ALERTTRACE®

by VOS Systems, LLC

CASE STUDY

With both county and state dropping contact tracing efforts, CEE turned to AlertTrace to help protect staff and students, and determine who should test and quarantine.

THE CENTER FOR EARLY EDUCATION

The Center for Early Education Protecting Faculty and Students on Campus

IoT Technology Provides a Safer Learning Environment for Children & Teachers

CENTER FOR EARLY EDUCATION

With its highly contagious nature, COVID-19 and its variants have infected over 3 million people globally, with over 5 million deaths.[1] Organizations from schools to businesses have been affected, as cities shut down and many companies are forced to close their doors. Schools have taken an especially hard hit, with closures across 188 countries and an estimated 1 billion children at risk of falling behind.[2]

Since the start of the pandemic, schools have seen closures, virtual learning transitions, and attempts to return to the classroom. With the onslaught of new variants and surges, temporary or complete shutdowns are common, leaving students struggling to keep up and staff struggling to work. This is where contact tracing can help. AlertTrace is utilized by schools across the United States to protect teacher and student health, while providing a safe learning environment.

CENTER FOR EARLY EDUCATION

The Center for Early Education (CEE) is an independent, coed day school in California. A top private school in Los Angeles county, CEE boasts impressive past alumni from celebrity parents, including Bruce Springsteen, Denzel Washington and Mel Brooks.[3] While renowned by many famed names, CEE proudly caters to students of all socio-economic backgrounds, with a diverse group of children from toddlers through grade six.

In 1939, the groundwork for CEE originated from a group of psychoanalysts who started a playgroup for their children. The founders were driven by a need to provide a safe learning environment in which each child's unique developmental requirements would be taken into consideration.

CHALLENGES

As COVID-19 began closing businesses in 2020, education faced numerous challenges. “We closed down March 13th [2020], everyone was sent home,” says Omar Dueñas, CEE’s Director of Technology. Shutdowns continued as an attempt to protect children and staff, and prevent the spread of COVID among the young population, many who were still not eligible for vaccination.

As students, parents, and staff adjusted to a new normal, some choosing homeschooling as others attempted online learning, it was clear school would not be the same for some time.

The future began to brighten as vaccinations rolled out and were made available to children as young as five years old. However, the idea of returning to school was still daunting, as many students wouldn’t be vaccinated and staff worried for their wellbeing.

With such uncertainty, AlertTrace has been honored to help ease fears. Our easy-to-implement method of contact tracing provides peace of mind and reliable data to help stop the spread of COVID-19 within organizations. “I loved the technology,” says Dueñas. “We initially ordered, when kids were off-site, 110 [Minis], which covers our faculty and staff.”

After testing AlertTrace with staff in the summer of 2020, CEE ordered enough for their over 540 student population, implementing AlertTrace for the their reopening. “Everything was seamless,” says Dueñas. “Once we got them, assigned them, configured them and placed the hubs in certain locations where I felt we had the most traffic, we started seeing data right away.” With Los Angeles county and state guidelines ever changing, CEE added AlertTrace to serve as extra reassurance that kids and staff would be protected while on campus, amid the changing advisories.

DATA-DRIVEN SOLUTIONS

THE ALERTTRACE SOLUTION

When looking for a solution, CEE wanted something with ease of use and rich, accurate data for contact tracing. "Not having to look at other data, going back and forth, or needing different platforms, this is just what we wanted to do," said Dueñas. After their initial test run of AlertTrace in the summer, they took the leap and entrusted the company with their contact training needs for staff and students that fall.

At slightly larger than a U.S. quarter, the AlertTrace Mini is a wearable device given to faculty and kids. Minis can be clipped to shirts, belts, ID badges, safety vests, lanyards or even hard hats. "Every child has a mini," says Duenas. "They use them on the clip, while faculty we have either a lanyard or a clip." Once in place, Minis effectively capture data whenever they are in range of another AlertTrace wearable.

When in range, which can be set to specified distances, two devices swap data and create a contact. User locations are never tracked or recorded, as there is no location software in the Minis. AlertTrace utilizes optimized Bluetooth to measure the length, proximity and unique user IDs of contacts made between AT wearable devices. With military-grade data security, the data is encrypted end-to-end and captured anonymously to ensure information is safe and secure, and that wearer privacy is protected.

MORE SOCIAL DISTANCING

Providing trustworthy data and enabling swift and decisive actions to stem infectious spread, AlertTrace streamlines the process of contact tracing within any organization. With the AlertTrace Administrative Dashboard, the data collected from the wearable Minis can be easily viewed by leadership. If someone tests positive, administrators can quickly identify that person's historical, anonymized contacts to safeguard their workforce and student population in mere minutes.

AlertTrace helps ensure that distancing efforts are maintained, proactively limiting transmission. While the AlertTrace Minis seamlessly collect contact tracing data throughout the day, they also use this data to notify wearers immediately when they are within range of another user. Customizable visual, audible, or vibrational alerts are available to notify users of any unintended breaches of social distancing.

AlertTrace also aids organizations in identifying any dangerous patterns, such as where and when the most contacts are being made within their facility, known as "hotspots." With this information, measures can be taken to ensure hotspots are diffused and limited to a certain number of people at one time. Once new preventative protocol is put in place, the AlertTrace Admin Dashboard can definitively show administrators how these measures have helped in reducing contacts. When AlertTrace is used to detect trends of infection and enact reactive protocols, like strategically reorganizing breaks or restructuring student activities, staff and students can get back to working and learning with confidence.

The data provided also allows for necessary health education to those who may be in constant breach of social distancing guidelines. Students can learn better social distancing behaviors, and teachers and staff can help to ensure that each student continues to safely maintain guidelines.

Results from AlertTrace deployments have shown more than 80% increase in adherence to COVID-related guidelines, greatly mitigating the risk of spread within any workplace, schoo or organization.

RESULTS

During CEE's summer trial run, they were able to maintain 100% safety via social distancing and stopped the spread of the one positive infection on campus that occurred. "We out-source a cleaning crew and assigned Minis to them," Dueñas says. "There was a positive case there, and we were able to quickly go on the dashboard, identify the employee in this case, see the information that we needed and quarantine them that same day." Following the successful trial, Minis were distributed to the students for the fall of 2020, where they helped to continue maintaining 100% safety among staff and children.

"Parents and families, even our employees on campus, feel secure knowing that we are doing this contact tracing," said Dueñas, "knowing that if someone does have it, we will be able to quarantine who needs to be quarantined that same day."

Though faculty initially had concerns over privacy and location tracking, CEE admins were able to assuage those worries quickly. "All they [the Minis] do is talk to each other and data is uploaded to the hubs," said Dueñas. "Even in the dashboard we showed them there was no information on them, just ID numbers assigned to them."

Another concern Dueñas detailed was deciding whether to collect Minis at the end of the day and where to store them, to prevent bad data from Minis being left active. AlertTrace was able to quell this concern with its sleep feature that allows admins to put all Minis to sleep during off hours. "It's easy for us to go on the dashboard and put all the Minis to sleep when we know no one is on campus," said Dueñas. In the rare instance a Mini was reported lost, Dueñas credits AlertTrace's fast and helpful support team with being able to provide a replacement swiftly and efficiently. "You guys have awesome support," said Dueñas. "No matter who we reach out to, they reach out right away and take care of it."

As school resumed, CEE saw no issues with the AlertTrace program and identifed four positive cases, containing them quickly and effectively. “When we had a student test positive, some of the teachers were concerned that they were a close contact, but we were able to go on the dashboard and look at the data and tell them definitively no,” said Dueñas. “They felt a lot safer, it’s peace of mind.”

The ease of information and data visibility has provided CEE with the tools to allow children to return to their education, and faculty their jobs, with the added assurance that their health was being made a top priority. As the school year continues and into the next, CEE has no plan to remove the wearables from campus. With new variants popping up constantly, Dueñas envisions using CEE for the foreseeable future. “It’s a great tool for contact tracing, it just works and it gives us the data that we need to be able to keep everyone safe on campus.”

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