

The COVID Alert Exposure Notification App: Overview for Stakeholders

July 2020
Ontario Digital Service

Exposure Notification: Background

- Exposure notification is a critical part of Canada's COVID-19 recovery plan and Ontario's enhanced [Case and Contact Management Strategy](#).
- It **complements** manual contact tracing and connects people to key public health information and support. It also helps us prepare for the next wave of COVID-19.

What is exposure notification?

- It's the process of **anonymously notifying** all contacts—especially unknown contacts—who have been near a COVID-positive person in the past 14 days.
- Exposure notification apps typically use Bluetooth signals to detect when phones are near each other.
- If an app user tests positive for COVID, they can opt to **anonymously alert** all users who have been near them (as defined by specific criteria) in the past two weeks.
- This lets people know quickly that they've been exposed, even if the app user with COVID doesn't know them (for example, the person behind you at the grocery store, or at the bus stop).
- By alerting more people more quickly that they've been exposed, the app can help Ontarians self-isolate, get tested, and slow the spread of the virus sooner.

The COVID Alert Exposure Notification App

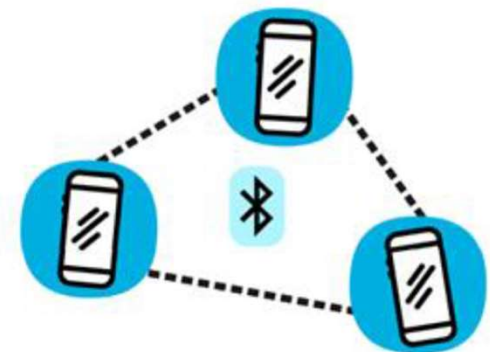
To launch exposure notification in Ontario, the province developed a mobile app that provides a **fast, secure, privacy-protective way to notify people who have been exposed to COVID-19**. Ontario is partnering with the federal government to launch this made-in-Ontario approach nationally, as the COVID Alert app.

In May and June, Ontario built a prototype of the app using free, open source code developed by volunteers from Shopify.

The Canadian Digital Service is now adapting this prototype for release as a Canada-wide app in the Google Play and Apple app stores in July.

We opted to use the code developed by Shopify because:

- It's highly privacy-protective
- It's designed with a single purpose in mind: notifying Ontarians when they've been exposed to COVID-19
- It is easy to use, and can be easily customized to add Ontario-specific content
- It uses the new Apple/Google platform, which lets the app run in the background and reduces battery use.



A Privacy-First Approach

- A critical factor for the app to succeed is **user trust**.
- To maintain this trust with Ontarians, the app is **voluntary** and has been designed with a **privacy-first approach**.
- **The app does:**
 - Help more people—especially the people you don't know—get alerted anonymously if they've been exposed
 - Connect users with public health guidance, including where to get tested
 - Automatically destroy all data after 21 days
 - Work across Android devices and iPhones
 - Interact with other similar apps from outside Ontario, in the future
- **The app does not:**
 - Track or trace the contacts of a user who has tested positive for COVID
 - Serve as a real-time or mandatory health screening tool for job sites
 - Collect any personal data or personal health information
 - Collect or track anyone's location
 - Identify who users are--or know their phone number, address or any other identifying information

How the App Works

1

- Users choose to download the app from the app store to their iPhone/Android device.
- Once downloaded, the app runs in the background.
- When two app users are near each other, their phones use Bluetooth to exchange an anonymized, encrypted “digital handshake”, without collecting or sharing any personal information or location data.

2

- If a user tests positive, they can choose to retrieve a security code and anonymously notify all devices they’ve been near.
- To prevent misreporting, the code is only available to a person with a **confirmed** COVID-19 lab result from Public Health.
- In Ontario, this code will be accessible through **Ontario’s Lab Results Viewer**, the online, self-service tool that uses data from Ontario Health and covers close to 90% of all lab results in the province.

How the App Works (continued)

3

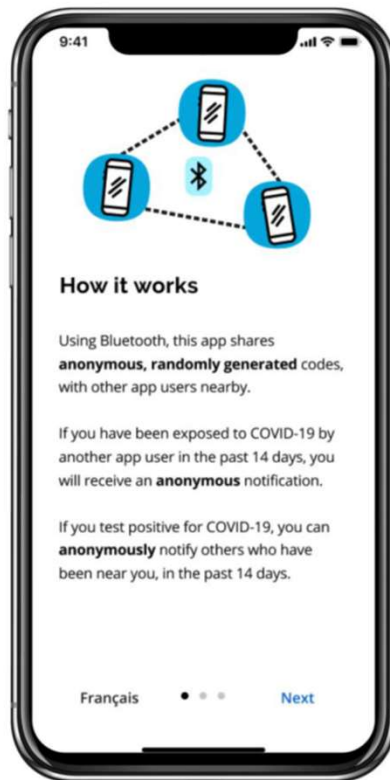
- If the user chooses, they can enter their code into the app and anonymously notify other app users who have been near them in the past 14 days.
- To protect privacy, no details are shared about the time, date, or place of exposure, nor is the identity of any app user shared with anyone (neither with other users, nor with public health, nor with the province).

4

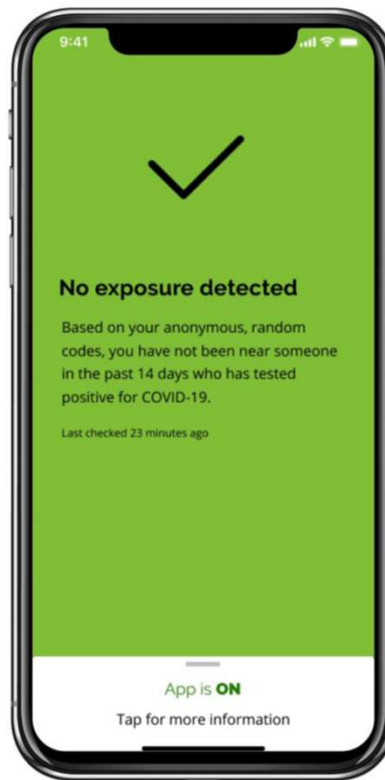
- Other users who may have been near a COVID-positive person receive an alert on their phone, directing them to public health guidance and next steps.

Sample User Journey

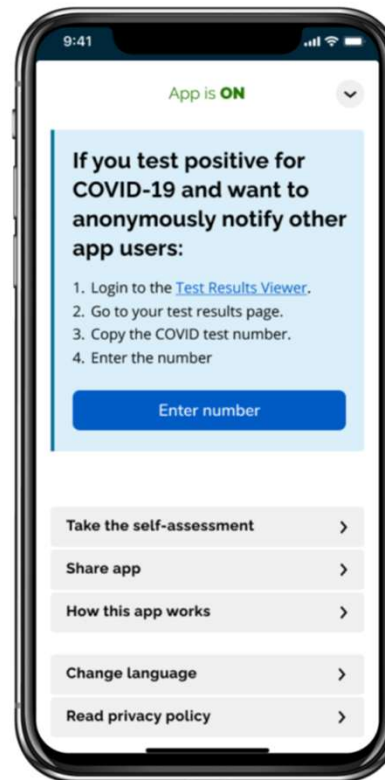
Onboarding



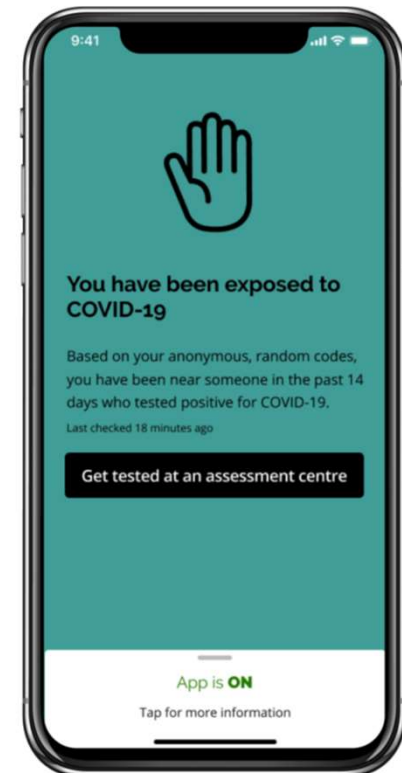
No exposure detected



Notify others and slow the spread



Receiving an exposure notification



How the App Determines COVID-19 Exposure

- Determining whether a user may have been exposed to COVID-19 – and when to notify them of potential exposure – is based on key variables defined by Apple and Google, for all countries/regions that use their platform:
 1. **The cumulative duration** of the exposure between a user and other diagnosed user(s)
 2. **The number of days that have elapsed** since the exposure(s);
 3. **The distance** between the user and a person with COVID-19; and,
- Each of these categories can be weighted with a value between 0 and 8, enabling Ontario's health officials to determine the appropriate calibration for meaningful exposure in our province.

Status and Next Steps

A successful launch is about more than just technology. Ontario and the federal government are working together on several fronts, to ensure that:

- Stakeholders in the ethics, rights, advocacy and business sectors are consulted, and share feedback on the app and its roll-out
- The federal and provincial privacy commissioners are engaged, and privacy and cybersecurity assessments are completed.
- Public health units are supported, so they can encourage app use and connect users with information about the app
- App users can access online and phone support if they have questions about the app.
- A full communications and public education campaign is launched to promote widespread awareness and uptake

After launch, we will continue to:

- Test the app with users, and update it regularly
- Analyze uptake rates and assess Ontarians' and Canadians' awareness of the app
- Support the federal government on launching the app in additional provinces