

# COVID-19

# Contact Tracing Data Standard

HISO 10085:2020

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# Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>Introduction</b>                            | <b>1</b> |
| 1.1      | Purpose  | 1        |
| 1.2      | Scope  | 1        |
| 1.3      | Definitions                                    | 2        |
| 1.4      | Reference documents                            | 2        |
| 1.5      | Revision history                               | 2        |
| <b>2</b> | <b>Background</b>                              | <b>3</b> |
| 2.1      | Contact tracing process                        | 3        |
| 2.2      | Contact tracing system                         | 3        |
| <b>3</b> | <b>Data set specification</b>                  | <b>4</b> |
| 3.1      | Consumer identity and demographic information  | 5        |
| 3.2      | Recording business and service location visits | 13       |
| 3.3      | Recording attendance at social gatherings      | 16       |



# 1 Introduction

This document is a technical specification for the data sets used to support COVID-19 contact tracing. It is published as a draft standard that will be updated progressively to reflect new requirements as they emerge.

## 1.1 Purpose

This standard has been produced as part of the COVID-19 epidemic response in New Zealand.

The standard is consistent with the Ministry of Health COVID-19 case definitions and contact tracing process description, and forms part of the pandemic minimum data set for COVID-19 in New Zealand.

This standard is intended to assist implementers and their technology partners in interpreting the data requirements for contact tracing. Whilst we will endeavour to maintain consistency with the **current government requirements**, implementers also should ensure that any solutions developed conform to these, regardless of what is captured in this standard.

The general purpose of the standard is to ensure that all data collected and used in the contact tracing process is well-defined, properly structured and coded, and supports interoperability. The initial focus is about supporting the consumer registration process and recording consistent information about customers and visitors to business locations.

The data set specifications provide a technical definition for the information collected and used in contact tracing. The standard is essential reading for implementers and data users of contact tracing systems.

## 1.2 Scope

In this first edition, the standard covers consumer identity and demographic information, contact tracing registers, identification of business premises, location check in and check out, and QR code content.

Over time the standard may grow to encompass a broader set of data requirements. It should not be read as a specification for any one system, integration point or class of app.

We expect the standard will be extended to other aspects of contact tracing, such as data requirements for communication with people in self-isolation.

The requirements are for structured and coded data throughout to maximise data quality and utility for data analysis. The standard includes the data set and code set specifications that solutions should support.

## 1.3 Definitions

**Contact tracing** is the process used by public health units and the national close contact service to find people who may have been exposed to COVID-19 through contact with a suspect, confirmed or probable case during that person's infectious period.

**Close contact** means a person who has had a **certain level of exposure** to a suspect, confirmed or probable case of COVID-19 during the infectious period.

**Casual contact** refers to any person with exposure to a suspect, confirmed or probable case who does not meet the criteria for a close contact.

## 1.4 Reference documents

COVID-19 Public Health Response (Alert Level 2) Order 2020  
COVID-19 Health and Disability System Response Plan  
Initial COVID-19 Māori Response Action Plan  
Ministry of Health overview of contact tracing for COVID-19  
Contact Tracing App Privacy Impact Assessment  
HISO 10082:2020 Community Based Assessment Data Standard

## 1.5 Revision history

|                    |  |
|--------------------|--|
| <b>21 May 2020</b> | Published as draft standard  |
| <b>2 June 2020</b> | Updated to reflect changes to the Alert Level 2 order: <ul style="list-style-type: none"><li>• Remove home address from the contact tracing register data set</li><li>• Add data set for recording attendance at social gatherings</li></ul> |

# 2 Background

In New Zealand, a nationwide state of emergency was imposed in response to the COVID-19 pandemic. Contact tracing is one of the pillars of the public health response to COVID-19, along with border control, testing and case isolation. A comprehensive contact tracing system will enable rapid identification and isolation of new cases and is central to breaking the chain of transmission and eliminating COVID-19.

## 2.1 Contact tracing process

Contact tracing starts with a phone call from the public health unit or national close contact service. The person is provided with advice on self-isolation and their health and wellbeing is checked. The person receives daily follow up calls during the isolation period.

Key to contact tracing is rapidly getting information about the contacts of persons with COVID-19 to identify the source of the infection and make close contacts aware of the risk and the need to be tested and self-isolate.

Records of customers and visitors to business locations are important so that this information can be shared to speed the work of contact tracers.

## 2.2 Contact tracing system

A national contact tracing information system is being introduced to increase the reliability, capacity and scalability of the contact tracing process.

The new system will enable faster access to the correct phone number, email and address details for people who may have come in close contact with COVID-19.

The national contact tracing system will store case and close contact details, and will have links to the NHI system, National Enrolment System, laboratory information systems and public health information sources. As soon as a suspected, probable or confirmed case is detected, the information shared or uploaded can be used by contact tracers to communicate with the affected person and their close contacts.

Any data held about individuals for contact tracing will only be used for this purpose.

# 3 Data set specification

This section provides a templated definition for each data element making up the overall contact tracing data set. This is a collected set of requirements and does not constitute a specification for any one system.

Data element definitions are provided for:

- Consumer identity and demographic information
- Recording business and service location visits
- Recording attendance at social gatherings

## Data element template

Data element specifications are presented in the following templated form based on **ISO/IEC 11179 Information Technology – Metadata Registries (MDR)**.

|                         |   |                                |   |
|-------------------------|---|--------------------------------|---|
| <b>Name</b>             | Data element name   |                                |   |
| <b>Definition</b>       | A statement that expresses the essential nature of the data element and its differentiation from other elements in the data set   |                                |   |
| <b>Source standards</b> | Established data definitions or guidelines pertaining to the data element   |                                |   |
| <b>Data type</b>        | Alphabetic (A)<br>Date<br>Date/time<br>Numeric (N)<br>Alphanumeric (X)<br>Boolean<br>SNOMED CT identifier (SCTID)   | <b>Representational class</b>  | Code<br>Date/time<br>Identifier<br>Indicator<br>Text<br>Value<br>Date   |
| <b>Field size</b>       | Maximum number of characters  | <b>Representational layout</b> | The formatted arrangement of characters, eg: <ul style="list-style-type: none"> <li>• X(50) for a 50-character alphanumeric string</li> <li>• NNN for a 3-digit number</li> </ul> |
| <b>Data domain</b>      | The valid values or codes that are acceptable for the data element<br>Each coded data element has a specified code set  |                                |   |
| <b>Obligation</b>       | Indicates if the data element is mandatory, recommended, optional or conditional<br>A recommended data element is not a mandatory requirement<br>Conditional means use of the data element depends on the context |                                |   |
| <b>Guide for use</b>    | Additional guidance to inform the use of the data element, including verification rules   |                                |   |



## Character sets

Text data elements must accommodate macrons for te reo Māori and diacritic characters for other commonly used languages. By default, this means using the Unicode Basic Latin, Latin-1 Supplement and Latin Extended A character sets.

**ISO/IEC 10646:2017 Information technology – Universal Coded Character Set (UCS)** is the recognised standard. UTF-8 is the recommended character encoding.

Alphabetic and alphanumeric codes and identifiers are at least restricted to printable Basic Latin characters and normally further.

# 3.1 Consumer identity and demographic information

Consumer identity and demographic information includes name, birth date, gender, ethnicity, phone number, email address and residential address. This is important information for identifying and communicating with people, ensuring equity in service delivery, and for anonymised population health reporting.

The following data elements are defined below:

- **Person name**
- **Birth date**
- **Gender**
- **Ethnicity**
- **Phone number**
- **Email address**
- **Home address**
- **NHI number**

## 3.1.1 Person name

Person name is the name of a natural person. Person name generally consists of a family name or surname, and one or more given names. The name is used to help identify and communicate with the individual.

The government **person name data content requirement** is to use the **NZ Government OASIS CIQ Name Profile** to format and exchange person name.

The chosen format for compliance with this requirement is a family name data element and a separate element for each given name. For example, if a person has a family name of Smith and three given names – Te Aroha Mary Anne – then the family name element is Smith, the first given name element is Te Aroha, the second given name element is Mary, and the third given name element is Anne.

Where a person only has a single name, it should be recorded as a family name.

## Given name

First name, middle name and any other given names are recorded using a separate instance of this data element for each name. The given names are ordered.

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | Given name  |                                |       |
| <b>Definition</b>       | First name, middle name or another given name   |                                |       |
| <b>Source standards</b> | <b>NZ Government OASIS CIQ Name Profile</b><br><b>Person name data content requirement</b>                                    |                                |       |
| <b>Data type</b>        | Alphabetic  | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50  | <b>Representational layout</b> | A(50) |
| <b>Data domain</b>      | The text is case-sensitive and can include spaces, apostrophes and hyphens, as well as macrons and other diacritic characters |                                |       |
| <b>Obligation</b>       | Recommended for first name, optional for middle name  |                                |       |
| <b>Guide for use</b>    | This is a repeated, ordered element   |                                |       |

## Family name

|                         |   |                                |        |
|-------------------------|---|--------------------------------|--------|
| <b>Name</b>             | Family name   |                                |        |
| <b>Definition</b>       | Family name or surname  |                                |        |
| <b>Source standards</b> | <b>NZ Government OASIS CIQ Name Profile</b><br><b>Person name data content requirement</b>                                    |                                |        |
| <b>Data type</b>        | Alphabetic  | <b>Representational class</b>  | Text   |
| <b>Field size</b>       | 100   | <b>Representational layout</b> | A(100) |
| <b>Data domain</b>      | The text is case-sensitive and can include spaces, apostrophes and hyphens, as well as macrons and other diacritic characters |                                |        |
| <b>Obligation</b>       | Recommended   |                                |        |
| <b>Guide for use</b>    | NHI entry will be coded to indicate that a consumer app is the information source   |                                |        |

### 3.1.2 Birth date

Birth date is used to help identify the individual. The year of birth may be used for aggregate population reporting.

See the government **date of birth content requirement** for more information.

|                         |   |                                |          |
|-------------------------|---|--------------------------------|----------|
| <b>Name</b>             | Birth date  |                                |          |
| <b>Definition</b>       | Date of birth of the person   |                                |          |
| <b>Source standards</b> | <b>ISO 8601-1:2019 Date and time – representations for information interchange – part 1: basic rules</b><br><b>Date of birth data content requirement</b> |                                |          |
| <b>Data type</b>        | Date  | <b>Representational class</b>  | Date     |
| <b>Field size</b>       | 8   | <b>Representational layout</b> | YYYYMMDD |

|                      |   |
|----------------------|---|
| <b>Data domain</b>   | Full date   |
| <b>Obligation</b>    | Recommended   |
| <b>Guide for use</b> | NHI entry will be coded to indicate that a consumer app is the information source |

### 3.1.3 Gender

Gender is used with name and birth date information to identify the individual. Gender may also be used in aggregate population reporting. Gender is self-identified by the person and may differ from biological sex at birth.

#### Gender code

|                         |  |                                |      |
|-------------------------|--|--------------------------------|------|
| <b>Name</b>             | Gender code  |                                |      |
| <b>Definition</b>       | A classification of the self-identified gender of the person   |                                |      |
| <b>Source standards</b> | <b>HISO 10046:2019 Consumer Health Identity Standard</b>   |                                |      |
| <b>Data type</b>        | Alphabetic   | <b>Representational class</b>  | Code |
| <b>Field size</b>       | 1  | <b>Representational layout</b> | A(1) |
| <b>Data domain</b>      | <ul style="list-style-type: none"> <li>• F – Female</li> <li>• M – Male</li> <li>• O – Gender diverse, non-binary or other</li> <li>• U – Prefer not to say, not stated</li> </ul> |                                |      |
| <b>Obligation</b>       | Optional   |                                |      |
| <b>Guide for use</b>    | Gender is recorded using the level 1 classification codes of the published <b>gender identity standard</b>   |                                |      |

#### Gender description

A self-identified gender description may be typed in if the person does not identify as male or female.

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | Gender description  |                                |       |
| <b>Definition</b>       | Self-identified description of the person's gender                      |                                |       |
| <b>Source standards</b> | <b>HISO 10046:2019 Consumer Health Identity Standard</b>                |                                |       |
| <b>Data type</b>        | Alphabetic (A)  | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50  | <b>Representational layout</b> | A(50) |
| <b>Data domain</b>      | May be entered if the coded gender classification is not male or female |                                |       |
| <b>Obligation</b>       | Optional  |                                |       |
| <b>Guide for use</b>    |   |                                |       |

## 3.1.4 Ethnicity

The person's self-identified ethnicity will be used to ensure the services provided to support faster contact tracing are equitable across the population. Ethnic group is an aggregate population reporting variable.

|                         |   |                                |      |
|-------------------------|---|--------------------------------|------|
| <b>Name</b>             | Ethnic group code   |                                |      |
| <b>Definition</b>       | Coded classification for an ethnic group self-identified by the person  |                                |      |
| <b>Source standards</b> | <b>HISO 10001:2017 Ethnicity Data Protocols</b>   |                                |      |
| <b>Data type</b>        | Numeric (N)   | <b>Representational class</b>  | Code |
| <b>Field size</b>       | 5   | <b>Representational layout</b> | N(5) |
| <b>Data domain</b>      | Use the level 4 codes in the <b>ethnic group code finder</b> <ul style="list-style-type: none"> <li>• 11111 NZ European</li> <li>• 21111 Māori</li> <li>• 31111 Samoan</li> <li>• 32100 Cook Islands Māori</li> <li>• 33111 Tongan</li> <li>• 34111 Niuean</li> <li>• 42100 Chinese</li> <li>• 43100 Indian</li> </ul> Any other level 4 code may be selected |                                |      |
| <b>Obligation</b>       | Optional  |                                |      |
| <b>Guide for use</b>    | Up to six ethnicities may be recorded<br>Use the standard ethnicity collection question from the Ethnicity Data Protocols<br>Codes may be selected directly or derived from a free text description   |                                |      |

## 3.1.5 Phone number

The current phone number is used to help identify the individual and allow contact to be made with them. There is a phone number verification process.

|                         |  |                                |            |
|-------------------------|--|--------------------------------|------------|
| <b>Name</b>             | Phone number   |                                |            |
| <b>Definition</b>       | The chosen phone number for communication                                    |                                |            |
| <b>Source standards</b> | <b>ITU-T E.164 The international public telecommunication numbering plan</b> |                                |            |
| <b>Data type</b>        | Numeric  | <b>Representational class</b>  | Identifier |
| <b>Field size</b>       | 15   | <b>Representational layout</b> | N(15)      |
| <b>Data domain</b>      | International ITU-T E.164 numbers  |                                |            |
| <b>Obligation</b>       | Recommended  |                                |            |

|                      |   |
|----------------------|---|
| <b>Guide for use</b> | <p>International ITU-T E.164 numbers are variable length numeric strings without punctuation, composed of country code, area code or mobile network code and subscriber number</p> <p>Numbers should be entered, validated and displayed as separate components, eg:</p> <ul style="list-style-type: none"> <li>• 64 4 232nnnn</li> <li>• 64 20 412nnnnn</li> </ul> |
|----------------------|---|

### 3.1.6 Email address

Email address may be used to identify the individual and for communication. There is an email address verification process.

|                         |  |                                |            |
|-------------------------|--|--------------------------------|------------|
| <b>Name</b>             | Email address  |                                |            |
| <b>Definition</b>       | The chosen email address for communication             |                                |            |
| <b>Source standards</b> | RFC 5322 Internet Message Format                       |                                |            |
| <b>Data type</b>        | Alphanumeric   | <b>Representational class</b>  | Identifier |
| <b>Field size</b>       | 50   | <b>Representational layout</b> | X(50)      |
| <b>Data domain</b>      | Valid email address in <i>local-part@domain</i> format |                                |            |
| <b>Obligation</b>       | Recommended  |                                |            |
| <b>Guide for use</b>    |  |                                |            |

### 3.1.7 Home address

Home address is recorded to help identify the person and to enable contact with them. If the person is currently staying at a different address to their usual home address, both addresses may be recorded. Current residential address is a recommended data element.

Postcode and/or geographic region derived from the address information may be used in aggregate population reporting.

Use of the Ministry of Health **eSAM address web service** is recommended for address lookup. eSAM combines address and geospatial data from NZ Post, Land Information NZ and Statistics NZ. Users may also choose to enter their address manually or by using other conforming location services.

The government **street address data content requirement** mandates **AS/NZS ISO 19160.1:2018 Addressing Part 1: Conceptual Model** as the street address format standard. The standard requires a minimum four data elements: property number or building name, road/street name, locality/suburb name and city/town name. We add country code and province/state name to cater for overseas addresses.

A flag distinguishes the permanent home address from any temporary current address.

See also **useful information for people working with addresses (LINZ)** and more about **addressing and geocoding** for health providers and their industry partners.

## Property number

The first address element is the unique number given to the house, unit or property on the street.

The number can include a unit number prefix or an alpha suffix. A unit number prefix is separated from the property number by a forward slash (eg, 1/21 for unit 1), and an alpha suffix follows the property number immediately and has no separator (eg, 21A).

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | Property number   |                                |       |
| <b>Definition</b>       | Unit number and property number on the road/street  |                                |       |
| <b>Source standards</b> | Street address data content requirement   |                                |       |
| <b>Data type</b>        | Alphanumeric  | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50  | <b>Representational layout</b> | X(50) |
| <b>Data domain</b>      | One line of text, formatted as described above for property number  |                                |       |
| <b>Obligation</b>       | Recommended   |                                |       |
| <b>Guide for use</b>    | A street address must include a property number where possible. The exception is where a number is substituted with a building name |                                |       |

## Building name

The street address may feature a building name instead of the property number.

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | Building name                           |                                |       |
| <b>Definition</b>       | Building name                           |                                |       |
| <b>Source standards</b> | Street address data content requirement |                                |       |
| <b>Data type</b>        | Alphanumeric                            | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50                                      | <b>Representational layout</b> | X(50) |
| <b>Data domain</b>      | Recognised building names               |                                |       |
| <b>Obligation</b>       | Optional                                |                                |       |
| <b>Guide for use</b>    |   |                                |       |

## Road/street name

The name of the road or street should include a full, non-abbreviated road type – road, street, avenue etc. In cases where a road name does not include a road type (eg, The Terrace) the road type may be omitted.

|                         |   |                                |        |
|-------------------------|---|--------------------------------|--------|
| <b>Name</b>             | Street name                             |                                |        |
| <b>Definition</b>       | Road or street name                     |                                |        |
| <b>Source standards</b> | Street address data content requirement |                                |        |
| <b>Data type</b>        | Alphanumeric                            | <b>Representational class</b>  | Text   |
| <b>Field size</b>       | 100                                     | <b>Representational layout</b> | X(100) |
| <b>Data domain</b>      | Recognised road and street names        |                                |        |

|                      |             |
|----------------------|-------------|
| <b>Obligation</b>    | Recommended |
| <b>Guide for use</b> |             |

## Locality/suburb name

A locality is a named geographical area or place defining a community of interest and may be rural or urban. Suburbs are urban localities.

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | Locality name                           |                                |       |
| <b>Definition</b>       | Locality or suburb name                 |                                |       |
| <b>Source standards</b> | Street address data content requirement |                                |       |
| <b>Data type</b>        | Alphabetic                              | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50                                      | <b>Representational layout</b> | A(50) |
| <b>Data domain</b>      | Recognised locality and suburb names    |                                |       |
| <b>Obligation</b>       | Recommended                             |                                |       |
| <b>Guide for use</b>    |   |                                |       |

## City/town name

|                         |   |                                |       |
|-------------------------|---|--------------------------------|-------|
| <b>Name</b>             | City or town name   |                                |       |
| <b>Definition</b>       | City or town name   |                                |       |
| <b>Source standards</b> | Street address data content requirement                           |                                |       |
| <b>Data type</b>        | Alphabetic  | <b>Representational class</b>  | Text  |
| <b>Field size</b>       | 50  | <b>Representational layout</b> | A(50) |
| <b>Data domain</b>      | Recognised city and town names                                    |                                |       |
| <b>Obligation</b>       | Conditional – city/town is not applicable to some rural addresses |                                |       |
| <b>Guide for use</b>    |   |                                |       |

## Country code

|                         |   |                                |      |
|-------------------------|---|--------------------------------|------|
| <b>Name</b>             | Country code  |                                |      |
| <b>Definition</b>       | Country code for the person's usual country of residence  |                                |      |
| <b>Source standards</b> | ISO 3166-1:2013 Codes for the representation of names of countries and their subdivisions – Part 1: Country codes |                                |      |
| <b>Data type</b>        | Alphabetic  | <b>Representational class</b>  | Code |
| <b>Field size</b>       | 2   | <b>Representational layout</b> | A(2) |
| <b>Data domain</b>      | 2-alpha codes from <a href="http://www.iso.org/iso/country_codes">http://www.iso.org/iso/country_codes</a>        |                                |      |
| <b>Obligation</b>       | Recommended   |                                |      |
| <b>Guide for use</b>    | Use the code 'NZ' for New Zealand addresses   |                                |      |

## Province/state name

For overseas home addresses, the name of the province or state may also need to be recorded.

|                         |                                 |                                |        |
|-------------------------|---------------------------------|--------------------------------|--------|
| <b>Name</b>             | Province/state name             |                                |        |
| <b>Definition</b>       | Overseas province/state name    |                                |        |
| <b>Source standards</b> |                                 |                                |        |
| <b>Data type</b>        | Alphanumeric                    | <b>Representational class</b>  | Text   |
| <b>Field size</b>       | 100                             | <b>Representational layout</b> | X(100) |
| <b>Data domain</b>      | Free text                       |                                |        |
| <b>Obligation</b>       | Optional                        |                                |        |
| <b>Guide for use</b>    | Use only for overseas addresses |                                |        |

## Permanent address indicator

Flag used to distinguish the person's permanent home address from a temporary address where they are staying currently.

|                         |  |                                |           |
|-------------------------|--|--------------------------------|-----------|
| <b>Name</b>             | Permanent address indicator  |                                |           |
| <b>Definition</b>       | Whether this is the permanent home address as opposed to a current temporary address |                                |           |
| <b>Source standards</b> | <b>HISO 10046:2019 Consumer Health Identity Standard</b>                             |                                |           |
| <b>Data type</b>        | Boolean  | <b>Representational class</b>  | Indicator |
| <b>Field size</b>       | 1  | <b>Representational layout</b> | N         |
| <b>Data domain</b>      | True, false  |                                |           |
| <b>Obligation</b>       | Recommended  |                                |           |
| <b>Guide for use</b>    |  |                                |           |

## 3.1.8 NHI number

COVID-19 laboratory test orders and results are recorded with an NHI number. The national contact tracing system will record the NHI number for each person with a positive test result so that they are accurately identified and can be communicated with.

|                         |  |                                |            |
|-------------------------|--|--------------------------------|------------|
| <b>Name</b>             | NHI number   |                                |            |
| <b>Definition</b>       | NHI number   |                                |            |
| <b>Source standards</b> | <b>HISO 10046:2019 Consumer Health Identity Standard</b>   |                                |            |
| <b>Data type</b>        | Alphanumeric   | <b>Representational class</b>  | Identifier |
| <b>Field size</b>       | 7  | <b>Representational layout</b> | AAANNNN    |
| <b>Data domain</b>      | Valid NHI number, last digit is check digit  |                                |            |
| <b>Obligation</b>       | Optional   |                                |            |
| <b>Guide for use</b>    | NHI numbers are issued by the NHI system<br>NHI number can be verified using the check digit algorithm in the cited standard |                                |            |



## 3.2 Recording business and service location visits

Records of customers and visitors to business and service locations are important so that this information can be shared to speed the work of contact tracers. See the published information for businesses and services on **how to collect information to help with contact tracing**.

### Requirements for businesses and services

For businesses and services, the rules distinguish uncontrolled environments, essentially retail, from controlled environments. In uncontrolled environments, the requirement is to keep contact tracing records for workers. In controlled environments, the requirement is to record details of all people's movement on the premises, including staff, customers and other visitors.

### Recommendations for consumers

For consumers, this means keeping track of where you've visited. People will be able to use their phone to scan a premises-identifying 2D barcode on entry to some workplaces and other business and service locations. When a COVID-19 case is identified, this information can be used to find people who were at the same location around the same time, making them possible close or casual contacts.

### Contact tracing register

Businesses and services maintaining their own contact tracing register should record for each person:

- **Person name**
- **Phone number** or **Email address**
- **Entry date/time**
- **Exit date/time**.

See the linked data element specifications for details.

### QR code

Organisations can register each of their locations with Business Connect to create a poster with a QR code for display. Customers and visitors to that location can then scan the barcode to capture a record of their visit.

The QR codes format used by Business Connect includes the following data elements:

- **Location identifier**
- **Location name**
- **Physical address**.

See the **COVID-19 Contact Tracing QR Code Specification** for details.

## 3.2.1 Location details

Business and other participating organisations should first have a **New Zealand Business Number (NZBN)**. Businesses are then able to record each of their premises as an 'organisation part' in the NZBN register. Each such business location is issued a globally unique 13-digit identifier called a **Global Location Number (GLN)**.

A commonly recognised name for the location is recorded as the organisation part name in the NZBN register. The purpose of the record can be marked as for location tracking. Locations are also recorded with a physical address, as well as phone number and email address details for the operator.

Sub-locations, such as the floors of a building, or different entry/exit points may be recorded in a hierarchy attached to a parent location. Each sub-location is assigned its own GLN and a descriptive name distinguishing it from others at the same address.

Location name examples:

- National Couriers Wellington Branch
- Louie's Lattes Lyall Bay

**Business Connect** is the online platform that enables businesses to enter and upload location details to the NZBN register.

It is recognised that not all business locations will have a GLN. Where a business does have a GLN it must be used.

### Location identifier

|                         |  |                                |            |
|-------------------------|--|--------------------------------|------------|
| <b>Name</b>             | Location identifier  |                                |            |
| <b>Definition</b>       | Business location or sub-location identifier   |                                |            |
| <b>Source standards</b> | <b>NZBN Organisation Part API Use Case Specification</b>   |                                |            |
| <b>Data type</b>        | Numeric  | <b>Representational class</b>  | Identifier |
| <b>Field size</b>       | 13   | <b>Representational layout</b> | N(13)      |
| <b>Data domain</b>      | <b>Global Location Number (GLN)</b>  |                                |            |
| <b>Obligation</b>       | Recommended  |                                |            |
| <b>Guide for use</b>    | GLN is the primary identifier in the NZBN register for locations and sub-locations<br>Use GLN where it exists<br>The last digit is a check digit – see the <b>GS1 check digit calculator</b> |                                |            |

### Location name

|                         |  |                                |        |
|-------------------------|--|--------------------------------|--------|
| <b>Name</b>             | Location name  |                                |        |
| <b>Definition</b>       | Location or sub-location name                            |                                |        |
| <b>Source standards</b> | <b>NZBN Organisation Part API Use Case Specification</b> |                                |        |
| <b>Data type</b>        | Alphanumeric   | <b>Representational class</b>  | Text   |
| <b>Field size</b>       | 100  | <b>Representational layout</b> | X(100) |

|                      |  |
|----------------------|--|
| <b>Data domain</b>   | Free text  |
| <b>Obligation</b>    | Mandatory  |
| <b>Guide for use</b> | Maps to NZBN organisation part name, where GLN exists<br>Used to distinguish an organisation's different locations, or to distinguish one sub-location from another belonging to the same organisation at the same address |

## 3.2.2 Phone number

The visitor's **Phone number** is a recommended data element. Either phone number or email address should be recorded. See the linked data element specification for details.

## 3.2.3 Email address

The visitor's **Email address** is a recommended data element. Either phone number or email address should be recorded. See the linked data element specification for details.

## 3.2.4 Entry and exit times

It is important to contact tracing to know when a given visit to a location occurred. The times of entry and exit are recorded, either using the check in and check out functions of an app or by making a record in the venue's own register.

### Entry date/time

|                         |   |                                |                 |
|-------------------------|---|--------------------------------|-----------------|
| <b>Name</b>             | Entry date/time   |                                |                 |
| <b>Definition</b>       | Date and time of the visitor's entry or check-in to the location                                    |                                |                 |
| <b>Source standards</b> | ISO 8601 - 1:2019 Date and time – representations for information interchange – part 1: basic rules |                                |                 |
| <b>Data type</b>        | Date/time   | <b>Representational class</b>  | Date/time       |
| <b>Field size</b>       | 14  | <b>Representational layout</b> | YYYYMMDD hhmmss |
| <b>Data domain</b>      | Valid date and time (precise to the minute)   |                                |                 |
| <b>Obligation</b>       | Recommended   |                                |                 |
| <b>Guide for use</b>    |   |                                |                 |

### Exit date/time

|                         |   |                                |                 |
|-------------------------|---|--------------------------------|-----------------|
| <b>Name</b>             | Check out date/time   |                                |                 |
| <b>Definition</b>       | Date and time of the visitor's exit or check-out from the location                                  |                                |                 |
| <b>Source standards</b> | ISO 8601 - 1:2019 Date and time – representations for information interchange – part 1: basic rules |                                |                 |
| <b>Data type</b>        | Date/time   | <b>Representational class</b>  | Date/time       |
| <b>Field size</b>       | 14  | <b>Representational layout</b> | YYYYMMDD hhmmss |
| <b>Data domain</b>      | Valid date and time (precise to the minute)   |                                |                 |

|                      |             |
|----------------------|-------------|
| <b>Obligation</b>    | Recommended |
| <b>Guide for use</b> |             |

### 3.2.5 Physical address

Physical addresses for business locations should conform to the **street address data content requirement** and have the following components:

- **Property number or Building name**
- **Road/street name**
- **Locality/suburb name**
- **City/town name.**

NZBN physical addresses also have an ISO 3166-1 country code, which will be set to 'NZ'.

See the linked data element specifications for details.

Further level and unit details may be needed for some business premises, such as for sub-locations in retail outlets or workplaces – eg, 'Shop 4', 'Level 3'. Level and unit data elements, their keywords and formats are defined by the **NZ draft profile of AS/NZS ISO 19160.1:2018 Addressing – Part 1: Conceptual Model** and **AS/NZS 4819:2011 Rural and urban addressing**.

In the NZBN, level and unit details will need to be recorded as part of the location name rather than in the address.

Property number and street name elements will be concatenated into the first address line in the NZBN register, while the other address components will map discretely.

Location name and address example:

- Louie's Lattes Lyall Bay  
1/1012A Lyall Parade  
Lyall Bay  
Wellington

## 3.3 Recording attendance at social gatherings

Social gatherings are defined to be all situations where people are intermingling, other than at a business or a service. See the requirements for **recording attendees at social gatherings**.

Record for each attendee:

- **Person name**
- **Phone number or Email address**
- **Entry date/time**

- **Exit date/time.**

See the linked data element specifications for details. Arrival and departure date/time data elements are equivalent to entry and exit date/time, as defined above.