reopen the campus in phases.
POLICY CHANGES: DAILY SYMPTOM CHECK-INS AND PRE-VISIT CHECKLISTS

Many schools required students to complete a daily screening for COVID-19 symptoms. Students took their temperature, answered a symptom checklist, and reported results to an app or website. At some schools, access to campus was restricted until students cleared a daily symptom screening.

Example:
The **Denver Department of Public Health** requires anyone going to the **Community College of Denver (CCD)** campus to report their temperature and complete a **COVID Check-in Form** (33). CCD set up a system where students take their temperature either at home or at on-campus check-in stations, and then they [submit their result online](#) (34) to receive access to campus.

Example:
At **Washington State University** all students, faculty, staff, and visitors must complete an online **self-attestation form** (35) every day they plan to physically attend a WSU location. These forms require a self-screening and response if any of the symptoms or exposure guidelines are applicable to the respondent. These forms are available through online browsers or smartphone apps.

PROCEDURE CHANGES: CONDENSED OR MODIFIED COURSE AND SEMESTER SCHEDULES

Many IHEs are utilizing condensed semester schedules, which helps limit travel to and from the campus over breaks. In response to students indicating that frequent travel to and from campus would make it difficult to adhere to mitigation efforts (e.g., minimized in-person interaction as described above for Quiet Periods), IHEs can consider alternate timelines and plans. Closing campus after Thanksgiving break, cancelling spring breaks, and establishing early move-in and move-out dates are examples of condensed semester scheduling.

Examples:
**Creighton University, University of Notre Dame, and Fort Valley State University** adjusted their academic calendar for Fall 2020 to a **condensed schedule** (36) so that classes end by Thanksgiving (November 26th) to help mitigate the spread of COVID-19. **Slippery Rock University** removed fall break in 2020 and spring break in 2021 to finish each semester a week earlier and to [reduce travel to and from campus](#) (37) around students breaks, especially related to students residing in on-campus housing.

PROVIDING SUPPLIES

Providing students, faculty, and staff with necessary products and supplies can help them comply with behavioral compacts and regulations.

Examples:
**Virginia Commonwealth University** and **George Mason University** installed [vending machines](#) (38) throughout campus to provide masks, hand sanitizer, and cleaning wipes. Supplies are free for students and employees, who swipe their college ID card to dispense the product up to once monthly. This effort supplements and refills the starter supply kits that students and staff received at the beginning of the semester. Many universities distribute free supplies to students and employees. For example, all students and employees were provided [face masks](#) (39) at **University of Nebraska-Lincoln** and a **wellness package** (40) including a face mask, hand sanitizer, and thermometer at **Agnes Scott College**.
SIGNAGE ON CAMPUS

Signage around campus can serve as “nudges” or behavioral prompts for students, faculty, and staff when navigating around campus. In this document, signage refers to flyers, posters, billboards, or similar advertising efforts to promote healthy behaviors related to COVID-19.

Example:
Elizabethtown College developed a signage toolkit (41) to indicate to students where masks are required for entry and which doors are designated for entry or exit only, to identify touchless entry areas, and to limit restroom occupancy. This signage prompts students about the preferred behavior change to reduce contact with surfaces in busy areas and help promote safe distancing.

REDUCING CROWDS THROUGH APPS, ALTERNATE GATHERING SPACES, AND VIRTUAL EVENTS

To encourage behavior change related to physical distancing (maintaining a minimum six feet of space between themselves and others), schools can identify situations where crowds are likely to form and implement alternatives such as using app technology.

Example:
Miami University introduced their participation in the GET mobile app (42). The app helps students avoid long lines in their community dining halls and allows them to pick up their food to-go, minimizing exposure time and reducing the number of close contacts in an often-crowded location.

IHEs have had success in providing alternate spaces to support students in gathering safely. This intervention works by restructuring the social and physical environment to enable safer behaviors, such as physical distancing and mask wearing. The high visibility of a common gathering space where safe practices are the norm also encourages positive affective attitudes that can encourage behavior change.

Examples:
The University of Notre Dame created the Library Lawn (43), an outdoor, socially-distanced student gathering space. The university calls it “the ultimate outdoor hangout space,” and it features firepits, blankets, Adirondack chairs, and yard games. It also serves as an event space for physically distanced concerts, student performances, and contests throughout the semester. Staff monitor the lawn to make sure students are wearing masks and physically distancing. Fort Lewis College held a physically distanced Debate Watch Party (44) on the campus lawn.

Virtual events help students feel connected to one another and provide safer alternatives to gathering in groups. Virtual events happened across several schools and helped give students the college experience they anticipated and nurtured school spirit, all while limiting the spread of SARS-CoV-2.

Examples:
Appalachian State University hosted a Virtual Fall Open House (45) to engage high school students and parents while reducing the number of people on campus. This was a highly interactive event including virtual tours, a virtual resource fair, and one-on-one sessions with faculty, admissions staff, and current students. University of Wyoming hosted a virtual homecoming (46) event in Fall semester 2020, including student activities and alumni speakers.

Next Steps

Because preventing transmission of SARS-CoV-2 requires a layered approach with multiple, concurrent mitigation strategies in place, ACHA is partnering with CDC to create a higher education community of practice. This community of practice will be open to all campus stakeholders, not just health and well-being professionals, as IHEs must take a “whole campus” approach to reducing the spread of the virus.
References


34. COVID Check-In Form. [Internet]. Denver (CO): Community College of Denver. c2020 [cited 2020 Dec 23]. Available from: https://www.ccd.edu/blog/cityhawk-talk/


