Alameda County Public Health Department manages call volume surge with cloud-based contact center

Innovative technology rapidly expands Alameda County’s ability to respond to citizens with COVID-19 inquiries.
The Alameda County Public Health Department (ACPHD) in California manages a broad array of programs and services designed to protect the health and safety of 1.5 million residents across 13 Bay Area cities. Because those services include disease prevention and control, health education, and medical and health care services, the COVID-19 outbreak prompted a spike in phone calls to the organization. The department’s call agents, which typically receive about 300 calls a week, received nearly 1,800 calls per week in March. ACPHD was quickly overwhelmed, causing the average time to handle a call to grow to five minutes and 42 seconds, and the average queue time increasing from nearly nothing to 38 minutes.

“We received an unmanageable number of calls from the public regarding COVID-19 and evolving shelter-in-place orders,” says Stephen De La Vega, information systems manager at ACPHD. “We couldn’t conduct business as usual in that situation.”

Several years prior, in response to a different outbreak, the department deployed call center software that used client server technology and hardware. In this solution, physical phone lines connected to an on-site server. This was a very costly system to maintain and the agents could only use specially configured physical phone sets. Due to this, the department discontinued using the system soon after the outbreak was over.

When call volume suddenly jumped in response to COVID-19, it became clear Alameda needed a technology solution that would scale on demand and use automation to manage call flow. Given local orders to stay home, the agency also needed to enable call center agents to work from anywhere.

Less than 24 hours
ACPHD leaders reached out to Amazon Web Services (AWS) to address their needs. The county selected Amazon Connect, a simple-to-use omnichannel cloud contact center to meet their requirements for a scalable, cost-effective solution. Then, the county took a few weeks to establish objectives and agree on workflow and messaging scripts.
“After we laid the groundwork, it took less than 24 hours to get the solution up and running and to begin testing it,” says De La Vega. Following a few days of testing, ACPHD officially went live with the Amazon Connect call center solution on April 3. At that time, the solution included partnering with a third party to deliver a broader scope of related information. Today, all information delivery is handled in house, without the help of a third party.

Using Amazon Connect, ACPHD can now handle more calls faster and communicate with callers in a more streamlined and automated way. Callers to ACPHD now receive the most critical information immediately through an information menu. Providing data to callers more quickly also reduces repetitive calls and administrative burden on call center agents. The solution also significantly reduces the time it takes to reach an agent if a caller needs additional information.

“Call center employees can now interact with constituents over the phone quickly, no matter the call volume,” says De La Vega.

The county can dynamically make changes to the information menu as situations change or evolve. Callers also have the option to be called back or to leave a message. If a caller opts to leave a message, that message is transcribed and emailed to a group ACPHD email box, where an agent or supervisor addresses it within 24 hours. The system can also automatically translate the information a call center agent provides into seven different languages to accommodate non-English speaking callers, including Spanish and Simplified Chinese.

Finally, the solution supplies ACPHD call center supervisors with a broad range of call statistics they can review at any time.

“That’s helpful for managing the call center behind the scenes,” says De La Vega. “It allows our call center supervisors to make informed, real-time decisions and pivot as needed.”

Perhaps most critically, the new system allows ACPHD to handle all calls in house.

**BY THE NUMBERS:**
Alameda County Public Health Department

**Headquarters:** Oakland, Calif., plus 21 satellite offices across the county

**Service size:** 13 cities (Albany, Emeryville, Alameda, Piedmont, Oakland, San Leandro, Hayward, Union City, Fremont, Newark, Dublin, Pleasanton, Livermore, as well as unincorporated communities); 1.5 million residents

**Employees:** More than 600, including public health nurses, doctors, epidemiologists, dentists, medical social workers, physical and occupational therapists, dietitians, outreach workers, health educators, program managers, pre-hospital care coordinators, etc.

**Call center headcount:** As much as 23 agents

**Average number of weekly calls pre-COVID:** 300

**Average number of weekly calls post-COVID:** 1,800
"We are no longer using the third-party call center, which has reduced our costs at a critical time," says De La Vega. "Amazon Connect is cost effective, and the technology has not been a barrier to productivity. We haven’t experienced any outages or latency, so we’re able to serve our constituents much more effectively."

**Power of the cloud**

Utilizing cloud-based technology also allowed ACPHD employees to shift to a remote work environment quickly — something the department’s legacy technology could not accommodate.

"We now have a system that’s accessible from anywhere at any time," says De La Vega. “Our call center agent pool is larger than it would be if the system was restricted to a physical location or to physical phone sets."

De La Vega adds that, when used in combination with other cloud collaboration tools, the new solution also offers the department more flexibility to train, deploy and schedule call center agents.

ACPHD’s success with Amazon Connect has already prompted an additional project. The department is currently deploying Amazon Connect as part of a second call center project for its Information Systems help desk, which saw a significant uptick in calls as staff moved to remote work environments.

"Previously when calls came in, we had no idea what happened to the callers — if a caller hung up, if a call was dropped for some reason, or if the phone rang but never got answered; we didn’t have any statistics," says De La Vega.

Using Amazon Connect, ACPHD’s Information Systems help desk leaders will implement an information menu system that will route callers directly to the appropriate IT assistant. The system will also provide statistics so Information Systems leaders can determine what types of calls they are getting and how staff handle them to better serve ACPHD employees.

ACPHD is also exploring other ways to leverage the cloud for rapid deployment of end-user solutions.

"We’re very much in the cloud these days, and we expect to use a cloud-based framework for the foreseeable future," says De La Vega.

Most importantly, ACPHD’s use of cloud is helping constituents across 13 cities receive timely information during the COVID-19 pandemic.

"Amazon Connect helps us provide the necessary information to residents and businesses and to better manage the health of our communities and our employees during these unprecedented times," says De La Vega.

This piece was developed and written by the Government Technology Content Studio, with information and input from AWS.