AlohaSafe

A collaboration with the
Hawaii State Department of Health

Brandon Kurisu
President, aio Digital
brandonk@aiohawaii.com

What is AlohaSafe?

AlohaSafe is a public/private partnership created in collaboration with the Hawaii State Department of Health promoting the health and safety of Hawaii residents and visitors.

AlohaSafe and the Hawaii State Department of Health will be rolling out a series of digital tools including Hawaii's official digital contact tracing application based on the Google/Apple Exposure Notification protocol.
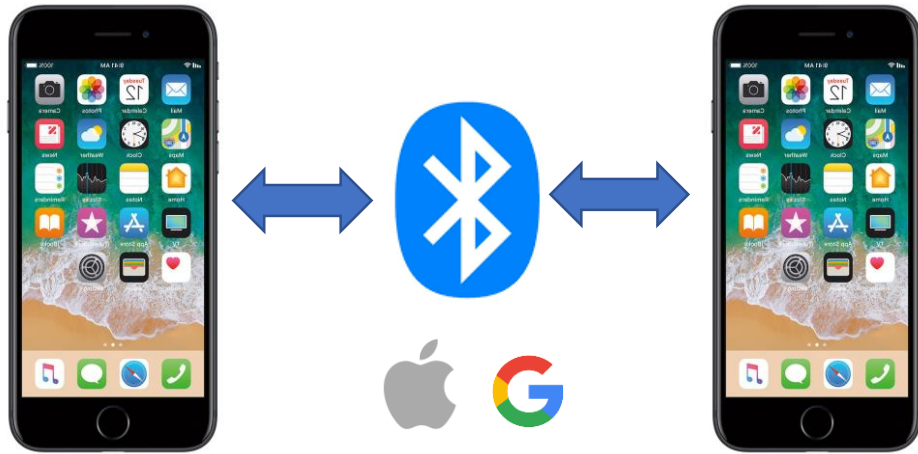
Digital Contact Tracing Apps

Important Note:

- Google and Apple are <u>ONLY</u> allowing COVID-related tracing apps submitted by the Hawaii State Department of Health to be available in their app stores.

- This is to prevent other rogue efforts from creating and submitting their own apps.

- All other COVID-related tracing apps not submitted by the Hawaii State Department of Health will be denied.

Device-to-Device

AlohaSafe Alert – Exposure Notifications

"Were you exposed to an infected individual?"

- Hawaii's official Google/Apple Exposure Notification (GAEN) application

- GAEN protocol already embedded in the operating systems of Apple/Android devices

- Any digital contact tracing that don't use GAEN won't be effective.

- Need a "key" to access it. Only one key given to the public health authority at the state or country level

- The DOH has the key for Hawaii and is the only entity that can get the key from Apple/Google

Interaction

Devices talking

Kimo and Lani's devices are pinging each other during their interaction using low-energy Bluetooth transmitting and capturing random keys

Measurements

Their devices are also measuring the **signal strength, distance and duration of interaction**

Confirmed Positive

Kimo is later tested and is confirmed positive.

↓

Kimo is contacted by a DOH contact tracer. and tells them he has the GAEN app

↓

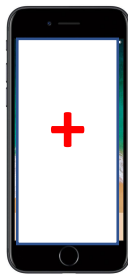DOH contact tracer gives Kimo a 6-digit code to enter into the AlohaSafe Alert app.

↓

Kimo enters his 6-digit code and sends his list of keys to the server

Submit Keys

2

- **Exposure notification**

Lani receives a notification letting her know she "may have been exposed" and to call her primary care physician

Signal strength = 5
Distance = 6 ft
Duration = 20 minutes

Kimo and Lani's interaction is measured and meets minimum exposure notification requirements

Alert

4

Exposure Notification

3

AlohaSafe Alert (GAEN App) Main Points & Summary:

1. All Apple/Android devices have the GAEN protocol in the operating system (1/3 of world's population)

2. Need a "key" (through an app) to access the GAEN protocol, only one "key" given to the public health authority at the state/country level

3. GAEN uses low-energy Bluetooth technology, enabling devices to communicate with each other

4. Users can control whether or not they receive notifications (can opt-in/opt-out anytime)

5. <u>GAEN does NOT track location</u>, just devices you've been exposed to

6. Notifications are only triggered if minimum thresholds are met.

7. Only the Hawaii State DOH can use this. Google/Apple cannot see your identity.

Some Google/Apple Exposure Network (GAEN) Adopters
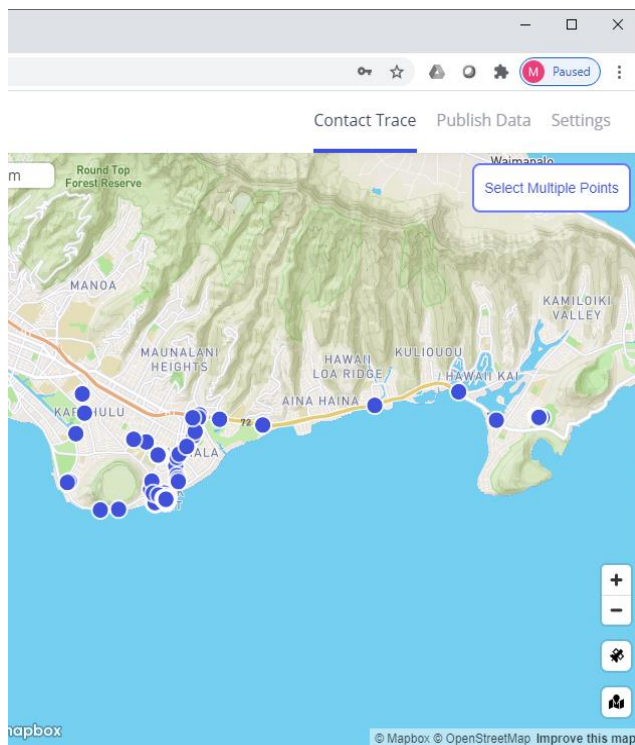
(GAEN apps in development or released)

- Australia
- Brazil
- Canada
- Czech Republic
- Denmark
- Finland
- Germany
- Ireland
- Italy

- Japan
- Kenya
- Mexico
- Netherlands
- Philippines
- Poland
- Portugal
- Spain
- Switzerland
- United Kingdom

- USA
  - Alabama
  - Arizona
  - Hawaii
  - Minnesota
  - Nevada
  - New Jersey
  - New York
  - North Dakota
  - Pennsylvania
  - South Carolina
  - Virginia
  - Wyoming
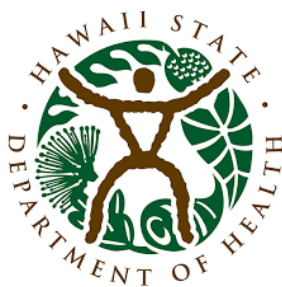
APHL
National Key Server

- Association of Public Health Laboratories (APHL) is working with Google/Apple/Microsoft to create a National Key Server, which will bridge contacts across the country.

- An International Key Server is also being discussed.

Source:

https://www.xda-developers.com/google-apple-covid-19-contact-tracing-exposure-notifications-api-app-list-countries/

AlohaSafe Story – Patient Memory Aid Tool

Location-based - "Where you've been"

- GPS memory aid tool to help patients remember where they've been

- Securely logs your location on your device every few minutes

- Allows patients to easily share their location history with the Hawaii Department of Health contact tracers with the click of a button

- Makes the contact tracing process much more efficient and accurate

User downloads app

Records location

Using GPS, the app logs your location on the device every 5 minutes.

Confidential, secure

Data never leaves your device, unless you share it with a contact tracer. Only latitude, longitude and time are being stored.

Confirmed Positive

Individual is tested and is confirmed positive.

Patient goes through contact tracing interview.

"Do you have any data on your past whereabouts in the last 21 days?"

Gets 6-digit code to enter and upload location data

Patient uploads location data (past 21 days) from the app on their device to the contact tracer with the click of a button.

AlohaSafe Story

- **GPS memory aid**

- **Possible for quarantine/isolation monitoring (sick, not travel)**

Contact tracers walk through the location data with the patient to jog their memory to find out if they need to follow up with other contacts.

Hawaii State Department of Health takes next steps to contain the spread

Next Steps

Location Data Upload

Contact Tracing

2

4

3

AlohaSafe Story (GPS App) Main Points & Summary

1. <u>This is a memory aid tool only</u>. GPS should NEVER be used as a notification tool. It will result in many false notifications since GPS has an accuracy range of 25-50ft.

2. The data never leaves your device. It only does so if you choose to share it with the Department of Health contact tracer.

3. Only latitude, longitude and time are recorded. No other identifying data points.

4. The app just runs in the background, doesn't need to be open.

5. This tool will help Hawaii's contact tracers by making their contact tracing process **more efficient and accurate**.