Beginning Monday, Nov. 16, UC Santa Barbara will become one of five campuses to join California COVID Notify, a pilot program of a smartphone-based COVID-19 exposure notification system. The program is a collaboration between UC and the State of California to assess use of the technology on a voluntary basis as a means of reducing the spread of the virus.

The opt-in system, which uses Google/Apple Exposure Notification (GAEN) technology on smartphones, is designed to supplement existing contact tracing protocols to further help limit the spread of SARS-CoV-2, the virus that causes COVID-19. It will become available statewide in December.

Faculty, staff and students will receive a campuswide memo Nov. 16 containing a link to instructions for opting in to the notification system.

A major goal of the pilot program is to determine whether using this smartphone technology can encourage users to respond to a high-risk exposure more quickly by self-isolating and receiving additional clinical resources, which are key to mitigating the transmission of COVID-19.

The technology uses Bluetooth to enable those who use the system to receive automatic smartphone notifications of potential exposure to other enrolled users who are subsequently diagnosed with COVID-19, regardless of whether the users know each other.
“This system is beneficial for two reasons,” said Dr. Laura Polito, medical director of UC Santa Barbara’s COVID-19 Response Team and associate medical director at Student Health. “First, if you keep the app running, it will notify you if you have been exposed to someone with COVID-19, even if you don’t know that person. So, if you were in a restaurant, out exercising or in a social situation and were close enough to someone to be exposed to COVID-19, the app will notify you. Additionally, if you are diagnosed with COVID-19 but you were around other people who you don’t know but who also subscribe to the app, the app will notify them for you. This allows people to find out about the exposure sooner and get tested sooner than they might otherwise.”

“This new COVID-19 tracking app has the potential to greatly enhance our efforts to identify close contacts of confirmed COVID-19 cases,” said Dr. Mary Ferris, the campus’s COVID-19 clinical advisor. “Besides being extremely accurate about the contacts, it also provides confidentiality in the notifications, which is a barrier we have encountered frequently when trying to identify close contacts.

“If we can encourage widespread adoption of the app, it will be most effective and greatly help us find the contacts early in order to advise them on quarantine to prevent further spread of the disease,” she continued. “Just a single case of COVID-19 can result in widespread disease transmission and even death, so this is a noble effort we all should support.”

The technology employs Bluetooth to communicate with other Bluetooth-enabled devices nearby — the smartphones of, say, people seated near you in a restaurant or standing in line at a grocery store. When a person joins the Google/Apple notification system, the user’s phone broadcasts a random identification number to other phones in the area. When phones come within six feet of each other, they log one another’s respective ID’s — but with no reference or attachment to names or locations.

If a user of the notification system is diagnosed with COVID-19, that individual can enter a key code indicating a positive test result. This in turn will generate anonymous alerts to other notification system users based on their respective exposures — proximity and length of time — to that individual.

As part of the privacy-first approach, users decide whether they want to share a verified positive test result with the app and determine whether they want to share
that with other users.

“The most important thing to know about it is that is completely anonymous,” explained Polito. “It neither gathers nor sends any personal information. The university doesn’t know if you have the app unless you choose to share that information. It’s also important to know it does not replace case management and contact tracing, so it is still vital to the mitigation of the spread of COVID-19 to cooperate fully with Student Health, the campus’s COVID-19 Response Team and the Santa Barbara County Public Health Department.”

Noted Matt Hall, associate vice chancellor for information technology and chief information officer at UC Santa Barbara, “Apple and Google provided an excellent technology that preserves privacy, preserves choice. It allows the UCSB community to participate in the public health battle against COVID-19 in a totally voluntary way in advance of the State of California’s general deployment. I hope each and every one of our community members can take advantage of this opportunity.”

The pilot program launched earlier this fall with two UC campuses — UC San Diego and UC San Francisco. Joining the program now in addition to UC Santa Barbara are UC Berkeley, UC Davis, UCLA and UC Riverside. These campuses cover areas across the northern, southern and central valley areas of California. Although the software does not allow tracking of users, UC investigators for the study estimate that more than 20,000 users at the initial two campus locations have activated the software.

“What started six weeks ago with two UC campuses has now grown to the majority of UC campuses,” said Dr. Carrie L. Byington, executive vice president of University of California Health and an infectious disease expert. “Applying this type of innovation to a practical use is part of our mission to improve the health of the people of California. This demonstrates the commitment across the university to battling COVID-19 in collaboration with the State of California.”

More information about GAEN is available on Google and Apple information pages.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary
collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.