

Ministry of Health
COVID-19 Contact Tracing Application

Privacy Impact Assessment

Includes: Release 1

Date 15 May 2020

Confidentiality

This Privacy Impact Assessment (“the Assessment”) will be an evolving document that will record the impacts related to the latest release developments, immediately prior to implementation of such releases. This document will be regularly updated. The current version of this document will be made publicly available, commencing with initial release of the NZ COVID Tracer mobile app.

Document creation and management

This document has been prepared by the Data & Digital Directorate, Ministry of Health.

Consultations with the following have occurred during the development of this document:

- Sector Portfolio Manager, Digital Portfolio Team, Ministry of Health
- Manager, Data Governance, Data & Digital, Ministry of Health
- Project Manager, COVID-19 Contact Tracing App, Data & Digital, Ministry of Health
- General Manager, Emerging Health Technology and Innovation, Ministry of Health
- The Chief Privacy Officer of the Ministry of Health
- The Office of the Privacy Commissioner

Disclaimer

This Assessment has been prepared to assist the Ministry of Health (“the Ministry”) to review the purposes for which information collected via the NZ COVID Tracer mobile app can be used, and the privacy safeguards that are required to manage those purposes.

Every effort has been made to ensure that the information contained in this report is reliable and up to date.

This Assessment is intended to be a ‘work in progress’ and may be amended from time to time as circumstances change or new information is proposed to be collected and used.

Summary of Intent

This Assessment represents the current state of the way the NZ COVID Tracer mobile app will operate, and expectations for future releases.

Contents

SECTION ONE – EXECUTIVE SUMMARY	4
CLARITY OF PURPOSE	9
INFORMATION COLLECTION PROCESSES	10
ACCESS AND SECURITY	11
FUTURE PRIVACY IMPACT ASSESSMENT ACTIVITY	11
SECTION TWO – SCOPE OF THIS ASSESSMENT	12
ASSUMPTIONS APPLIED	12
METHODOLOGY - PROCESS FOLLOWED IN DEVELOPMENT OF THIS ASSESSMENT	13
SECTION THREE – COVID-19 CONTACT TRACING APP	14
BACKGROUND	14
INFORMATION COLLECTED AND USER INFORMATION FLOWS	16
SECURITY	24
GOVERNANCE	25
DATA ACCESS	25
SECTION FOUR - PRIVACY ANALYSIS	26
SECTION FIVE - INTENDED FUTURE USE CASES	32

Section One – Executive Summary

1. In New Zealand, the COVID-19 pandemic was considered sufficiently serious to impose a nationwide state of emergency under the Civil Defence Emergency Management Act 2002¹.
2. The COVID-19 pandemic is forcing governments around the world to evaluate how standard public health approaches to managing and controlling infectious disease can be bolstered and augmented by technology.
3. The speed and efficiency of contact tracing is one of the most critical factors in a health system's ability to slow or stop the spread of communicable diseases². In the case of COVID-19, it has been determined that under routine conditions of movement and contact amongst the population, the disease can spread too quickly to be contained by traditional contact tracing practices alone³.
4. The Ministry has identified an opportunity to support national Contact Tracing processes by use of a Mobile Application for supported iOS and Android smart phones (the NZ COVID Tracer mobile app), a Web Application (Website), and a Data Platform (Platform). These are collectively referred to as the COVID-19 Contact Tracing Application (the CCTA).
5. The Office of the Privacy Commissioner has overseen and supports this release.

Privacy focus

6. The intention of the Ministry has been to retain consumer choice, minimise the collection of personal information to those matters most directly useful to its contact tracing purposes, and limit who will have access to that information. It has also endeavoured to minimise any potential privacy risks in its development of the CCTA. Consumer trust is essential if use of the CCTA is to become widespread. The Ministry intends to earn and respect that trust.
7. The purpose of development of this Assessment has been to review the process of collection, storage, use and sharing of personal and contact information associated with the CCTA to ensure that relevant risks are identified and mitigated. This has involved ongoing consultation with the Office of the Privacy Commissioner to ensure that the CCTA retains a strong privacy focus.
8. This Assessment is to be a 'living' document that will be updated as the CCTA development progresses, with the intent that updates be published either ahead of or

¹ On 30 January 2020 'novel coronavirus capable of causing severe respiratory illness' was listed under the Health Act schedule as a notifiable infectious disease. On 25 March 2020 an epidemic notice came into force under the Epidemic Preparedness Act 2006.

² *Rapid case detection and contact tracing, combined with other basic public health measures, has over 90% efficacy against COVID-19 at the population level, making it as effective as many vaccines. This intervention is central to COVID-19 elimination in New Zealand:* Dr Verrall, A 10 April 2020: Rapid Audit of Contact Tracing for COVID-19 in New Zealand page 1.

³ <https://science.sciencemag.org/content/early/2020/04/09/science.abb6936>
https://www.health.govt.nz/system/files/documents/publications/contact_tracing_report_verrall.pdf

alongside future releases. This will enable the Ministry to maintain transparency about the CCTA with Consumers.

Background

9. The Ministry's elimination strategy is a sustained approach to 'keep it out, find it and stamp it out'. It does this through: controlling entry at the border with routine quarantine or supervised self-isolation for 14 days; disease surveillance; physical distancing and hygiene measures; testing for and tracing all potential cases; isolating cases and their Close Contacts; and broader public health controls depending on the Alert Level we are in.
10. Contact tracing is one of the pillars of the public health response to this infectious disease pandemic along with border control measures, testing, case identification and case isolation. The purpose of contact tracing is to obtain information about the contacts of persons with infectious diseases or suspected of having infectious diseases in order to:
 - 10.1. Identify the source of the infectious disease or suspected infectious disease
 - 10.2. Make contacts aware that they too may be infected, thereby encouraging them to seek testing and treatment if necessary
 - 10.3. Limit the transmission of infectious disease or suspected infectious disease⁴

How 'contact tracing' works

11. Once a person is identified as having tested positive for COVID-19, or is suspected of having COVID-19, contact tracing will commence to identify Close Contacts. This supports the 'find it and stamp it out' component of the Ministry elimination strategy.
 - 11.1. Trained Contact Tracers will contact the infected person directly to ask questions, in line with their responsibilities under subpart 5 of Part 3A of the Health Act. Contact Tracers need to identify Close Contacts promptly to reduce the risk that the infection may spread further, and to ensure people get the best advice as quickly as possible. Close contacts are those individuals at higher risk of being infected.
 - 11.2. Contact tracing includes a phone call from a Contact Tracer to the Close Contact to provide advice on self-isolation and checking on health and wellbeing. It is therefore important that the Contact Tracer can promptly identify Close Contacts and quickly make contact with them.
 - 11.3. The infected person does not always know the identity of individuals who may be Close Contacts, for example they might have attended an event or a workplace with others they did not know. Alternatively, they might know who the individual

⁴ Section 92ZX of the Health Act 1956

is, but not how to contact them. Sometimes it may be difficult to contact an infected person or a Close Contact if, for example, they are travelling.

12. The Ministry has worked with the health sector and the community to identify ways of improving access to the relevant information, while still respecting individual privacy.
13. Technology can help with the process of contact tracing. The Ministry has created a National Contact Tracing System (the NCTS), to greatly increase the capacity and reliability of tracing activity, and support existing regional expertise. Contact tracing systems had been partly paper based and regional in operation until the NCTS deployment. The NCTS includes reporting safeguards designed to reduce the chance of individuals being missed when volumes dramatically increase, and many Contact Tracers are involved from locations around the country.
14. An additional key use for technology will be to enable faster access to the correct contact details for people who may come in contact with COVID-19.
15. The Ministry has commissioned and intends to operate the CCTA to enable the New Zealand public to opt in to support contact tracing processes for the purposes of the COVID-19 pandemic response. Individuals who choose to use any component of the CCTA are referred to as “Consumers” in this Assessment.
16. As other apps enter the New Zealand marketplace, the Ministry is developing standards that will enable those other apps to participate in support of the public health contact tracing processes, provided that the other apps can meet the necessary security and privacy standards.

COVID-19 Contact Tracing Application (*the CCTA*)

17. Development of the CCTA is progressing in stages, and new functions will be released as they are developed. This Assessment addresses Release 1:

Release identifier	Content of Release	Intended date of release
Release 1	Website to enable Consumers to opt in and submit their own contact details. These details will be available to contact tracers to look-up within the NCTS when that person tests positive with COVID-19 or is a potential Close Contact of that person.	20 May 2020
	NZ COVID Tracer mobile apps for iOS and Android	

	<ul style="list-style-type: none"> • These will enable Consumers to opt in and submit their own contact details via the mobile app • Consumers will be able to 'check-in' to locations by scanning a QR code (location recording). This record will remain on the Consumer's phone as a digital diary if that Consumer is contacted by a contact tracer. The information will not leave the Consumer's phone in this release. 	
--	---	--

18. In future it is intended that other features will be enabled. A Privacy Impact Assessment will be completed prior to any such implementations. It is planned that Release 2 will include additional functionality for the iOS and Android apps. This may include:

18.1. The ability to share recorded locations electronically with Contact Tracers if the Consumer chooses to do so. Additional functionality in future for location aspects of the App may enable some form of 'exposure' event notification.

18.2. A daily check-in – this would only be for people in self-isolation / quarantine where a Contact Tracer has indicated this is an appropriate option for that Consumer.

19. If the components of this additional functionality are to be implemented, they will each be addressed in a subsequent Privacy Impact Assessment, prior to implementation.

Initial features of the CCTA

Identification and current contact details

20. Consumers can share their personal and contact information via the CCTA, so it is available for quick access by Contact Tracers if they need to get in contact with the Consumer due to a COVID-19 related matter. This contact sharing facility can be accessed by Consumers by the Website interface or by the App via smartphone.

21. Information about the identification and contact details of Consumers will be submitted to and stored securely by the New Zealand Ministry of Health. These details will be made available to public health services, including Contact Tracers, for the purposes of supporting the public health response to the COVID-19 pandemic. These CCTA details will not be shared with any other Government agencies.

22. Outside of the CCTA, if a Consumer is required by a Contact Tracer to provide additional information when that Consumer has or is suspected of having COVID-19, or is a Close Contact, any management of that information will be in accordance with the contact tracing provisions of the Health Act and the Privacy Act. Only agencies directly supporting the public health response to the COVID-19 pandemic will be permitted to have access to that information.

Location data

23. Location information, including the ability to “*check in*” to high traffic settings like public transport or cafes⁵ is recognised as an important tool to support contact tracing.
24. Consumers who join the CCTA and download the App, will have the choice of whether or not to use the installed location feature, and on which occasions they wish to use it.
- 24.1. This location feature is designed to help the Consumer keep a record of places they have visited, and will note the date and time they scanned a Quick Response (QR code) at a participating premises.
- 24.2. It is intended to be a helpful record if a Consumer is contacted by a Contact Tracer and asked to indicate if they may have been in close contact with others.
- 24.2.1. The Contact Tracer will need to discuss the location information further with the Consumer to clarify the time frame the Consumer was at the location, what they did there and who they were with. By using the App information as a prompt for the discussion the Contact Tracer will be able to get a better risk profile to help them identify if others may be at risk and need to be contacted.
- 24.2.2. This may also apply if the Consumer is contacted by a Contact Tracer and told that they may be a Close Contact themselves. The Consumer could review the location information they hold on their phone and discuss that with the Contact Tracer to help identify their personal risk of having been a Close Contact and the risk to others they may have been in contact with.
25. The App will not record any location information automatically. A consumer must proactively use the App to scan the QR code. QR codes will only be displayed at a participating business or location. This feature is not available on the Website.
26. Once the Consumer has scanned the QR code for a location using the App, information about the scanned locations will be stored on the Consumer’s smart phone.
- 26.1. The information stored consists of a Global Location Number (GLN), location name, physical address of the location, and the date and time the scan occurred. The GLN is a unique identifier that represents a physical location or sub-location of a business.
- 26.2. The Ministry of Business, Innovation, and Employment (MBIE), through the New Zealand Business Number (NZBN), is responsible for the allocation and management of GLNs and the associated business information.

⁵ Dr Verrall, A 10 April 2020: Rapid Audit of Contact Tracing for COVID-19 in New Zealand page 7

- 26.3. The scanned location information, stored on the Consumer's smart phone, will not be transmitted to the Ministry or anywhere else in Release 1. The data rotation for storage of information on the phone will be 31 days. This is based on a 14-day incubation period for COVID-19, plus 7 days of illness and 10 days of being symptom free. After 31 days the information will automatically delete from the phone. These timings have been set based on public health and contact tracing advice.
- 26.4. If the Consumer tests positive for COVID-19, when they are contacted by a Contact Tracer for information, they can use their recorded locations as a memory aid, to assist them to answer questions from Contact Tracers about their movements.
- 26.5. Alternatively, in a future release of the App, a Consumer may elect to send their recorded location information to the Ministry for access by public health staff involved in contact tracing. This will only be able to occur if the Consumer is invited to do this by a Contact Tracer and the Consumer agrees to release the location information from the Consumer's phone to the Contact Tracer. This will be fully reviewed in a future Privacy Impact Assessment before release.

Analytics and reporting

27. It is recognised that robust reporting and KPIs are essential to evaluate the effectiveness and proper performance of the contact tracing process⁶. As such, anonymous analytics events may be captured at key stages throughout the CCTA to inform reporting on how it is being used.
- 27.1. Any analytics data captured cannot be used to personally identify an individual Consumer, and any reporting is done on an aggregate basis.
- 27.2. Analytics data is stored separately from Consumer data, and there is no mechanism to link analytics events with an individual Consumer or their data.
- 27.3. Aggregate demographic information of Consumers, including approximate age range, gender, and ethnicity, is captured to provide reporting on the usage of the CCTA by different segments of the population. This data is used to inform wider Ministry efforts about the equity of the overall technology response to the COVID-19 pandemic.

Clarity of purpose

28. A simple Privacy Statement will be displayed to Consumers as part of the CCTA registration process. This is linked to a more detailed Privacy and Security Statement for those who wish to view that more detailed information. This has been developed with the

⁶ Dr Verrall, A 10 April 2020: Rapid Audit of Contact Tracing for COVID-19 in New Zealand page 8

intent that all Consumers can obtain a full understanding of how this information will be used if they choose to participate.

29. Authorised users of the information (Contact Tracers) will be informed of about expectations for use, and limitations on use of this personal information. This will be consistent with their existing legislative responsibilities under the Health Act to manage this information appropriately.
30. CCTA Consumers will be notified in advance of any changes being implemented to the Purpose Statement or other Privacy Notice Materials via their registered email address or a notice in the App, to enable ongoing Consumer choice about participation.

Information Collection Processes

31. The Ministry will produce standardised Privacy Notice Materials, compliant with rule 3 of the Health Information Privacy Code. The Privacy Notice Materials have been developed and will be made available to Consumers at the first contact with the CCTA, and will form part of the Terms of Use, prior to the Consumer submitting any information.
32. The Privacy Notice Materials are to be designed to enable Consumers and Contact Tracers to be fully informed about possible use and disclosures of information:
 - 32.1. Guidance will be taken from the Health Information Governance Guidelines HISO 10064:2017⁷ in development of these materials.
 - 32.2. The standardised information will be provided to, or easily available to be accessed, by all Consumers, through the App.
 - 32.3. Future releases of the Privacy Notice Materials may be available in different languages, and if additional communication assistance is required for a group of individuals this will be reviewed in a timely manner.
33. Consumers have the choice of opting-in to use the CCTA, and if they do, will retain the choice of the extent to which they wish to contribute information. This includes:
 - 33.1. when recording their contact details for upload to the Ministry (other than the email address required for registration) they may choose what contact and identification details they include;
 - 33.2. whether or not to use the location features, and Consumers may choose which participating locations that they wish to scan;
 - 33.3. when the ability to electronically share location check-in data is added in a future release, they will retain the choice of whether to release electronic details of those locations held on their phone at the time when a positive or probable diagnosis for COVID-19 is confirmed.

⁷ <https://www.health.govt.nz/our-work/ehealth/digital-health-standards-and-governance/health-information-standards/health-information-governance-guidelines>

34. Information provided should be clear, and appropriately worded for the intended audience (level of complexity and language(s) it is written in). Links will be provided to a web-based explanation in the Privacy and Security Statement which will contain more detail for those individuals that wish to know more (a layered privacy notice). The Privacy and Security Statement will also link to the current version of this Assessment.
35. As this project evolves, the Ministry intends to have an ongoing privacy assessment process to mitigate risks associated with the implementation of any new use / disclosure type. Any future use / disclosure must remain limited to the Ministry's general pandemic response requirements. If any significant change is contemplated this may require updating any web-based privacy information, and advance notice will be provided to participating Consumers so they can choose to opt-out at that point if they wish.

Access and Security

36. The CCTA implements robust security and authorisation controls to prevent unauthorised access to information, and follows leading practices for encrypting data at rest and in transit. Access to information requires authentication.
37. Prior to each release, the CCTA and supporting web services will be independently security assessed by an All of Government approved supplier. Findings from the reviews will be remediated where appropriate. Future releases of the solution will also be independently assessed to the same standards.

Future Privacy Impact Assessment Activity

38. The CCTA has been developed in parallel with completion of this Assessment. The Office of the Privacy Commissioner has provided independent advice and assessment to the project team during this process, which the project team has endeavoured to incorporate into the CCTA application.
39. This Assessment is expected to be a 'living' document that will be reviewed as the Project progresses. The Ministry plans a phased release of functionality in the CCTA, so features available in subsequent releases will require further privacy review prior to implementation.

Section Two – Scope of this Assessment

1. This Assessment does not review the decision-making process, approvals, nor conclusions reached about the decision to create the COVID-19 Contact Tracing App (the CCTA). It is instead focused on the collection, storage, use and sharing of personal and contact information for the purposes of contact tracing.
2. This is the first Privacy Impact Assessment in relation to the CCTA, covering Release 1. It is intended that additional Privacy Impact Assessments will supplement this work as the CCTA develops.
3. The CCTA will be developed in stages. Content of proposed and possible future releases are briefly described in Section Five - Intended Future Use Cases.
 - 3.1. Release 1 is planned for release on or about 20 May 2020. This will:
 - 3.1.1. include a website and smart phone application (NZ COVID Tracer) that will enable Consumers to choose to sign up to the CCTA and register their identification and current contact and address details; and
 - 3.1.2. allow Consumers to record on their phones the locations of participating businesses by scanning a QR code (this will also record the day and time of scan). This function will not be available on the website.
 - 3.2. Release 2 (not reviewed under this Assessment) will enable Consumers consent to electronically sharing their recorded check-in locations in the event they test positive for COVID-19, and an option to have a daily check in via the App when required to self-isolate or quarantine due to COVID-19. The Release 2 components will be addressed in a subsequent Privacy Impact Assessment.
4. In relation to Release 1, this current assessment covers:
 - 4.1. The personal, demographic, location and anonymous information collected from the Consumer about themselves
 - 4.2. Where and how the collected information is to be stored
 - 4.3. Who will use the information collected and for what purposes
 - 4.4. When Contact Tracers will be permitted to access the information identified above
 - 4.5. How long the information will be kept
 - 4.6. How the information will be disposed of when no longer required

Assumptions applied

5. The assumptions that have been applied in the development of this Assessment include:

- 5.1. As this CCTA project develops, there will be evidence and information generated through the development and deployment of the application (e.g. Statistics of use and feedback from Consumers) that will impact on how the Ministry determines what is important for the future development of the CCTA. This may result in changes to the Terms of Use, the information collected, and the risks and mitigations required.
- 5.2. Discussions will continue between key parties (the Ministry and the Office of the Privacy Commissioner in the first instance), and future versions of this Assessment will record changes to information that is collected and the consequent risks, further analysis and mitigations.
- 5.3. This Assessment will be made publicly available at the time of the first release for the public to understand the collection, storage, use and sharing of personal and third-party information for purposes of transparency. This will continue to be updated as this project progresses.

Methodology - Process followed in development of this Assessment

6. This Assessment has been developed on the basis of review of project documents and discussions with members of the project team.
7. Multiple meetings have been held between stakeholders from the Office of the Privacy Commissioner and the Ministry's Data & Digital Project team. The Privacy Commissioner and his team have also reviewed relevant project documents. The Ministry has updated the design of the App, wording and content visible to Consumers and the content of this PIA based on the feedback from those meetings and reviews.

Section Three – Operational Details

Background

1. Contact tracing has been identified in the Ministry of Health’s COVID-19 Health and Disability System Response Plan as a critical component of the public health response.⁸
2. The Health Act 1956 provides a statutory regime for Contact Tracing. The CCTA is not directly authorised under these statutory provisions, but some of the information collected via the CCTA is aligned with the information used by Contact Tracers:
 - 2.1. Section 92ZY of the Health Act provides that the purpose of contact tracing is to obtain information about the contacts of persons with infectious diseases or suspected of having infectious diseases in order to:
 - 2.1.1. Identify the source of the infectious disease or suspected infectious disease
 - 2.1.2. Make contacts aware that they too may be infected, thereby encouraging them to seek testing and treatment if necessary
 - 2.1.3. Limit the transmission of infectious disease or suspected infectious disease
 - 2.2. Section 92ZZC provides that individuals with infectious disease, or suspected of having an infectious disease, may be required to provide the name, age, sex, address and contact details of any contact.
4. A Consumer’s personal information, and information about who they have been in ‘close contact’ with is a standard part of the process undertaken by Contact Tracers to limit the spread of the virus. The process operates as follows:
 - 4.1. A call by a Contact Tracer to advise of test results, and collect necessary information for contact tracing purposes will be made directly to the infected Consumer.
 - 4.2. That call will also include requesting information about locations the Consumer has visited and other individuals with whom the Consumer has been in contact (their Close Contacts).
 - 4.3. Those Close Contacts will then also be contacted by a Contact Tracer for information to be provided to them about the matters outlined in sections 92ZY (b) and 92ZZ (d).
5. The Ministry has access to the National Health Index (NHI) and the National Enrolment Service (NES). These services allow the Ministry to identify and locate a majority of New Zealanders for contact tracing purposes, and are being used as part of the NCTS process. However, a number of limitations have been identified, including:

⁸ <https://www.health.govt.nz/publication/covid-19-health-and-disability-system-response-plan>

Incorrect contact details of Consumers and Close Contacts

- Consumers who have changed their contact details since they were last updated in the NHI or NES services, or who may not be residing at their usual address. The impact of this is that Contact Tracers may find it more difficult to contact the person concerned, delaying the process of managing their self-isolation, and Close Contact identification, or they may not be able to locate them at all.
- If the infected person or a Close Contact has independently submitted their contact information via the CCTA then these contact details could also be accessed by a Contact Tracer if they had not been able to locate them promptly via the standard processes.

Inability to identify Close Contacts

- Consumers have difficulty remembering where they have been and who they have had 'close contact' with, particularly over the period of interest (up to 31 days). This means Consumers and therefore Contact Tracers may not be able to identify all of those who need to be tested, and/or isolated. This is even more of an issue when New Zealand is at lower Alert Levels, as Consumers will be more mobile.
- The use of the CCTA to keep a record of their visits to participating locations that display an appropriate QR code, to be maintained by each Consumer, on their own phone, may assist them as a memory prompt.

The Ministry approach to the CCTA development

6. The Ministry has taken an approach informed by the work done for the development of the proposed national Health Information Platform⁹. This work was informed by the development of the social sector Data Protection and Use Policy.¹⁰ The intent with this is for the Ministry to be transparent with the use of the data, in order to maintain and grow social licence. The Ministry has applied these principles in the following manner:
 - The information collected will be voluntarily provided by the Consumer (on an opt in basis)
 - The information collected will only be used for the COVID-19 Pandemic Public Health Response (limited use)
 - Any information relating to the Consumer's visited locations, will remain on the Consumer's device unless the Consumer agrees to release it if requested to share it

⁹ <https://www.health.govt.nz/our-work/digital-health/digital-health-sector-architecture-standards-and-governance/health-information-standards-0/standards-development/personal-health-information-standards>
https://www.health.govt.nz/system/files/documents/pages/digital_health_portfolio_report_nov_2019-290120.pdf

¹⁰ <https://dpup.swa.govt.nz/>

by a Contact Tracer (noting this electronic release facility will only be available in a future Release).

- These location questions will only arise if the Consumer either has COVID-19 or is a suspected case, or is a potential Close Contact.
 - The Contact Tracer may ask questions about the circumstances in which a person may have contracted or transmitted COVID-19 (under section 92ZZC(3) of the Health Act. This may include discussion about locations the Consumer has visited. The Consumer must respond to appropriate questions put by a Contact Tracer but this will not compel them to release the information from the phone itself.
 - The visited location records on the Consumer's phone will expire on a rolling 31-day period (consistent with the incubation period of the virus).
7. The approach the Ministry has taken is to try and make it as easy as possible for Consumers to sign up and provide their information, while providing sufficient security controls for Consumers to manage their information. Consumers will choose to visit the website or download the App through hearing about it from a number of sources. If they choose to sign up, they will see the Privacy Statement and have access to the Terms of Use prior to registering.

Information Collected and User Information Flows

8. The Ministry has identified four key sets of information the CCTA will collect:
- **Personal contact, and demographic details** – Consumers providing this information about themselves will allow Contact Tracers to contact the correct person more quickly and easily. It will also allow the Ministry to understand its performance and develop a solution that is equitable (via ethnicity information, if Consumers choose to provide it).
 - **Visited locations** – this information, provided by Consumers about participating locations they have visited, will allow Contact Tracers to more quickly assess information relating to locations where the COVID-19 infected (or suspected case) Consumer may have encountered Close Contacts, thus reducing the risk of transmission to others.
 - A Consumer must choose to scan a QR code on each occasion or no information will be collected.
 - This location information is held on the phone. In future the Consumer may make a decision to release that information at the relevant time to the CCTA, but this functionality is not available in Release 1.
 - **Daily check-in records** – this will not be collected as part of Release 1. Once the functionality is fully reviewed in a Privacy Impact Assessment, and then implemented, information will be able to be collected onto the NCTS via the App

from those Consumers who are subject to self-isolation or quarantine requirements. The formatting and content for this survey is subject to clinical review and is similar to the question script operated by callers monitoring the daily check-in process (if the Consumer were not to choose to use the App to check in).

- **Anonymous Statistical Information** – this information will be collected from Consumer’s interactions with the CCTA to help the Ministry to understand its performance and develop a solution that is equitable.

Personal contact, and demographic details

Sign Up process

9. Consumers are able to sign up using an email address of their choosing. They will be asked to confirm (via a code sent to that registered email address) that they control this address. This email and password will prevent unauthorised users from accessing the information the Consumer provides.
10. A second layer of protection will allow the use of a Time-Based One Time Passcode (TOTP) in order to further protect the account from unauthorised use (commonly described as “multi-factor”).
11. Consumers can subsequently choose to add their name and current phone number.
12. A component of the CCTA is to gather limited personal and contact information including a Consumer’s phone number, email address, address details, gender and ethnicity. All of the information provided by the Consumer to the Ministry of Health is done so voluntarily. This information is used to:
 - Increase the speed and the reliability with which a Consumer is contacted in the case of having a positive test result or being a Close Contact.
 - Help ensure that the overall service that is delivered by the Ministry is accessible to all parts of New Zealand.
13. Consumers will also be able to add and update this personal demographic information to assist in identifying the correct individual, and their relevant contacts. The Consumer identification and demographic information to be collected has been determined to be necessary for the purpose of the public health response to the COVID-19 pandemic in New Zealand as follows (noting that only the email address is compulsory to participate in the App):

Data	Compulsory	Purpose / necessity
First Name	No	To identify the individual
Middle Name	No	To identify the individual
Last Name	No	To identify the individual

Date of Birth	No	To identify the individual. The year of birth may be used in aggregate reporting on usage of CCTA across the population.
Gender	No	To identify the individual. Some people share the same name. Asking for gender helps to ensure we contact the right person. Gender may be used in aggregate reporting on usage of CCTA across the population.
Phone Number	No	To identify the individual and allow contact to be made
Current/Permanent Address	No	To identify the individual and allow contact to be made. Post code and/or Region from address may be used in aggregate reporting on usage of CCTA across the population
Email address	Yes	Required to create an account. Also used to identify the individual and allow contact to be made
Ethnicity	No	This is to allow the Ministry to understand whether the services provided (information to support faster contact tracing) are equitable. This will help the Ministry confirm it is serving all New Zealanders, and obtaining sufficient population coverage from an equity perspective.

14. Contact and demographic data will be sent to the NCTS via a file transfer mechanism. Contact Tracers will have access to this information as a searchable function in the NCTS, similar to those used with the NHI in the health system. This access will be subject to the existing policies and controls relating to the NCTS.
15. Consumers can choose to recommend the use of the CCTA to their whanau and friends by sharing a link on their Facebook and/or Twitter account.
16. Registered Consumers may also receive official updates about Contact Tracing and other relevant information from Government sources, including updates to the Privacy Statement if required.

Sign-up Flow

Figure 1 represents the 'normal' process flow of signing up to use the COVID-19 Contact Tracing App.

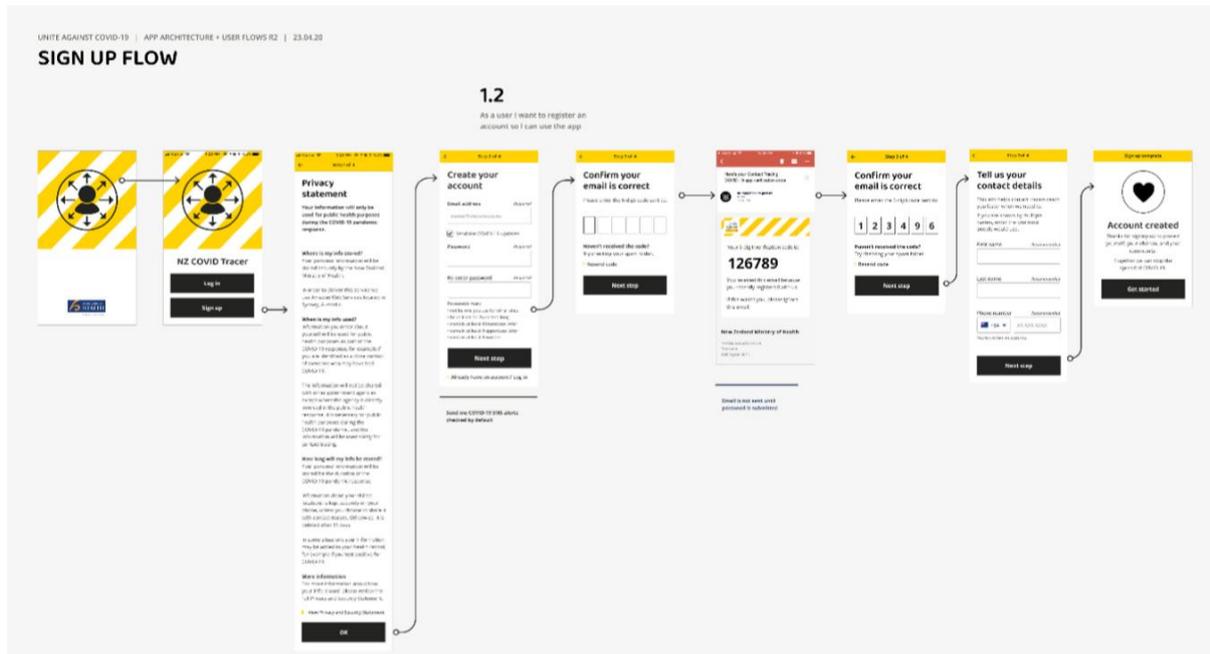


Figure 1: overview of the sign up flow

- All Consumers will be required to confirm their email address using a unique code sent to them via email before being allowed to log in.
- During registration Consumers will be prompted to enter their name and a phone number. This has been identified as the highest value information type for Contact Tracers to get in touch with someone who has been identified as a Close Contact of a confirmed or suspected case of COVID-19. This step is optional but recommended.

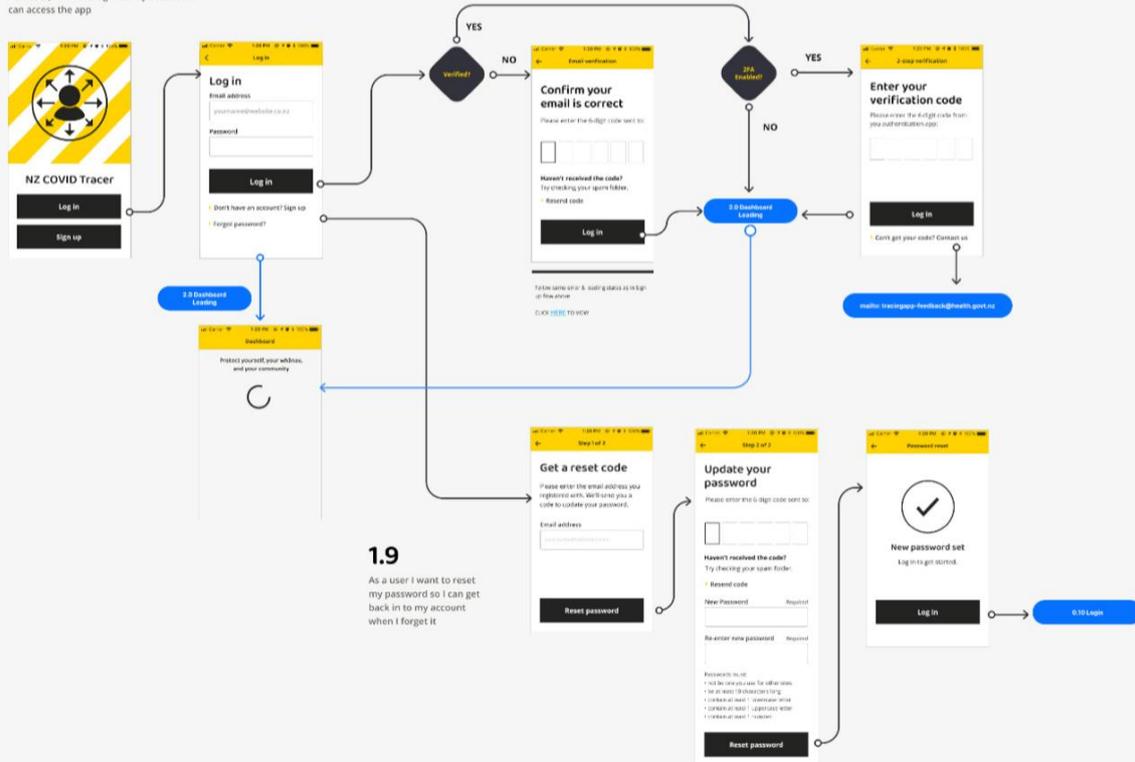
Reset Password

- The Consumer may reset their password to continue using the CCTA.

LOGIN & FORGOT PASSWORD FLOW

1.8

As a user, I want to log in to my account so I can access the app



1.9

As a user I want to reset my password so I can get back in to my account when I forget it

Figure 2: overview of the log in and forgot password flow

20. Password reset requests will be authenticated using the Consumer's email address.

Consumer's Personal Information and Contact Details

21. The register details flow provides the Consumer the ability to provide relevant personal information. Contact Tracers require this information to get in touch with any person who has been named as a Close Contact of a confirmed or suspected case of COVID-19.

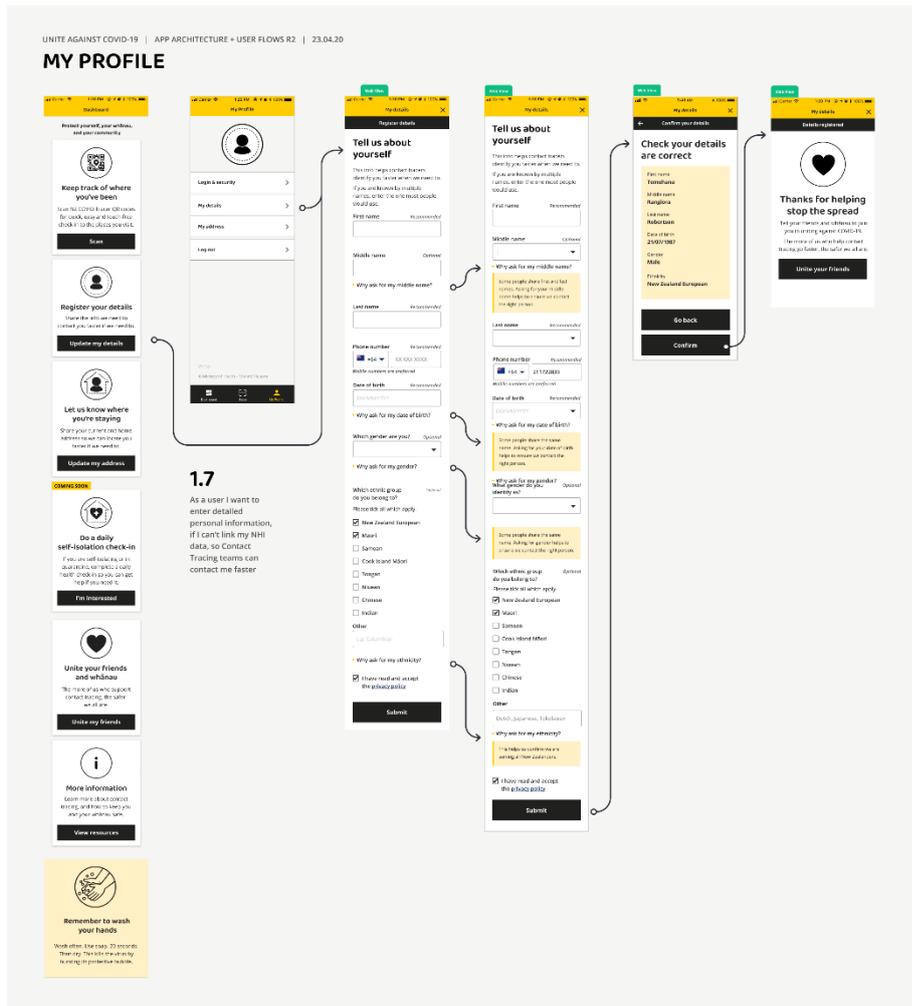


Figure 3: Register details information flow

22. Completion and confirmation of the Consumer's details in the Register Details Flow results in these details being Registered.

Consumers Current Residence Details

23. The Register Address Flow provides the Consumer the opportunity to complete address details of where they are currently staying and if not staying at their home address, then to include home address details as well. This function is not for collecting places the Consumer has visited.

24. This flow uses the Health Identity eSAM Address Web service to provide auto-complete address information. eSAM uses data from NZ Post, Land Information NZ, Statistics NZ, and the Ministry of Health to provide accurate and standardised address and geospatial data. Use of this service is optional, and Consumers may also enter their address manually or by selecting it on a map.

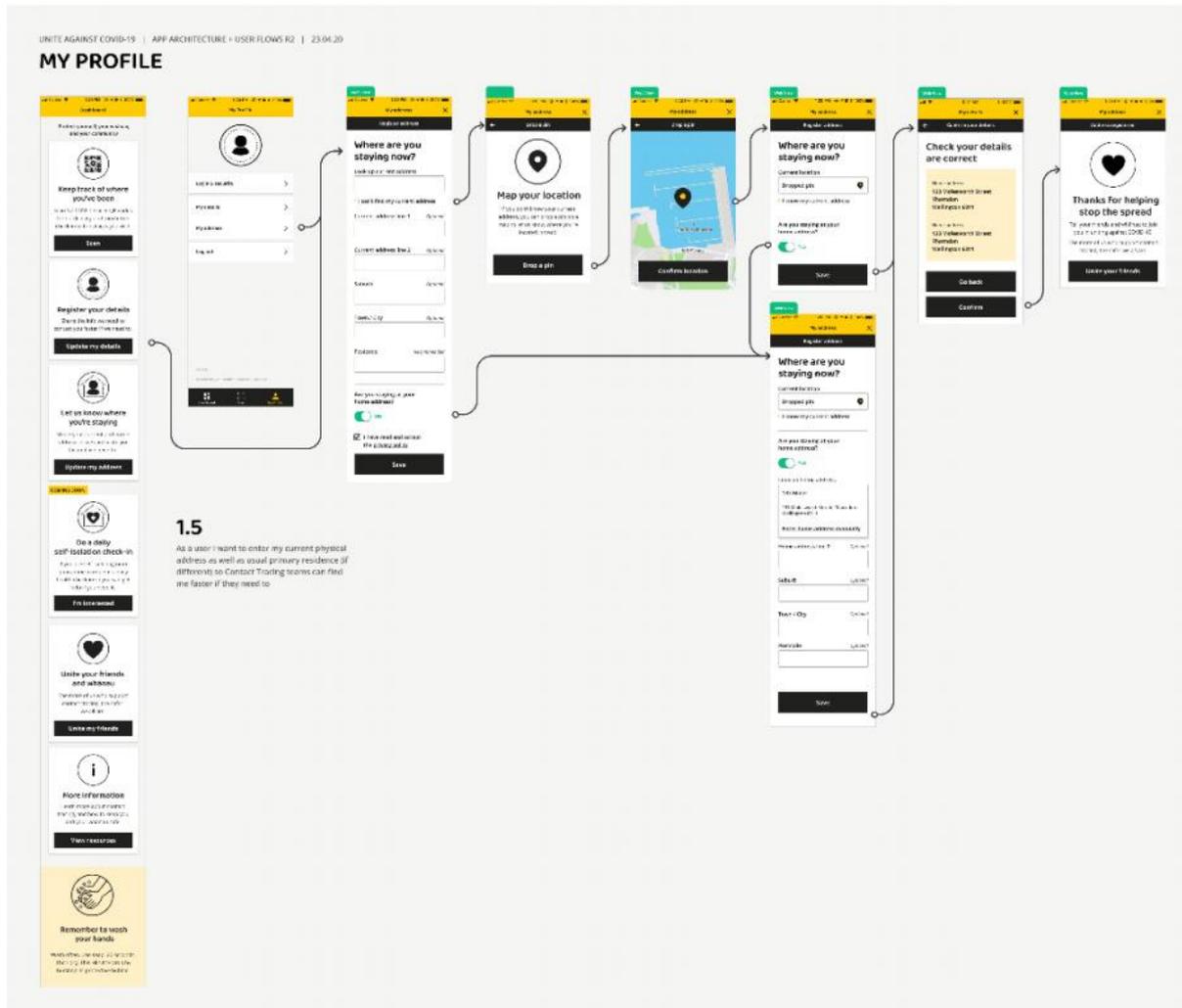


Figure 4: Register address flow

25. If the Consumer does not know their current address, they can use the 'location' function on their smart phone to pin and confirm their current location.

Visited Locations

26. QR codes at participating business locations will be able to be scanned by those with the mobile App.

- This QR Code will contain information about the specific location, including a Global Location Number (GLN).
- These GLN will be used to represent a location, or sub-location, of a business. They will not be compulsory for a business. But if they choose to have one, they will be low cost in terms of a PDF to print out and locate in an appropriate spot on their premises.
- These GLNs are linked to a business's New Zealand Business Number (NZBN). Planning is underway to implement this facility for business by 18 May 2020. It is expected a number of businesses may find the GLN beneficial, as a visible signal that they are taking all reasonable steps to keep their customers safe.

27. The App will record the GLN and the 'check-in time' when the Consumer scans the QR Code. It is noted that there is no facility to include an 'end time' when the Consumer leaves the facility – and this could be unreliable in any event, as the Consumer would need to remember to record their 'check-out' time on their phone. All scanning is a manual process initiated by the Consumer.

28. The Location Check-in flow has the following screen flows:

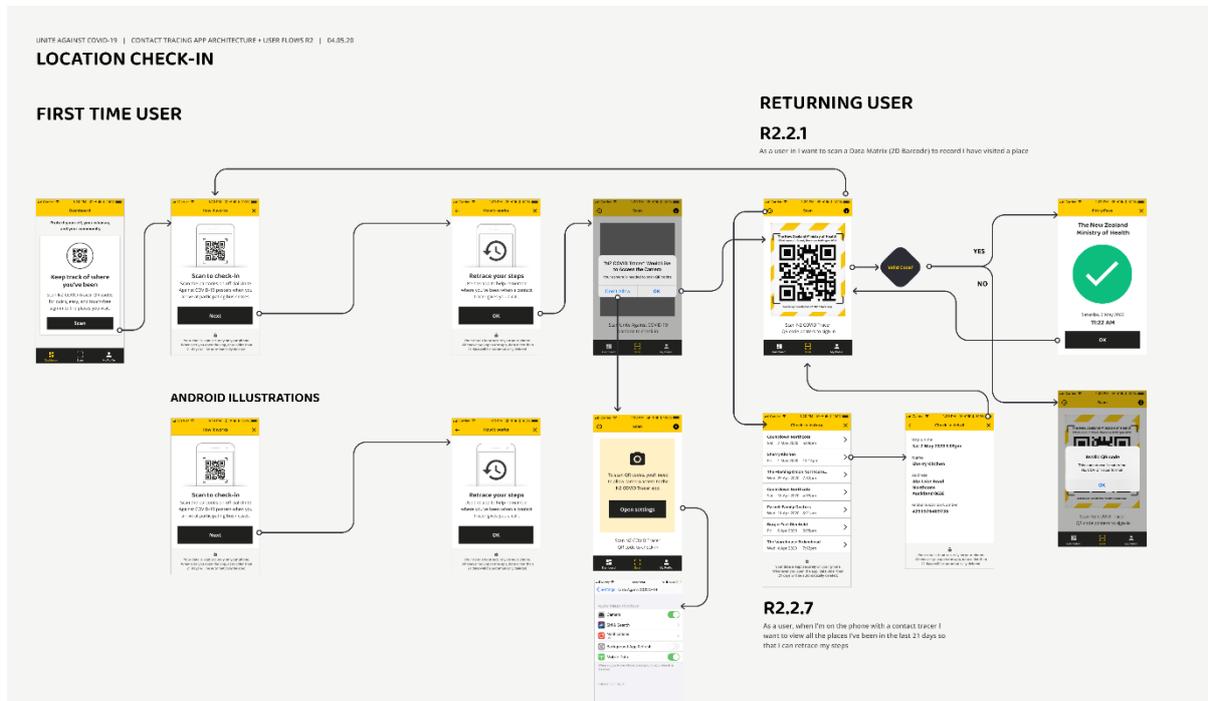


Figure 5: Location Check-in Flow

29. The App will hold location information on the Consumer's phone for 31 days before deleting it.

Anonymous Statistical Information

30. The Ministry intends to use a service (Amazon Pinpoint) to collect and analyse anonymous details about the use of our service. This will allow the Ministry to make sure the CCTA services it delivers meet its objectives (faster contact tracing).

Data	Compulsory	Purpose
The IP address of the device	No	To allow the Ministry to identify opportunities to improve the service
The pages accessed on our site and the links clicked on	No	To allow the Ministry to identify opportunities to improve the service
the date and time the site was visited	No	To allow the Ministry to identify opportunities to improve the service

the referring site (if any) through which the Consumer clicked through to the service	No	To allow the Ministry to identify opportunities to improve the service
the operating system (for example Windows 10, iOS, or Android) on the device used	No	To allow the Ministry to identify opportunities to improve the service
the type of web browser and/or device used (for example, iPhone 8, Internet Explorer, or Google Chrome)	No	To allow the Ministry to identify opportunities to improve the service
other incidental information such as screen resolution and the language setting used	No	To allow the Ministry to identify opportunities to improve the service

31. Analytics events may also be captured at key stages of the App and Website experience. These events are used to provide reporting into the effectiveness and performance of the CCTA and the contact tracing end-to-end service model. Specific events include:
- When the Consumer uses the 'scan location' feature, an event may be recorded that a scan has taken place. No information about the location of this scan or the identity of the Consumer will be recorded. It is not possible to use this event to reconstruct a Consumer's movements or track where they have been. Information about recorded locations remains on their device.
 - Events may be triggered when the Consumer navigates to different parts of the application. The information recorded in this event does not contain personally identifying information.

Security

32. Prior to each release, the CCTA and supporting web services will be independently security reviewed by an All of Government approved supplier. Findings from the review will be remediated where appropriate. Future releases of the solution will also be independently assessed to the same standards.
33. This solution, including Consumer's personal information and anonymised information, is hosted and stored using Amazon Web Services (AWS) in the ap-southeast-2 (Sydney) region. This is a Ministry owned sub-tenancy of the main Ministry of Health AWS tenancy which enforces a number of security, audit, and policy controls.
34. Data stored within AWS is encrypted. The Ministry controls access to the encryption keys and the data.
35. The source code and high-level architecture for initial design of the solution has been reviewed by the Government Communications Security Bureau's National Cyber Security Centre and an independent All of Government security supplier and designed in collaboration with Amazon Web Services.

36. The Specific Agreement with the Service Provider for provision of the CCTA contains standard Ministry Information Technology clauses designed to require performance of relevant New Zealand security and privacy obligations in development of the CCTA.

Governance

37. Governance of the programme and therefore the collection, management, authorised use and deletion has three distinct components:

- The data governance group at the Ministry for COVID-19.
- The Senior Responsible Officer for Data and Digital's COVID-19 response
- The Business Design Council. This includes a sub-set of members from the Digital Investment Board, a Clinical Leader and Ministry (non-Data & Digital employees).

Data Access

38. Consumer access to personal information is limited to information about that specific Consumer only. No Consumer is able to see information about any other Consumer.

39. Select staff and individuals in a production support role have access to the CCTA Platform (the data storage system that holds Consumer personal contact information). This access is only used for the purposes of maintaining the correct function of the production application. This access is logged and audited, and written authorisation is required before viewing of any personal information is permitted.

40. Consumer personal information collected and shared with NCTS is done by a file transfer process into an NCTS data store. This data store is able to be queried by Contact Tracers to find contact information of confirmed or suspected Close Contacts of a person with a confirmed case of COVID-19. This is the only interface available for Contact Tracers to query Consumer information.

41. Details of the data access and controls in place for NCTS will be covered in a separate Privacy Impact Assessment.

42. Statistical information collected about use of the platform will be accessible to relevant Ministry staff and its suppliers, in order to make decisions about the features and functionality of CCTA. This information does not identify any individual Consumer, nor will Consumer personal information be accessible in this way.

Section Four - Privacy Analysis

The purpose of this Assessment is to review the process of collection, storage, use and sharing of personal and contact information for the purposes of the COVID-19 pandemic response against the 12 Rules in the Health Information Privacy Code.

This application will collect personal and contact information for health purposes. It will be a health agency (the Ministry of Health) collecting, storing, using and where appropriate sharing the information collected (with other health agencies, but only as required for the purposes of the COVID-19 pandemic response).

The Ministry has conducted its analysis under the Health Information Privacy Code as the information is ultimately about individuals who may test positive for COVID-19, are suspected to have of COVID-19, or may be a Close Contact of a person with COVID-19. Under clause 4(1)(e) it is considered that this could be information about an *'individual which is collected before or in the course of, and incidental to, the provision of any health service or disability service to that individual'*. The Ministry has therefore chosen to analyse the high standards associated with health information in the HIPC for the purposes of this Privacy Impact Assessment.

Health Information Privacy Code Rules		Solution Details and commentary	Key Controls	Residual risk
Rule 1	<p>Purpose of collection of health information</p> <ul style="list-style-type: none"> - Only collect health information if you really need it 	<p>The purpose of collecting this information is to assist with contact tracing as part of the COVID-19 pandemic response.</p> <p>The App is intended to address two problems:</p> <ol style="list-style-type: none"> 1. New Zealanders who have changed their contact details since they were last updated in the NHI or NES services or people in New Zealand with no contact details in those services. The impact of this lack of information is that Contact Tracers find it more difficult to contact the person concerned, delaying the process of testing and/or self-isolation for potential Close Contacts. 2. People have difficulty remembering where they have been and who they have had "close contact" with, particularly over the period of interest (up to 31 days). This means Consumers and therefore Contact Tracers may not be able to identify all of those who need to be tested, and/or isolated. Release 1 will 	<p>Collection of this demographic, contact and location information is for the lawful purposes of the COVID-19 pandemic response to assist in the public health response. This can include contact tracing to locate Close Contacts of COVID-19 positive individuals and in future may also include follow up on compliance of those required to self-isolate or quarantine (if they choose to use the App for this purpose).</p> <p>The Consumer information supplied is necessary meet this purpose as set out in paragraph 13 of Section 3.</p> <p>The location data is necessary to assist in the contact tracing purposes to enable Consumers to more easily recall locations where Close Contacts may have congregated.</p> <p>The necessity of any further information to be collected will be addressed in future Privacy Impact Assessments prior to any new collection commencing</p> <p>Limiting data collected Review and challenge will be provided by governance and reference to the Office of the Privacy Commissioner prior to adding new development features to ensure only data aligned to these purposes is collected.</p>	Low

		<p>implement a location scan process to identify locations where close contact may have occurred. Further functionality to address this second problem is planned for a future release of this application.</p> <p>The type of information being contemplated for collection under the CCTA is aligned with that addressed under Part 3A of the Health Act, subpart 5 – Contact Tracing. This CCTA collection will not be under those powers but will be a collection on a voluntary basis of the range of information authorised under the Contact Tracing provisions.</p>	<p>Data Governance Will provide oversight of the use of the data to ensure that use matches the purpose.</p>	
Rule 2	<p>Source of information</p> <ul style="list-style-type: none"> - Get it straight from the people concerned 	<p>A Consumer is the voluntary source of their personal and contact information collected by the application. This is compliant with HIPC Rule 2.</p> <p>Information about a location an individual has attended will be sourced from the individual via the location scan via the App (if they choose to release the recorded details).</p> <p>The location information is aligned to the information a contact tracer may require under clause 92ZZC(3) if an individual has or is suspected of having COVID-19 as being 'information about the circumstances in which he or she believes that he or she contracted, or may have transmitted, the infectious disease'. The information is used as a memory aid to help identify locations, and therefore potential Close Contacts if requested under 92ZZC.</p> <p>In future App functionality:</p> <ul style="list-style-type: none"> • it will remain voluntary as to whether the individual forwards the electronic copy of information that has been collected on their phone about locations. • If a Consumer who is in self-isolation or quarantine chooses to participate in a daily check-in, (including the pre-determined datafields designed to assess the persons health, compliance and need for assistance), the information will 	<p>The initial and planned future collections of information are consistent with Rule 2 as the information in every instance of collection associated with the CCTA is directly from the Consumer.</p> <p>In future App functionality:</p> <ul style="list-style-type: none"> • The Consumer will still have a choice as to whether to advise the contact tracer of visited locations verbally over the phone, or to release the stored location data on their phone. This retains some control of the data with the individual. The Consumers independent obligations under clause 92ZZC(3) however remain. • The Consumer will contribute their own information to the daily check-in if that feature is enabled in future and the Consumer chooses to use it 	Low

		be collected directly from them via the App.		
Rule 3	<p>Collection of information from individual</p> <p>- Tell them what you're going to do with it</p>	<p>The Ministry will take all reasonable steps to ensure any Consumer of the application is aware that:</p> <ul style="list-style-type: none"> information is being collected, the purpose of the collection and the intended users of the information. The expiry and destruction of the information <p>The individual will also be made aware:</p> <ul style="list-style-type: none"> of the name and address of the collecting agency and the agency that will hold the information, That the supply of the information to the CCTA is voluntary When the supply of information may become mandatory under section 92ZZC of the Health Act (and any consequences of not supplying the information), noting that the CCTA is not specifically part of the mandated legislation. 	<p>Privacy Statement Material will be developed by the Ministry and available in the App, to ensure that individuals are aware of the purposes of collection and the possible recipients of the information.</p> <p>Privacy Statement This will reflect the Rule 3 requirements.</p>	Low
Rule 4	<p>Manner of collection of information</p> <p>- Be considerate when you're getting it</p>	<p>The Ministry will not collect personal information by unlawful, unfair or unreasonably intrusive means.</p> <p>The App is designed to be opt-in. The only requirement for creating an account is a valid email address. All additional information collected is on a voluntary basis.</p> <p>The Ministry intends to include the following in the Privacy and Security Statement: <i>'If you are under 16 years old you may choose to use the App to record the information you wish to. Please note however that if it becomes necessary for a Contact Tracer to contact you they may need to ask your parent or guardian to provide any necessary information from you'</i></p> <p>It would be very difficult to prevent under 16 year olds signing up to the App as there is no verification requirement nor compulsion to submit age. Also, some individuals younger than 16 may travel independently from their parents and they may wish to collect location information on their personal phone. If they are identified as under 16 years old by a Contact Tracer the</p>	<p>User Experience (UX) Design The approach taken by the Ministry is to use UX design processes and to collect anonymous information from Consumers (who can opt out) in order to ensure that information is collected as efficiently as possible.</p> <p>Feedback Email The Ministry is providing a feedback email address to take and incorporate feedback from Consumers to improve utility and equity.</p> <p>Information from under 16 year olds would be managed by Contact Tracers consistently with section 92ZZC(5) of the Health Act. This enables the Contact Tracer to seek any necessary information from a parent or guardian if the individual is under 16 years of age if that is considered appropriate.</p>	Low

		representative of the young person can be consulted where appropriate.		
Rule 5	Storage and security of information - Take care of it once you've got it	<p>Personal information is held and managed in accordance with the Privacy Act 1993 and Health Information Privacy Code 1994.</p> <p>Contact details will be stored by the CCTA Platform and made available to NCTS for search purposes. All of this information is held securely in compliance with Ministry of Health standards. Measures are in place to protect Consumer information from unauthorised access.</p> <p>Consumer details will be stored either on their phone (in the case of location data) or on the CCTA Platform based on Amazon Web Services, Sydney, Australia for the New Zealand Ministry of Health (for contact details). Some data directly relevant to COVID-19 positive cases will also be stored within the NCTS in individual cases.</p> <p>This application has been through a number of independent security reviews:</p> <ul style="list-style-type: none"> • Source code and high-level architecture review from the Government Communication and Security Bureau's National Cyber Security Centre • security review of cloud environments that the application is deployed to by a company contracted to government • security review of the application source code and penetration testing by another company contracted to government 	<p>Review of architecture This will be completed using the standard Ministry process</p> <p>Review of Security Architecture This has been undertaken by the Government Communications Security Bureau's National Cyber Security Centre.</p> <p>Review of security implementation The Ministry has used an All of Government supplier that is independent with experience of working in the health system</p> <p>Access Controls Access to the Platform and NCTS by specific Ministry staff and suppliers is permitted for production support, this access is logged and audited.</p> <p>Consumer access to App information held on their phone or stored information held about them is by email address and password, Consumers are also able to enable two-factor authentication for additional protection.</p>	Low
Rule 6	Access to personal information - People can see their health information if they want to	<p>The Consumer has the ability to view information held in the App.</p> <p>The Ministry will ensure that any Consumer about whom information is held can obtain confirmation of whether or not the Ministry holds the information and to have access to it.</p>	<p>Views of personal details provided The Consumer will be able to see any personally identifiable information supplied in the user interface.</p> <p>All other information will be available via access request to NCTS/Ministry.</p>	Low
Rule 7	Correction of information - They can correct it if it's wrong	A Consumer has the ability to correct information held in the App.	Personal details provided The Consumer will be able to see and modify or remove personal, identifiable information supplied in the user interface.	Low

<p>Rule 8</p>	<p>Accuracy etc. of information to be checked before use</p> <ul style="list-style-type: none"> - Make sure health information is correct before you use it 	<p>Information supplied by Consumers will not be verified by the Ministry in the first instance, but will be made available to Contact Tracers via the National Contact Tracing System (the NCTS).</p> <p>It can be reasonably assumed that Consumers will provide details that are true and correct</p> <p>This information will be confirmed by the Contact Tracer before use.</p> <p>The Ministry has no direct control over allocation of the QR codes, nor over the business accuracy in use of them (for example for multiple locations). In each case however, the advice of location information is for review by a Contact Tracer who will ask further questions from the Consumer and verify the correct information (as far as is possible)</p>	<p>Personal details provided The Consumer will be able to see and modify or remove personal, identifiable information supplied in the user interface.</p> <p>Contact Tracer Review will be used to ensure the information is accurate and matches to the correct person before use (where possible – if contact details are incorrect this may not be identifiable until the Consumer has been located by other means). This statement applies both to information provided by Consumers about themselves and to information they may provide about locations</p>	<p>Low</p>
<p>Rule 9</p>	<p>Retention of information</p> <ul style="list-style-type: none"> - Get rid of it when you're done with it 	<p>Consumer contact information is held for the duration of the pandemic and deleted thereafter, unless it has become part of the Consumer's record on the NCTS (such as contact information that has been incorporated into the case records of a Consumer who has tested positive) – it will then be subject to retention requirements within the NCTS.</p> <p>Information on visited locations recorded by a Consumer will be stored on the phone and will expire on a rolling 31 day basis.</p> <p>Information relating to locations of a positive case, if relevant, may be entered into the Consumer's record on the NCTS. Once transferred to the NCTS will be stored in accordance with the Health (Retention of Information Retention) Regulations 1996.¹¹</p>	<p>Data Governance This group will be responsible for ensuring that personal contact details and any other data is deleted at the end of the pandemic.</p> <p>Database configuration There is a standard feature that is being used that will delete Close Contact information on the Consumer's phone after 31 days.</p>	<p>Low</p>
<p>Rule 10</p>	<p>Limits on use of information</p> <ul style="list-style-type: none"> - Use it for the purpose you got it 	<p>Consumers opt-in to the collection of their identifying and contact information by signing up for the app.</p>	<p>Data Governance Will provide oversight of the use of the data to ensure that use matches the purpose</p>	<p>Low</p>

¹¹ <http://www.legislation.govt.nz/regulation/public/1996/0343/latest/DLM225616.html>

		Consumer information will only be used for the purposes of the COVID-19 pandemic response.		
Rule 11	<p>Limits on disclosure of information</p> <ul style="list-style-type: none"> - Only disclose it if you have good reason 	<p>Consumer information will be disclosed by the Ministry of Health only for use by the public health system in relation to the COVID-19 pandemic response, such as contact tracing. This is consistent with the Privacy and Security statement</p> <p>The data collected via the App will not be shared with other Government agencies unless they are directly involved in assisting with the COVID-19 contact tracing activities as identified in the Privacy and Security Statement.</p> <p>If relevant to a Consumer who has tested positive (or is suspected of having COVID-19) information disclosed to a Contact Tracer may be incorporated into a person's record created within the NCTS.</p> <p>Any interactions following on from engagement with a Contact Tracer will be governed by the Health Act provisions related to contact tracing, and / or in a manner consistent with the Privacy Act and are beyond the scope of the CCTA.</p> <p>In the future planned release to share a relevant time period of electronic location details any visited location details will not be shared until a Consumer takes a voluntary action to disclose the information to a Contact Tracer, after request by the Contact Tracer. Such a release will be directly authorised by the Consumer, consistent with the rule.</p>	<p>Data Governance Will provide oversight of the use of the data to ensure that use matches the purpose</p> <p>Access controls Only those required to have access to the data will have access. This will be enforced by Ministry policy</p>	Low
Rule 12	<p>Unique identifiers</p> <ul style="list-style-type: none"> - Only assign unique identifiers where permitted 	<p>A unique identifier will identify each Consumer in the database. The purpose of this is to ensure that the personal details provided are only able to be seen by the Consumer. This is also required in order for the database to function and to allow this to be provided to Contact Tracers</p> <p>This unique identifier is not connected to the NHI or any other identifier in use in the health system and is purely for the purposes described.</p>		Low

Section Five - Intended Future Use Cases

1. There is an intent to consider further stages of the CCTA development to address Consumer locations and Close Contacts during the suspected period of COVID-19 infection.
2. The Ministry intends to carefully consider how statistical information from the App can best be used, to make sure if individuals are to be encouraged to provide information that will have value to the 'find it and stamp it out' strategy. Further, the Ministry is committed to exploring best options for privacy protections and ensuring these have been fully canvassed before implementing any new features.
3. Other matters that may form part of the further developments would be fully assessed in a future Privacy Impact Assessment, and include:
 - Consumers may be able to electronically transmit a digital diary of the locations they have visited to Contact Tracers
 - An Exposure Event notification may be enabled to inform Consumers if they have been in a location on a date and time attended by another Consumer who has subsequently tested positive for COVID-19 (the positive case). It is intended that a Contact Tracer may issue an Exposure Notification as part of their investigation in order to further locate potential Close Contacts related to a positive case. Consumers who have opted-in and checked-in to the same location within the time window may receive an alert on their smart phone notifying them of the potential exposure and advising them to take appropriate action
 - A daily check in to support those Consumers who are required to self-isolate or quarantine, which may include symptom reporting and other necessary information as clinically advised
 - Bluetooth contact tracing, including possible integration with Apple/Google exposure notification frameworks
 - Surveillance symptom reporting across wide population
 - Immunisation status verification for return to work

Glossary

The following are definitions used in this Assessment:

Terms	Description, relationship and business rules
AWS	Amazon Web Services
CCTA	Contact Tracing processes by use of a Mobile Application for supported iOS and Android smart phones (the NZ COVID Tracer mobile app), a Web Application (Website), and a Data Platform (Platform) collectively referred to as the COVID-19 Contact Tracing Application.
Close Contact	This is any person who has been exposed to a suspect, confirmed or probable case of COVID-19 during the case's infectious period without appropriate personal protective equipment. The contact is more fully detailed on the Ministry website here: https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-novel-coronavirus-health-advice-general-public/contact-tracing-covid-19
Consumer	A user who registers or downloads and signs up to use the NZ COVID Tracer mobile app or website
Contact Tracer	An individual who is authorised to fulfil the role of contact tracer in accordance with section 92ZZA of the Health Act, and includes those assisting in finding and location services. All Contact Tracers are subject to an obligation of confidentiality.
Contact Tracing	This is the process used to find people who may have been exposed to an infectious disease. If a person is identified as a Close Contact of someone with COVID-19 they can expected to be contacted by a Contact Tracer, generally by telephone, from the National Close Contact Service operated by the Ministry of Health.
GLN	Global Location Number.
Privacy Notice Materials	Material to be prepared to inform consumers in compliance with rule 3 of the Health Information Privacy Code 1994. This is viewable on the Privacy Statement screen on the NZ COVID Tracer mobile app. This will link to a more detailed Privacy and Security Statement. The Privacy and Security Statement will contain a link to the most current Privacy Impact Assessment.
Privacy and Security Statement	The second part of the layered privacy notice. It is linked from the Privacy Statement available to Consumers at registration.
Privacy Statement	The notice available to Consumers at point of registration with the CCTA.