

Guidance for health professionals about Bluetooth exposure notifications

21 December 2020

To further assist with COVID-19 contact tracing, on 10 December 2020 the NZ COVID Tracer app was updated to include Bluetooth tracing. This guidance provides an update on the use of Bluetooth tracing functionality in the NZ COVID Tracer app and provides information for health professionals regarding the management of individuals who receive a close contact notification following exposure to a case of COVID-19.

The use of Bluetooth functionality allows us to provide timely information to those that may have been in contact with COVID-19 and ensure they promptly self-isolate to reduce the risk of onwards transmission. Bluetooth exposure notifications can be disseminated rapidly in comparison to manual contact tracing processes, and could also potentially notify close contacts that are not known to the case ie, someone that travelled on public transport or attended a festival who was in close proximity to the case.

Important information for health professionals

Bluetooth exposure notifications do not include any location or personal data so it will not be possible to definitively state where or with whom the exposure occurred. It will provide a date that the last exposure occurred, which is needed to calculate quarantine dates.

- Recipients of Bluetooth notifications are considered 'close contacts'
- Recipients are asked to call Healthline on a number dedicated to Bluetooth notification calls (0800 874 243)
 - This is *different* to the regular Healthline number and will not be published in public communications so as to maintain a dedicated channel for those that receive notifications
 - The number will be given directly to the recipient in the notification message

Instead of calling Healthline, it is possible that a recipient of a Bluetooth notification may call (or visit) their GP, emergency department or a community testing centre and ask for advice on what to do.

In this instance, it is advised that you:

- Establish that they received a Bluetooth notification on their phone
- Provide advice on how to safely self-isolate
- Ensure they have the dedicated number (0800 874 243) for Bluetooth exposure notification
- Ask them to call Healthline who will discuss the details to determine the type of notification and last exposure date.

It is important to note that Bluetooth notifications are different to notifications in the NZ COVID Tracer app resulting from scanning a QR code or check-in. Bluetooth notifications are orange whereas QR notifications are yellow. QR notifications contain the general COVID-19 Healthline number (0800 358 5453) and are targeted at low risk, casual contacts who scanned into a location of interest at a similar time to a case.

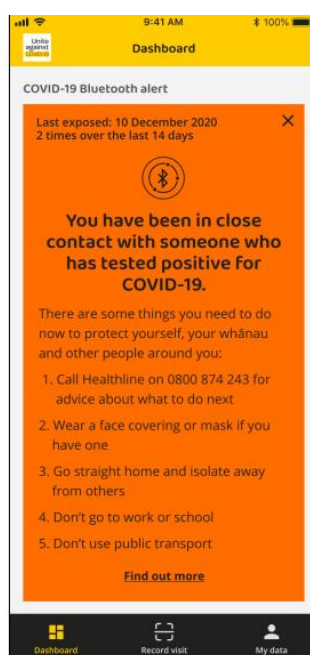
Advice for healthcare workers regarding use of Bluetooth on their own phones

- Healthcare workers are encouraged to download and use the NZ COVID Tracer app. As there is currently a low incidence of community cases in NZ, there is no need to turn Bluetooth off while working in healthcare buildings, including hospitals and general practices (unless providing direct care for patients that have been diagnosed with COVID-19).
- This advice is being given as healthcare workers work in highly specialised secure environments, are trained in infection prevention and control processes, and are wearing medical grade PPE as required.

- If a healthcare worker believes that they've been in contact with COVID-19, or gets an alert telling them that they've been in contact with someone who has tested positive, they should contact their local public health unit for advice.
- If you have two phones (eg, work and personal) then it is recommended to only activate Bluetooth on *one* phone – the one you have with you most often.
- The use of Bluetooth for healthcare workers may be reviewed if there is a significant outbreak and an increase in the number of community cases.

The exposure notification

- To send exposure notifications, the Public Health Unit will send a one-time password to the case via SMS. The case enters this into their app to allow their Bluetooth information to be shared. This uploads the cases anonymised information stored as 'keys' on their phone to allow other phones to check for a match.
- If another Bluetooth user's phone detects a match, they will receive a notification as below:



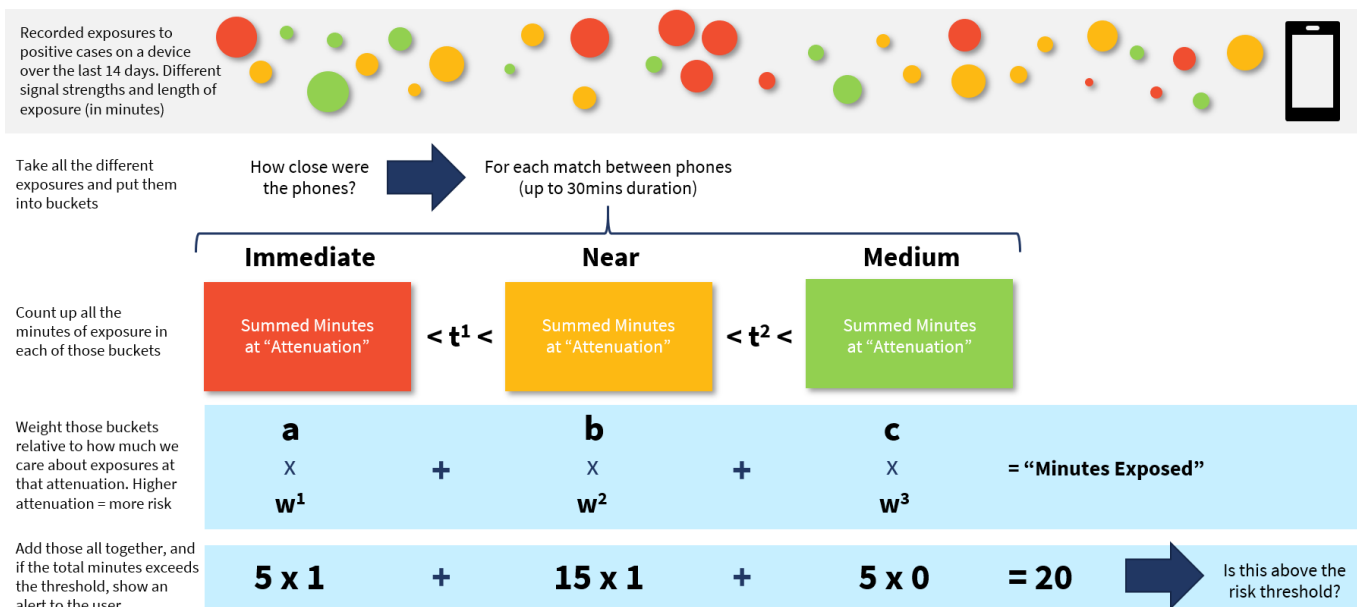
Instructions for the recipient

1. Call Healthline on 0800 874 243 for advice about what to do next
2. Wear a face covering or mask if you have one
3. Go straight home and isolate away from others
4. Don't go to work or school
5. Don't use public transport

NOTE: If a recipient dismisses the notification, then the information about what to do and who to call will no longer be available to view.

The technology

NZ COVID Tracer uses the COVID Green React Native Exposure Notification Service plugin to interface with the Exposure Notification (EN) framework on the device. This plugin implements a risk scoring algorithm using the scoring method found in iOS v1 and Android v1.5 of the EN framework.



In summary:

- Devices record interactions with other nearby EN-activated devices, including attenuation, duration, and other metadata (transmit power, etc). These 'exposures' are shown as the coloured dots.
- When the device downloads Diagnosis Keys (keys from a positive case) it re-calculates the Rolling Proximity Identifiers from those Diagnosis Keys and checks if there are any matching identifiers in the record on the device.
- If matching exposures are found they are fed into the risk scoring calculation as follows:
 - Sort each exposure into one of three buckets, *immediate*, *near*, and *medium*, based on the configured durationAtAttenuationThresholds.
 - For each bucket, sum the number of minutes of exposures within that bucket
 - Weight each bucket using the corresponding thresholdWeightings value
 - Sum the weighted value to give a total weighted exposure minutes.
- This calculation gives a risk score as "exposure minutes", i.e. the number of cumulative minutes this device has spent in proximity to other devices linked to a confirmed positive case of COVID-19.
- If this score is above a given threshold, the user is alerted through a push notification and in-app message alerting them to appropriate next steps.

This information can be found at <https://github.com/minhealthnz/nz-covid-tracer-docs/blob/main/docs/exposure-notifications/scoring.md>

More information

<https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-resources-and-tools/nz-covid-tracer-app/how-nz-covid-tracer-works/bluetooth-tracing>

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[also attached: media pre-release FAQs on Bluetooth]