

COVID Alert PA

Pennsylvania's Exposure Notification Mobile App

Senate Communications and Technology
Committee

September 08, 2020

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Deputy Secretary for Health Innovation

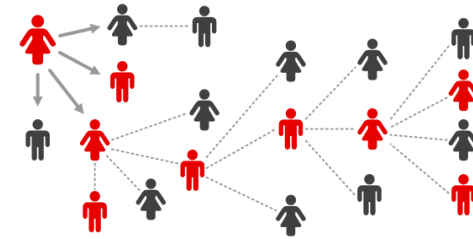


Background

- Announced in May 2020 by Apple and Google
- Only uses Bluetooth Low Energy (BLE) Technology
- Opt-in and voluntary
- Does not collect, use or track location – no means to collect it at all
- Only a country or state health department can release an Exposure Notification App
- **Enhances the current traditional contact tracing efforts**
 - **Unknown and unfamiliar person interactions**

What we did?

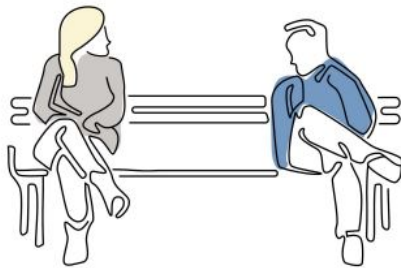
- Reached out to Australia, Singapore, **Ireland, Germany**, etc. – learn what they were doing
- Started multi-state coordination meetings
- Selected NearForm Inc. (Ireland, Northern Ireland, Scotland, Gibraltar govt.'s)
- Partnered with Delaware and two other large Northeast states
- Partnered with UPenn and MIT Lincoln Labs through CDC



Evaluating integration with APHL so we are interoperable with any state that use Exposure Notification Service of Apple/Google

How it works?

Alice and Bob meet each other for the first time and have a 10-minute conversation.



CDC and PA guidance is within 6 feet + 15 minutes & more

Bob is positively diagnosed for COVID-19 and enters the test result in an app from a public health authority.

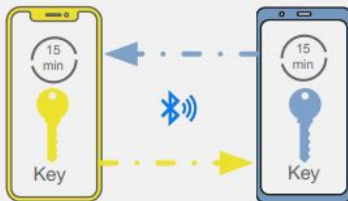


Public health validates



A few days later...

Their phones exchange anonymous identifier beacons (which change frequently).



With Bob's consent, his phone uploads the last 14 days of keys for his broadcast beacons to the cloud.

Apps can only get more information via user consent



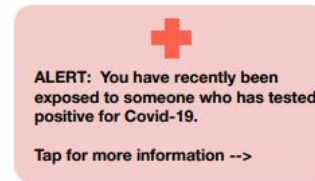
Apple | Google

How it works? continued..

Alice continues her day unaware she had been near a potentially contagious person.



Alice sees a notification on her phone.



Sometime later...

Alice's phone periodically downloads the broadcast beacon keys of everyone who has tested positive for COVID-19 in her region. A match is found with the Bob's anonymous identifier beacons.



Anonymous identifier keys are downloaded periodically



A match is found



Additional information is provided by the health authority app or website

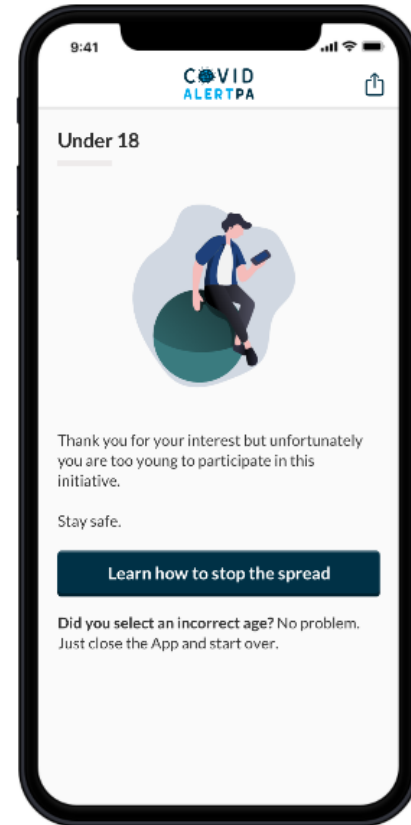
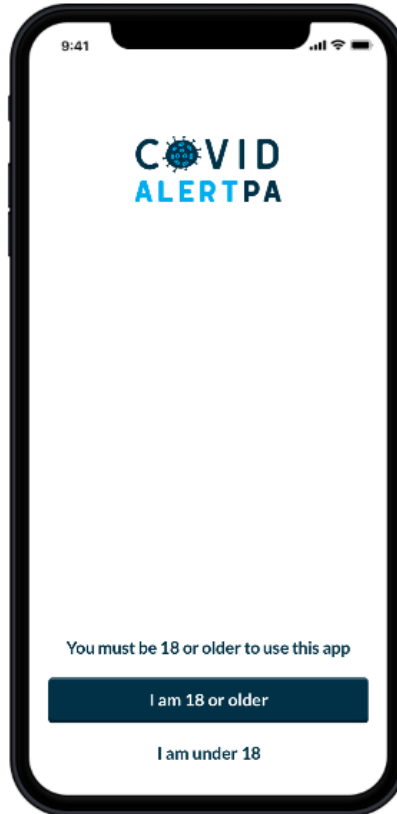




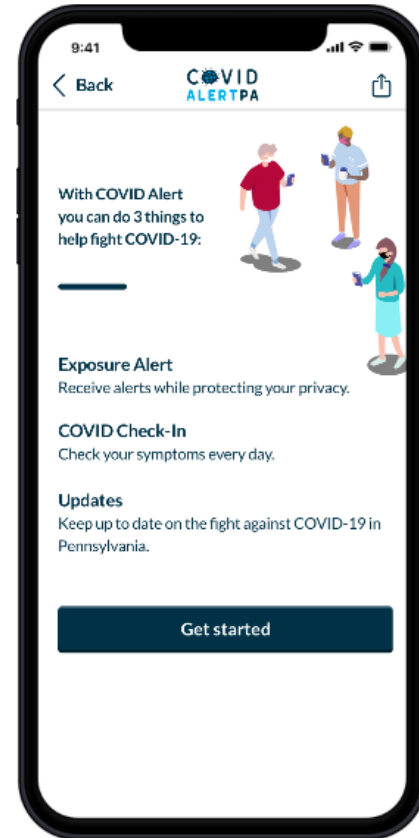
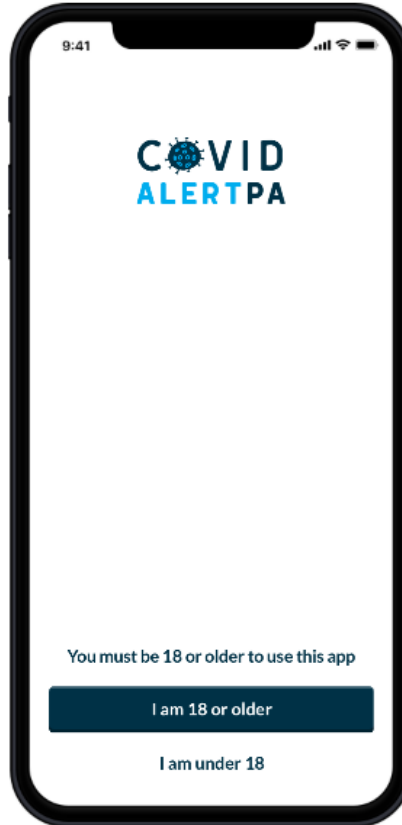
Limitations

- Bluetooth is a wireless technology - reacts aggressive in a metal environment (6 feet could show as 4 feet)
- Does not know if someone is wearing a mask
- Does not know if phone devices are close enough but devices owners are 6 feet apart
- Public trust of the technology in the time of a misinformation epidemic

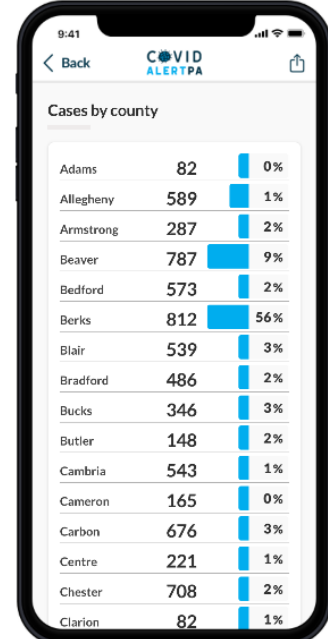
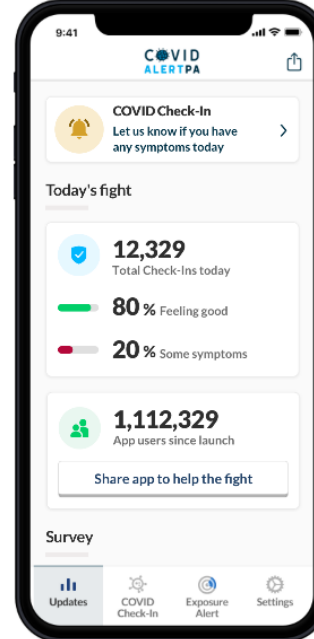
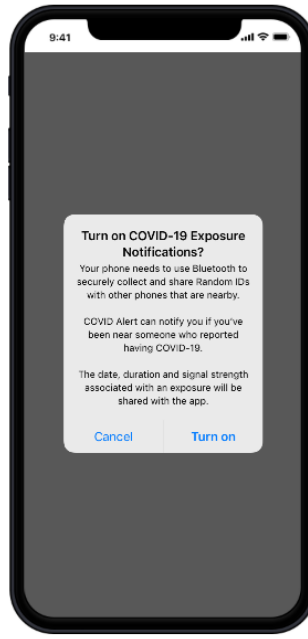
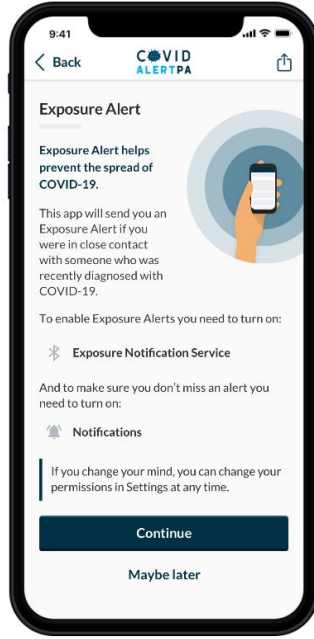
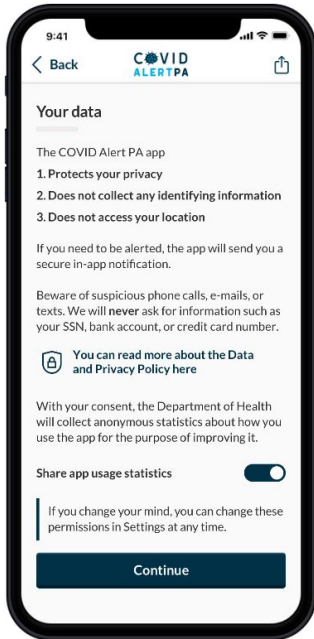
Under 18



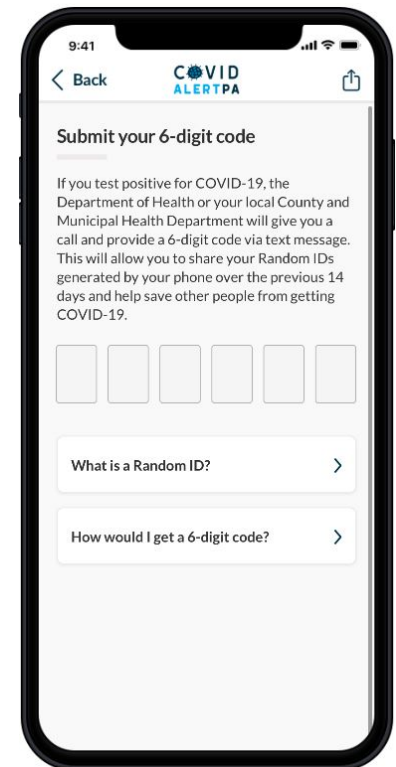
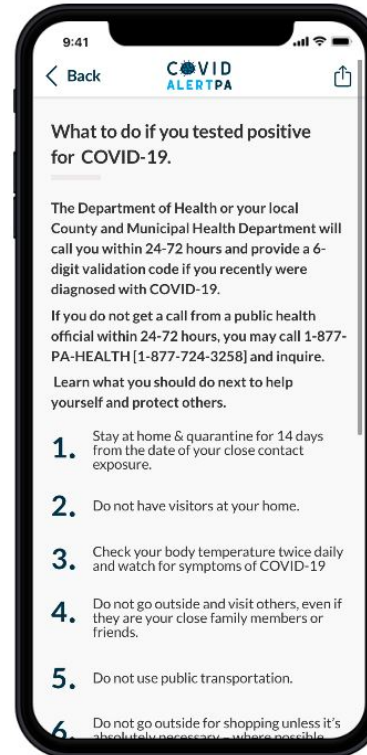
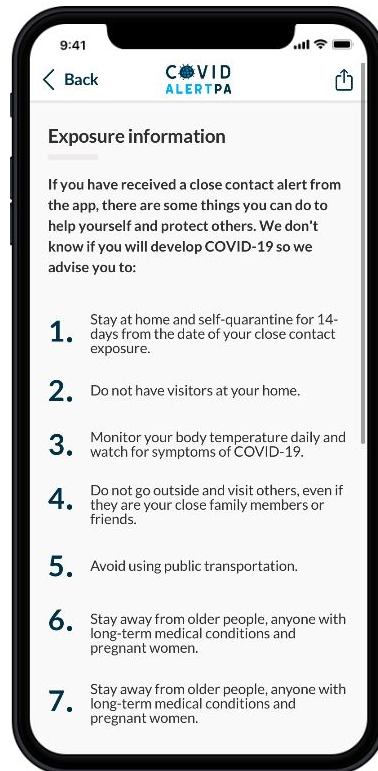
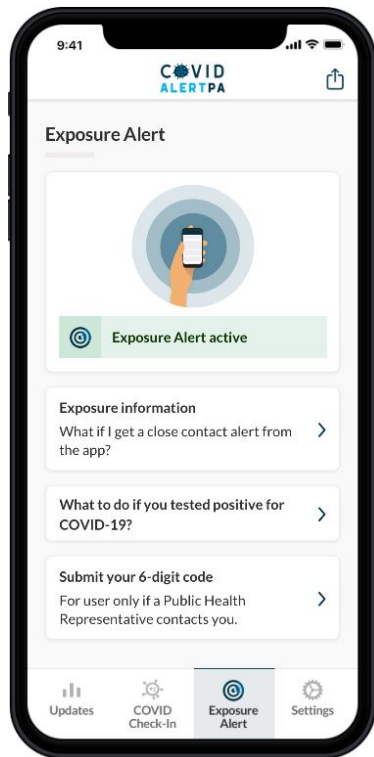
On-boarding



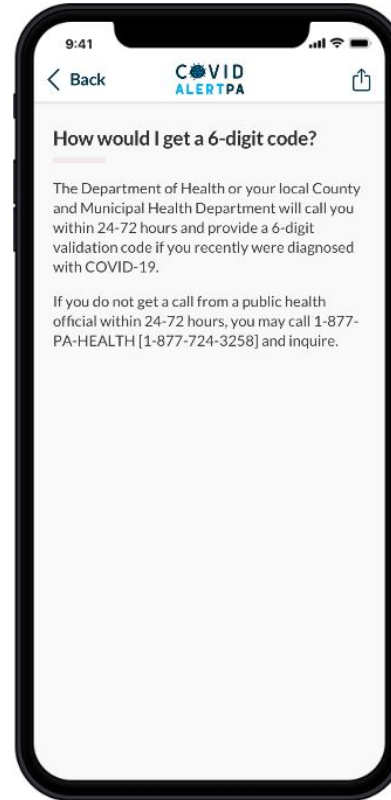
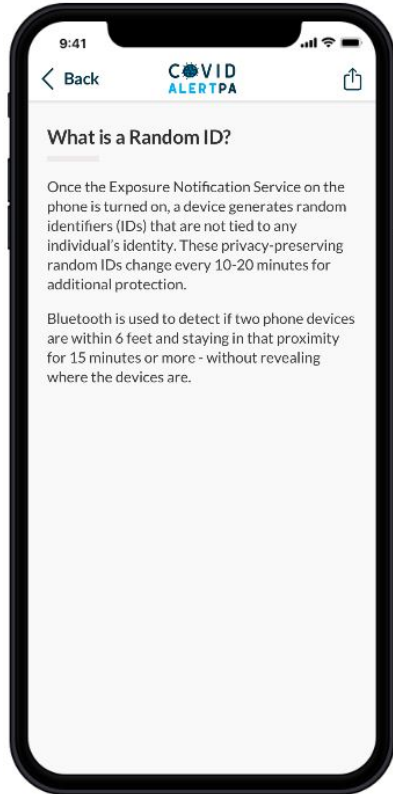
On-boarding continued..



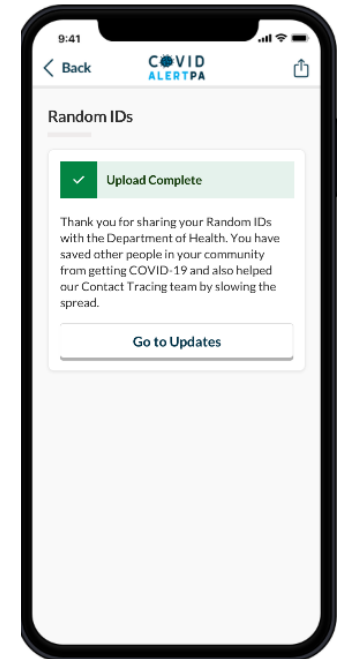
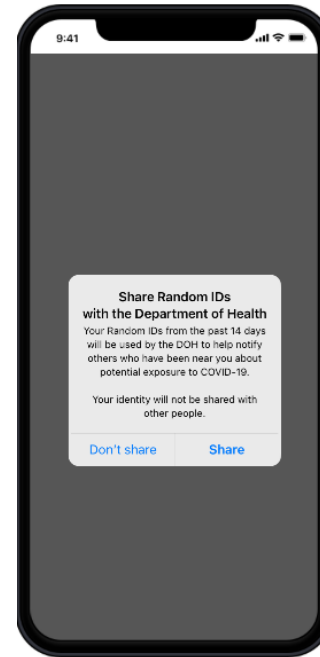
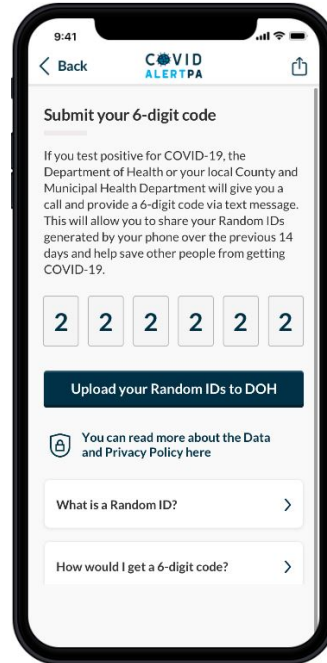
Exposure Alert feature



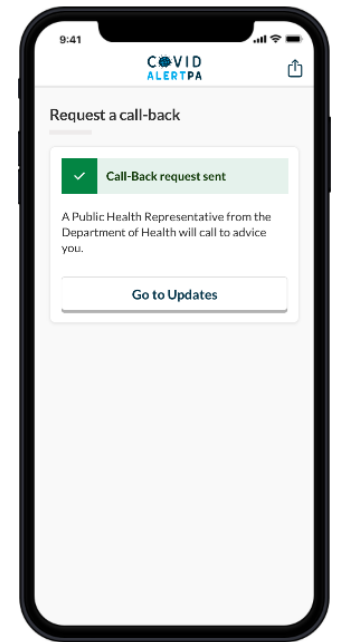
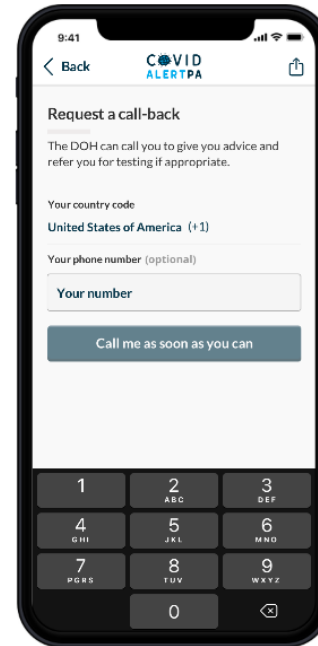
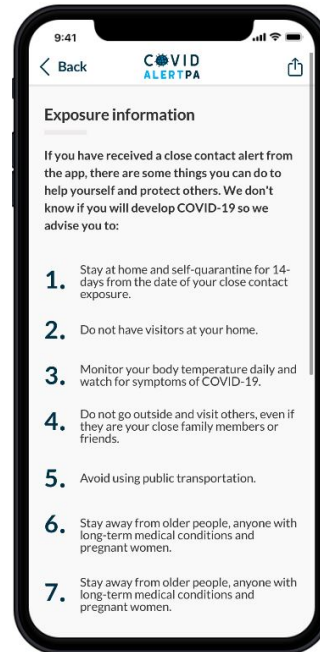
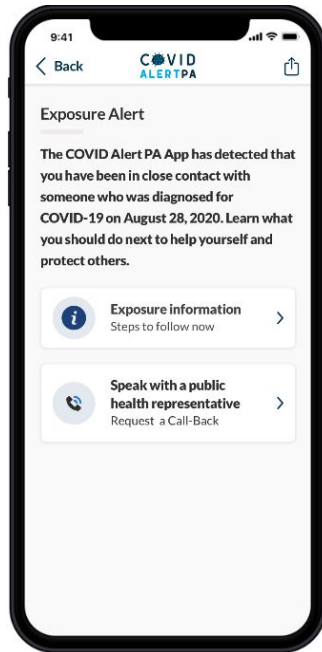
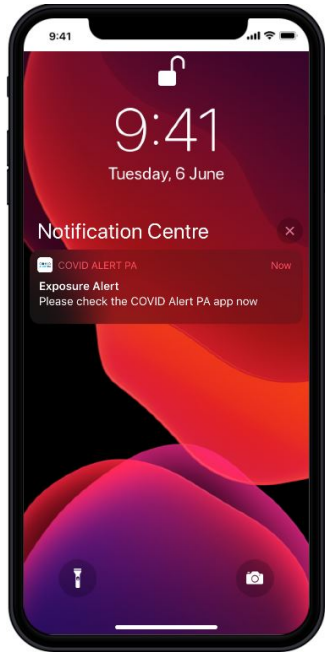
Exposure Alert feature continued..



Validating a positive COVID-19 individual



Exposure Alert



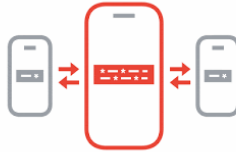
How the technology works?



COVID Alert PA app available in App Store and Play Store



Once you opt-in to the Exposure Notifications System, it will generate a random ID (alpha numeric values) for your device. To help ensure these random IDs can't be used to identify you or your location, they change every 10-20 minutes.



Your phone device and the phones devices around you will work in the background to exchange these privacy-preserving random IDs via Bluetooth. You do not need to have the app open or run it in the background.

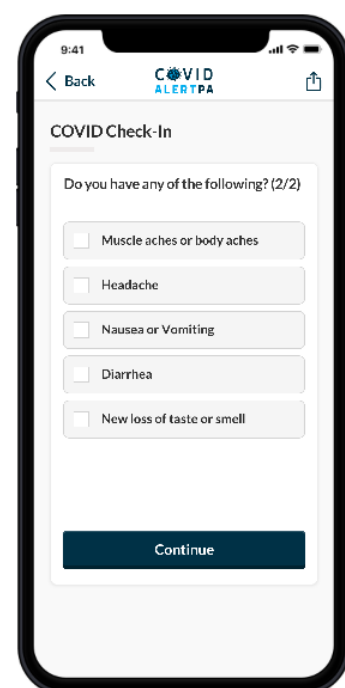
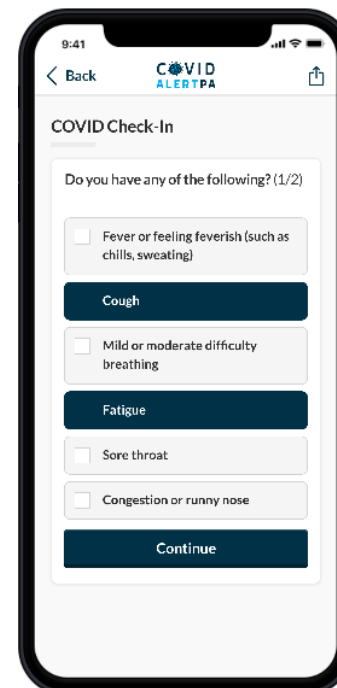
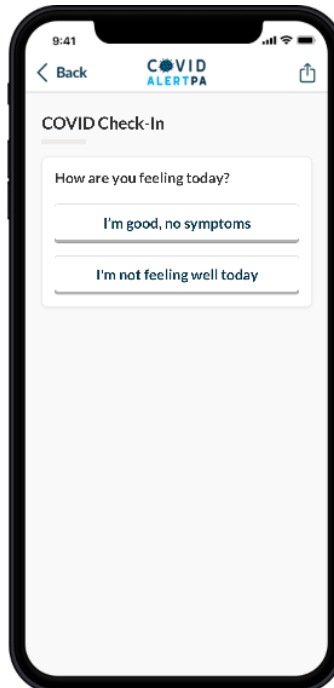
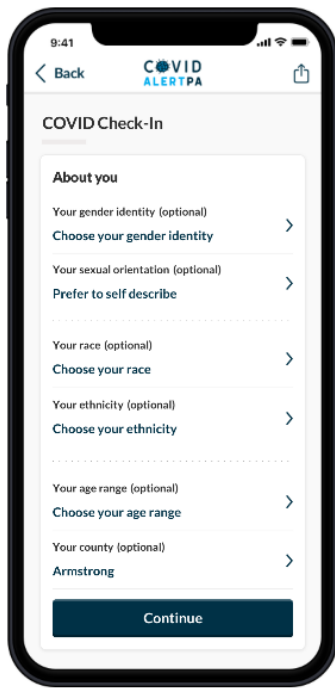
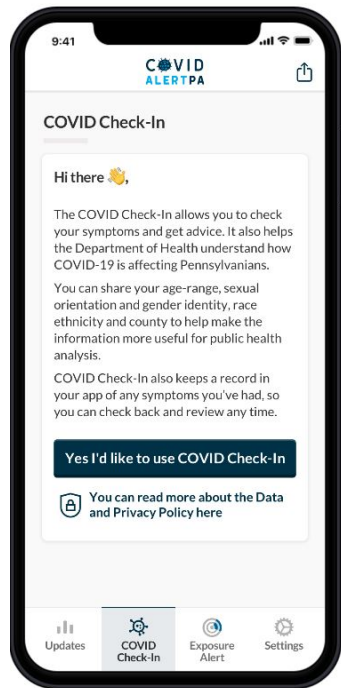


Your phone periodically checks all the random IDs associated with positive COVID-19 cases against its own list. All of this stays on the individual's phone device.

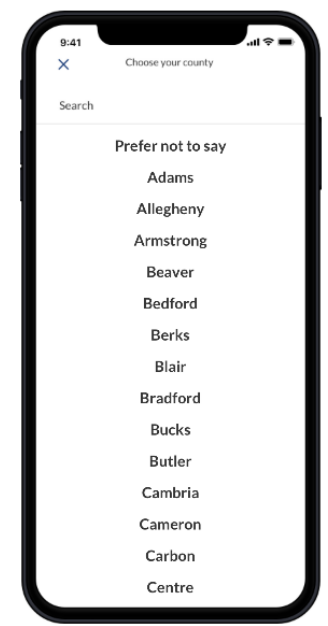
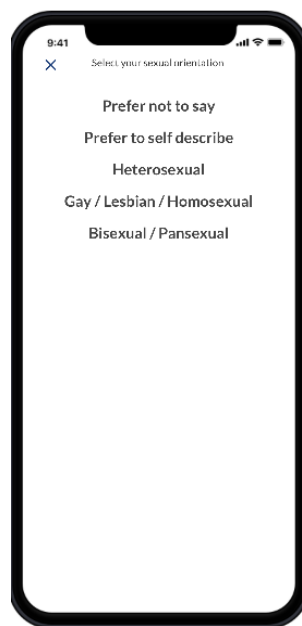
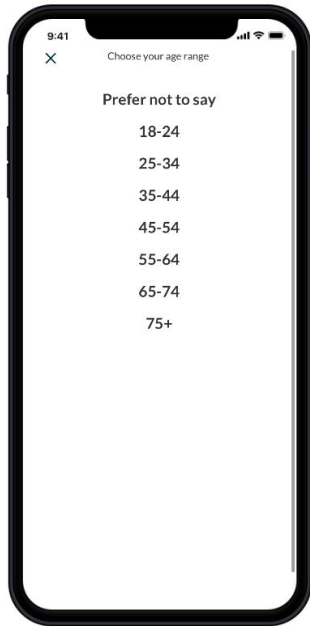


If there's a match, the app will notify you of a potential exposure and provide you with further instructions from DOH on how to keep you safe and protect the people around you.

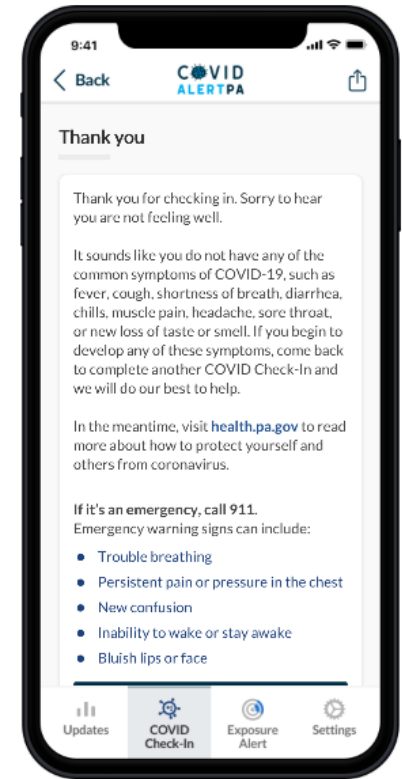
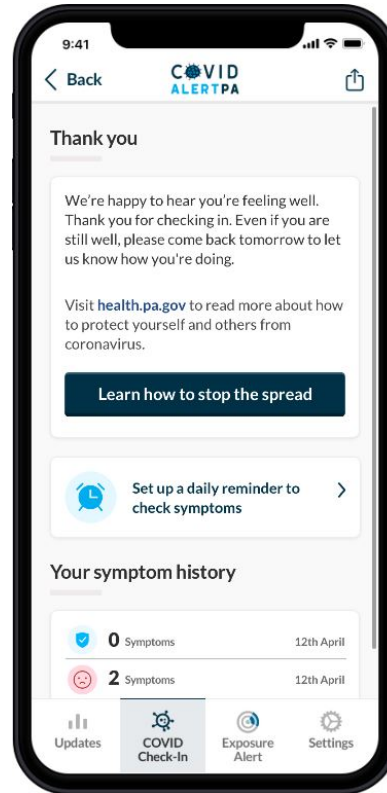
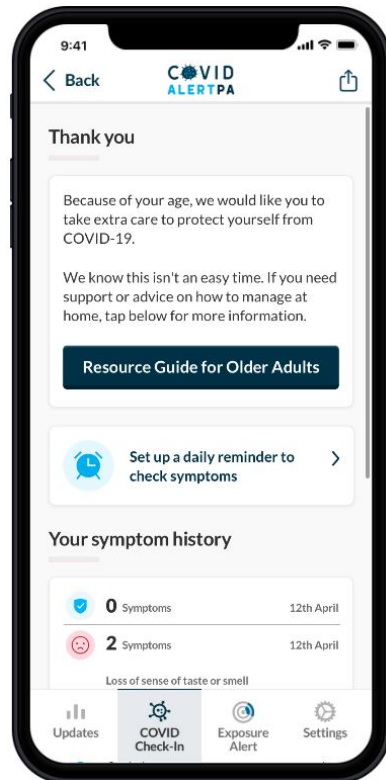
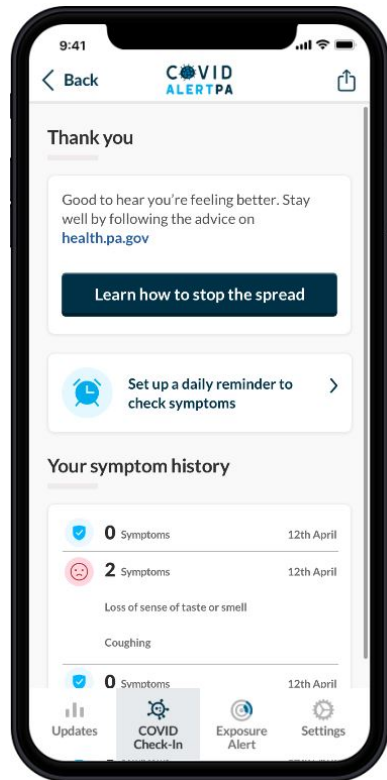
Check-In feature



Check-In Feature - Demographics



Post Check-In messages



App Settings

