TECHNOLOGY TAKES ON COVID-19

Exposure Notification

California's technology companies are playing a prominent role in fighting the spread of the coronavirus and providing individuals with information they need to remain safe and healthy. The Exposure Notification Application Programming Interface (API), developed by Google and Apple, helps people learn if they have been exposed to someone with the coronavirus.

How It Works

Use of the Exposure Notification API is voluntary. Once downloaded, the API uses Bluetooth technology on mobile devices to send out a string of random numbers that are not tied to any user's identity and change every 10-20 minutes for additional protection. Other phones are receptive to these beacons.

When individuals are diagnosed with COVID-19, public health authorities — with the consent of those individuals — will update the list of numbers to reflect users with new cases. If there is a match between the positive diagnosis list and beacons that have been received by other devices, the other app users may be notified of exposure and advised on steps to take next.

Privacy Protections

The Google/Apple API has very strict privacy protections.

- **Participation is voluntary.** Each user has to consent to using the app and being part of the process.
- **All information is anonymized.** Protected information remains on the device and is only shared with public health agencies.
- **Only public health authorities will have access to this technology and their apps must meet specific criteria around privacy, security, and data control.** User identity will not be shared with Apple and Google or other users.
- **There is no collection of location data** – that is, there is no record of where people are, but simply that they were near each other.
- **The API does not share identity of users.** Bluetooth notifications are completely anonymous. The API is only being used for exposure notification. Google/Apple have committed to disabled the API after it is no longer needed.
- **No information is shared with law enforcement or any other parties.**

Global Usage of the Exposure Notification API

- Germany has accumulated more than 13 million downloads.
- Italy has nearly 4 million downloads.
- Switzerland, Latvia, Poland, Denmark, Uraguay, Ireland, Austria and Japan have recently launched their apps.
- In the United States, many states have implemented or are in the process of implementing the API. These states include Alabama, Arizona, Colorado, Conneticut, Delaware, Maryland, Michigan, Minnesota, Nevada, New Jersey, New York, among others.

Effectiveness

According to the Oxford University model, the Exposure Notification API can help slow the spread of COVID-19 at <u>any level of adoption.</u> With public health experts warning of a second wave, it is important for California to consider the use of this system.

If we reduce potentially infectious contacts by 20%, and **56%** of the population use the app, we can considerably slow the epidemic. The app has an effect at all levels of uptake.
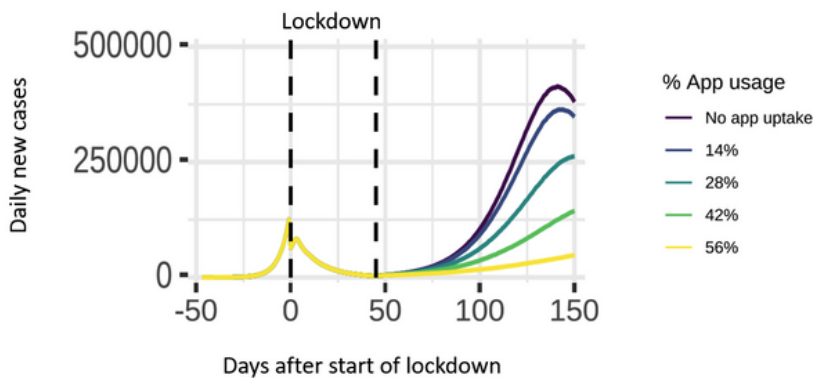
Source: Digital Contact Tracing: Advice and Simulations, Oxford University, May 2020

Exposure Notification API provides benefits to individuals and communities.

"Tech companies will be key to supporting California's growing "army" of coronavirus contact tracers and ultimately reopening the state, Gov. Gavin Newsom told <u>CNBC</u>."

"At UCLA, public health professor David Eisenman said apps could be a faster and more cost-effective supplement to public health departments reduced by years of budget cuts." (<u>Protocol.com</u>)

Tony Blair <u>Institute for Global Change</u>. "Carefully applied, technology gives policymakers a possible way through the crisis that reduces otherwise very high costs in terms of lives lost and livelihoods destroyed."

"The good news is that these new technologies give us the ability to develop and deploy lifesaving applications at unprecedented speed — while also safeguarding privacy." (<u>Forbes.com</u>)