Te Whatu Ora
Health New Zealand

Te Whatu Ora Health New Zealand

Aotearoa Immunisation Register (AIR) Programme

Release 3

Privacy Impact Assessment

Date: 20 February 2023

Document creation and management

Document Approval

	Name/Title	Sign-off date
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Version table

Date	Version number	Changes made	Version author
20/09/2022	**0.1**	**Initial Draft**	**Edwin Lau-Young**
27/09/2022	1.0	Final Feedback	Kim Stafford
14/10/2022	1.1	Additional fields for AIR user for MHA integration	Kim Stafford
28/10/2022	1.2	Added content for Release 2	Kevin Barron
20/02/2023	**1.3**	**Updated to link Annexed PIA for ISD Reporting Capability**	**Lisa Sheppard**

Disclaimer

This Assessment has been prepared to assist Te Whatu Ora to review the purposes for which information is collected for the Aotearoa Immunisation Register (AIR), how that information 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 Privacy Impact Assessment represents the current expectations of the way the AIR will operate.

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.

Contents

Section One - Executive Summary

Background

1. Vaccinations are recognised by the World Health Organisation as one of the most important public health services in reducing the burden of infectious disease. An effective immunisation programme generates significant benefits at individual, governmental and economic levels.

2. The National Immunisation Register (NIR) implemented in 2005, enabled the collection of information about childhood immunisation rates, but did not include people born prior to 2005. Consequently, it is difficult to understand overall immunisation coverage or to plan targeted interventions. A review of the NIR revealed that:
    - it is not easily configurable, user friendly, intuitive, or easy to change.
    - it is not available in some health care settings and vaccinators are not always able to use the system when and where they are engaging with the public.
    - it struggles with capacity issues with system outages occurring during high load periods.
    - it comprises inflexible reporting tools and processes, so information is not able to be tailored to the specific needs of planners; and
    - it is no longer supported by the vendor.

3. These issues and inefficiencies meant Te Whatu Ora did not have the information system and tools to support a population health approach to improving immunisation coverage across New Zealand and address inequities within that coverage.

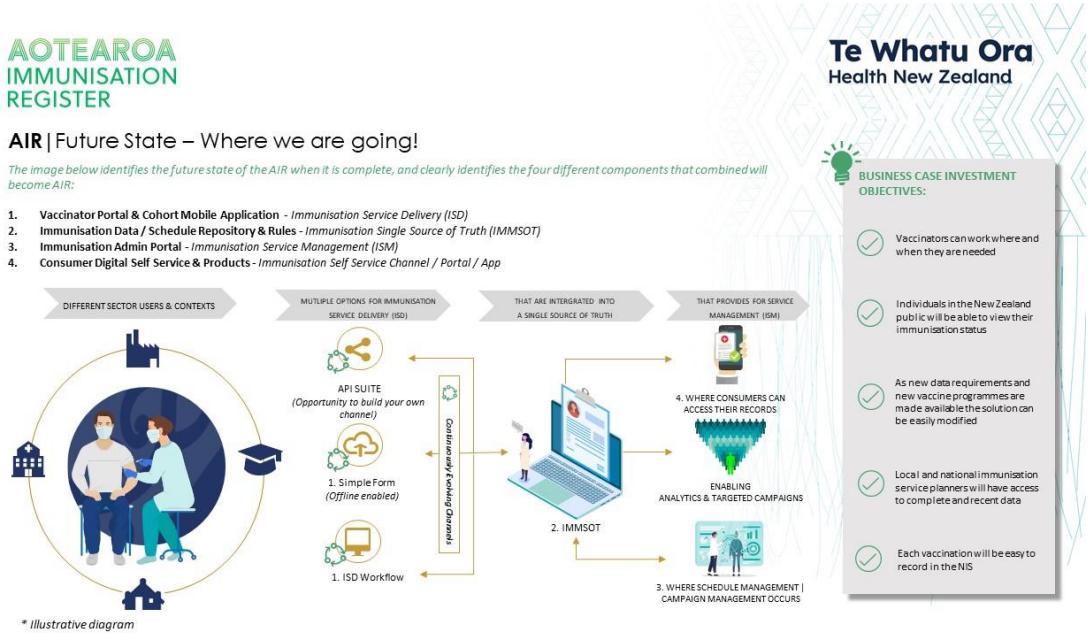
4. On 13 October 2020, the National Immunisation Register (NIR) Replacement single-stage business case was approved to replace the NIR with a scalable, integrated technology. Three investment objectives were identified as part of the Business Case:
    1. Ensure all vaccinators have anytime/anywhere access to immunisation health records and update capability. This included the priority to develop COVID-19 immunisation functionality (the COVID-19 Immunisation Register (CIR)).
    2. Ensure an individual's whole-of-life immunisation data is stored centrally and can be integrated with all other government datasets relevant to that individual. This data needs to be available to providers of healthcare and consumers with a focus on improving customer experience.
    3. Improve capacity to monitor, analyse and report on population immunisation status and identify where there is inequity.

5. The Ministry set up the COVID-19 Immunisation Register (CIR) as a response to the functional limitations of the National Immunisation Register (NIR) for effectively administering the COVID-19 Vaccine and Immunisation Programme (CVIP). The Ministry needed to ensure that it had a robust and nationally available digital recording solution that supported the safe and accurate administration of immunisations.

6. The future state of AIR is to replace the NIR, and supersede the CIR.

7. The Aotearoa Immunisation Register will consist of two layers:
    a. Experience Layer: ISD (Immunisation Service Delivery, or Vaccinator Portal) and the ISM (Information Service Management, or Admin Portal)
    b. Services Layer: Immunisation Source of Truth (ImmSOT) and Reporting

8. The diagram below is an illustrative view of the future AIR solution. For the following assessment we will only be dealing with the AIR ISD (Vaccinator Portal) and ISM (Admin Portal) in the experience layer for the November release.



9. The development of AIR will happen in stages. Outlined below are the stages that have occurred thus far.

    I. On 1 April 2022 a tactical solution was deployed in support of the Flu Vaccination Programme (FVP), Flu vaccinations were captured through the Covid Immunisation Register (CIR) and stored in the NIS Information Service Management (ISM).
    II. In June 2022 NIS was renamed to the Aotearoa Immunisation Register (AIR) as part of Te Whatu Ora.
    III. On 28 September 2022, the Immunisation Service Delivery (ISD) was rolled out to a Pilot group to capture MMR vaccinations.

10. On 09 November 2022, the ISD will be extended to record additional vaccine types and return immunisation history information for consumers currently available in NIR, CIR and AIR. Additionally, the AIR onboarding workflow for users of ISD\ISM will also be included in this release.

11. Authorised users for accessing the ISD and ISM will be vaccinators and administration staff who are involved with the process of administering the Vaccines to be recorded in the ISD. AIR Administrators (former NIR Administrators) will be given access to provide support via

Information Service Management (ISM) function. Vaccinators and AIR Administrators will be onboarded using AIR's onboarding workflow, that includes the use of My Health Account for some AIR users.

12. The AIR ISD will replace the use of the NIR web application called ImmuniseNow. ImmuniseNow is currently what Pharmacy are required to use to view vaccination history from the NIR and record vaccinations administered in Pharmacies to the NIR. In December ImmuniseNow will be closed, following the successful completion of pharmacy onboarding.

13. This PIA Release 3, updates the previous PIA to include an annex PIA for the ISD Reporting Capability, as an interim solution to provide reports to ISD users.

Out of Scope

This Assessment will not cover the systems that the AIR will be connecting to (such as the HPI, NES, MHA and NHI (see glossary)) because they are covered by their own individual Privacy Act Assessments. Key data sharing details will be consistent with their approved PIAs.

The NHI will be used to establish the health identity of Consumers for the purpose of recording the immunisation record and the HPI will be used to manage Vaccinators for the purposes of monitoring and recording the Immunisation.

The NHI, combined with the NES can be used to identify the general practitioner or practice a Consumer is enrolled with to send an electronic notification of the immunisation event via HealthLink (a secure password protected messaging system already used by health providers to send messages to and from Te Whatu Ora for CIR and NIR).

My Health Account is a digital identity tool and a way for the health workforce to access Te Whatu Ora applications securely. MHA will be used in the onboarding workflow to establish the verified identity and CPN attribute for some of AIR users. These credentials will be used in the initial account set-up and once that has been established users will be able to use their MHA to log into AIR.

In Scope, the Aotearoa Immunisation Register (AIR) is an evolving solution. The update in this PIA establishes a link to an annexed PIA for ISD Reporting Capability, which is an interim solution to provide ISD users access to vaccinations administered reports, until the end of September 2023.

Below outlines the existing scope and the new inclusions of the **AIR Programme Release 3**.

Functionality

Existing	• Record vaccination (MMR) • Record vaccination (additional vaccine types) • Onboarding of users • Immunisation history
New	• Annex statement to link this AIR PIA to the PIA assessing the interim ISD reporting capability.

A distinct PIA covering interim ISD Reporting Capability has been annexed to this PIA Release 3 to form a complete assessment of the AIR privacy risks, during this interim period ending September 2023.

The PIA for ISD Reporting Capability is found here:

Further Privacy Impact Assessments will be carried out for the establishment of the AIR beyond this release. It is anticipated that there will be a coexistence/transition period through to December 2022 wherein AIR, NIS, CIR and NIR will be operating at the same time. The existing privacy guidelines for NIR, CIR and NIS will continue to apply during this transition period.

Section Two - Privacy Analysis

The potential privacy impacts resulting from this project are analysed below. The analysis has been completed against the 13 rules of the Health Information Privacy Code 2020/Privacy Act 2020.

Te Whatu Ora has conducted its analysis under the Health Information Privacy Code as the information is about the public and their health services. Under clause 4(1)(e) it is considered that this is 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*'.

Purpose of Collection (Rule 1)

Section 3 of the New Zealand Public Health and Disability Act 2000 provides that one of the purposes of the Act is to pursue as an objective the improvement, promotion, and protection of the health of New Zealanders. Te Whatu Ora coordinating the national immunisation programme is consistent with this legislation and purpose.

The overall purpose of AIR is as a tool to:

- benefit individuals by facilitating the delivery of immunisation services and providing an accurate record of their immunisation history to consumers (individual gain).
- provide national and regional level information on the immunisation coverage of the specified population and assist in achieving New Zealand coverage targets, thus improving individual and population health through the control or elimination of vaccine preventable diseases (public health gain).

The tool will collect identifying information of the Consumer receiving the vaccine, and the Vaccinator providing the vaccination service to allow AIR to serve as a clinical record of vaccinations provided to Consumers. Clinical input has determined the necessary fields to be collected for immunisation, and the AIR is aligned with this information.

AIR will be operating in effect as a clinical system for vaccination providers recording the administration of vaccines supported by the system to Consumers. It will also provide the consumer's immunisation history.

Source of Personal Information (Rule 2)

Biographical information on consumers will be sourced from the NHI on demand when they are interacting with a vaccination provider. This ensures the accuracy of the record and supports clinical safety in ensuring that the correct person is being vaccinated.

The pilot group vaccinator details were requested from users via their employer. In selecting providers to work with during the pilot, we confirmed their employment checks to verify information. Onboarding using MHA will be the option for the future. In the interim state, there will be an alternative to MHA which will require different verification.

Consumers will provide their own data when they present themselves for vaccination.

Vaccination history will be available, and this data will be sourced from the Immunisation History Cache (which in turn will be data sourced from the National Immunisation Register (NIR), COVID (CIRFlu) and MMR.

Compliance with the requirement for the AIR to source information directly from Consumers would prejudice the purposes of collection (Rule 2(2)(c)(ii)) as it would not be possible to obtain a comprehensive list as the AIR could not identify those individuals to request the supply of relevant information. It is also not reasonably practicable in these circumstances to source the information directly from the individual (Rule 2(2)(d)).

Information collection summary table Rules 1 & 2

Personal Information	Purpose	Source	Legal authority
Person Record (records health identity): • NHI • Surname • Given Names • Date of Birth • Gender • Ethnicity • Address information	Identification of individual (and ability to link to relevant NHI). All individuals who are to receive a vaccine must have a person (NHI) record. Other person record details are required for planning and reporting purposes. Vaccinators will be required to check at a minimum the name, date of birth and contact details prior to giving a vaccine to an individual (to assist with accuracy and ensuring the correct	NHI Register	Required to provide health services under the Pae Ora (Healthy Futures) Act 2022.

	person receives the vaccine).		
Immunisation Task: NHI and all the vaccine details including medicine type, batch number, dilutant and needle size, dates, vaccinator of record etc	The record of administration of a single vaccine for a single person. This will be reported to the practitioner the Consumer is enrolled with.	Vaccinator	Required to provide health services under the Pae Ora (Healthy Futures) Act 2022.
AIR User: **From MHA** • First Name • Middle Name • Family Name • Mobile Number • Email • Confidence Level • CPN **Independent verification process:** • First Name • Middle Name • Family Name • CPN • ImmuniseNow username • CIR login username **In AIR** • Login Details	Identification of AIR users and audit purposes. MHA can be used to authenticate onto AIR. If the following details are held by MHA these will be passed to AIR for Identity Authentication. These details will only be passed with the MHA account holder's consent. For those that do not or cannot use MHA, at least one of the following forms of identity verification and authentication must be collected to be onboarded onto AIR – CPN, ImmuniseNow, CIR.	AIR User	Required to provide health services under the Pae Ora (Healthy Futures) Act 2022.

AIR Organisations: • HPI, contact information	Identification of AIR Organisations and Facilities.	Organisation & Facilities	Required to provide health services under the Pae Ora (Healthy Futures) Act 2022.

Collection of information from individual (Rule 3)

Te Whatu Ora will take a number of steps to ensure that Consumers, Facilities and Vaccinators have access to appropriate materials that comprehensively address the Rule 3 collection processes, including:

- what information is being collected.
- the purposes of the collection and the intended use, and users of the information.
- the retention period for the information.

Information will be provided through training and communications activities with the pilot users to ensure their understanding of the purpose of data collection and use in AIR. AIR will have a Privacy Statement, updated if required for every major release of functionality or change of use. This and this PIA will be accessible to any vaccination provider using the system and made publicly available on the Te Whatu Ora website.

The individual will also be made aware:

- of the name and address of the collecting agency and the agency that will hold the information (Te Whatu Ora).
- the right of access to and ability to seek correction of their information.

Manner of Collection (Rule 4)

AIR users are expected to be guided by Standard Operating Procedures in their use of the system. The processes involved will not collect personal information by unlawful, unfair, or unreasonably intrusive means.

The only personal data which can be collected in ISD and ISM that is not pre-populated form source systems is details about the vaccination received.

Information will be captured about users of the system. Their logins and activity will be recorded on the portal so that it is auditable.

Storage and Security (Rule 5)

All data collected from all sources (other systems and people) will be hosted on the MoH Amazon Web Services (AWS) tenancy, hosted in Sydney.

The sources of information include:

- All information collected for ISD (will be stored in the [ISM or ImmSOT]).
- Immunisation History Cache (IHC).
- Population Salesforce Org data related to immunisations.

The information held via AWS is personal information being held by AWS as agent for the Ministry in accordance with section 11 of the Privacy Act 2020. Data stored within AWS is encrypted. The Ministry controls access to the encryption keys and the data. The information is not to be used or disclosed for any purposes other than those directly permitted by the ISM and ISD.

Information stored in AIR will be covered by the NSS Data Policy. This aligns with the relevant HISO standards, including HISO 10029:2015 Health Information Security Framework, and the New Zealand Information Security Manual.

Consumer access to personal information within the AIR will be managed by the standard Te Whatu Ora processes regarding information access requests, using the hnzprivacy@health.govt.nz email address. The oiagr@health.govt.nz email address will also be available for the public to make information requests.

The AIR users will have to have their identity verified and authenticated to gain access to AIR. Users will either onboard through MHA or an independent identity verification process. Vaccinators will have their credentials verified against their CPN.

Access and Correction (Rules 6 & 7)

Users will only be able to access AIR with a unique logon and password and all access will be tracked and audited as outlined in the AIR Security section below. Key users will be:

- Vaccinators using the ISD.
- Te Whatu Ora Administration staff with responsibility to support the AIR (for upload of the user cohort for ISD, error correction and troubleshooting); and Te Whatu Ora (for non-identifiable reporting activities).

Statistical information collected about the use of the platform will be accessible to relevant Health NZ staff, to make decisions about the features and functionality of future AIR. This information will not identify any individual Consumer, nor will Consumer personal information be accessible in this way.

Te Whatu Ora applications such as Snowflake and Qlik will be used for reporting purposes and there are separate PIAs covering all Te Whatu Ora applications which will be used. Standard Te Whatu Ora tools and processes for reporting (including data access controls) will be adhered to.

AIR will not be sending emails that contain Personal Information.

AIR information is Medical-In-Confidence.

The standard Te Whatu Ora Data Access Policy and procedure for individuals wanting to access their own information applies. It states:

"Under the Privacy Act 2020 you are able to request a copy of any data held about you. Should you wish to do this, please email hnzprivacy@health.govt.nz with the specific information you would like as well as your contact details and we will be in touch. Before releasing personal information, we need to confirm your identity. We do this by asking you a standard set of questions."

Te Whatu Ora will have a national contact point for consumers to make contact about their information hnzprivacy@health.govt.nz. This will be incorporated into Privacy Statement materials.

A Consumer can request correction of their personal information held in AIR (including updating address and contact details) directly with the Vaccinator. The Vaccinator will be able to request changes to biographic information held on behalf of the consumer via the current NHI processes (not directly in AIR). Updates to details mastered in the NHI can continue to be made directly in PC Access or Health UI.

Standard Te Whatu Ora policies will still apply regarding access to, and the correction of, personal information.

Future enhancements

If it is a clinical record (e.g., a record of a vaccination event), however, it is essential that the integrity of these records is maintained. The current process for responding to requests to correct clinical information will also apply. This may need to be further refined to include referral to an AIR clinical governance team if there is any possibility of a systemic error identified in source system data. If an error is identified by a vaccinator in the pilot, AIR Administrators will be able to support the correction of this information about the consumer. No other clinical information will be held in the AIR during the pilot so there will not be a situation where other clinical information could need correction (consumer information is limited to biographical information from the NHI, and details of a vaccination event, recorded through the ISD interface).

Accuracy and verification of information (Rule 8)

The Consumer's data held in AIR will be checked with the Consumer at each vaccination event to ensure that their name and address details align with the Consumer presenting for their vaccination. If the information contained within the AIR is found to be inaccurate at this point, the vaccinator will initiate the process for that information to be updated in a separate application (Health UI) connected to the NHI system.

The NHI System is the Source of Truth for Health Identity information.

Operational controls will be contained in Terms of Use and in training for use of AIR.

Retention (Rule 9)

Any 'health record' details will be stored in accordance with the Health (Retention of Information Retention) Regulations 1996. It is noted that records may need to be retained for some time into the future as a resource to confirm who has or has not been vaccinated, and with which vaccine.

Te Whatu Ora Data Governance Group will be responsible for ensuring that personal contact details and any other data is securely deleted once legally able to be disposed of. Retention is likely to be aligned to national dataset collections and may be retained indefinitely (as implications for individuals into the future may require retention of a full record of what immunisation was provided and when).

Use, and Disclosure (Rules 10 & 11)

It is expected that the development of the Privacy Statement materials will clearly describe for Consumers the purposes for which the information collected by the AIR may be used:

- Managing Consumer health
- Keeping Consumers and others safe
- Planning and funding future health services
- Carrying out authorised research
- Training health care professionals
- Preparing and publishing statistics
- Improving government services
- Enabling broader health and social support services

Function creep is a risk that the AIR must guard against. This can be supported by technical controls, limiting users for example, or features that can be accessed (such as non-identifiable reporting for Te

Whatu Ora except where identifiable information is essential). A key control will however be a data governance strategy that will require oversight of any proposed changes to uses of the AIR information or expansion of users.

Disclosures associated with AIR will occur in relation to authorised users in the performance of their roles. Other disclosures will be in accordance with the purposes for which the information was obtained (Rule 11(1)(c)). This is intended to include the disclosure to the person's general practitioner (if they are enrolled in a PHO), to ensure that any future clinical decisions made around vaccinations can be made safely with the complete and correct information about the consumer's vaccination history.
The Governance Group established to govern the operation of the AIR will provide oversight of the use of the data to ensure that use matches the purpose.

Disclosure of personal information outside New Zealand (Rule 12)

Access to the AIR will require multifactor authentication, via a log-in and password for registered users who reside in New Zealand. Access will only be permitted to the functions and data required to do their job – e.g., recording a vaccination.

The role-based access for vaccinators and administrators will be able to be tracked and monitored. It is anticipated that proactive tracking and monitoring will take place, rather than it being implemented retrospectively once a risk has been realised. User activity will be logged, and audit logs will be available for viewing and extraction.

The solution supports the New Zealand Government authentication standards. And data held external to the Agency's network is encrypted both at rest and in transit.

Unique identifiers (Rule 13)

It is necessary to use the NHI, CPN, and HPI as part of the AIR processes to uniquely identify the individuals and providers concerned as the AIR will be recording the administration of clinical services, and these identifiers are necessary to enable the AIR functions to be carried out efficiently and accurately.

The agencies involved in the AIR are authorised to assign the NHI (rule 13(3)) and the HPI CPN (rule 13(4)).

NHI will be established by providers of vaccination services using Health UI and other systems at their disposal.

CPNs are issued on receipt of health practitioner data supplied to the HPI by the Responsible Authorities who have signed a Data Provision Agreement.

Providers will be required to take reasonable steps to ensure accuracy of NHI, CPN and HPI details submitted to the Register.

Governance

The AIR programme is governed by the NIP Programme Leadership Group (PLG). This group is supported in their decision making by the NIP Technical Steering Group and through other technical governance groups like Programme Architect Group (PAG) and Design Authority Group (DAG).

Requests for use of immunisation data held in AIR will go through the NIP Data Sharing and Engagement Team. This team has established data sharing processes and oversight procedures via the Data Sharing Working Group, Data Governance Group and Programme Leadership Group.

Section Two - Privacy Risk Assessment

Risk Reference Number	Privacy Risk Description	Raw Risk Rating Consequence / Likelihood	Existing Controls	Current Risk Rating Consequence / Likelihood	Planned Controls	Target Risk Rating Consequence / Likelihood	Rationale for Target Risk Rating
R01	**Describe** the potential harm to the individual and/or Te Whatu Ora with any privacy risk using the following format: **Source:** what is the action or event that could lead to the risk? **Risk:** what may happen? **Effect:** what would the impact be to the individual and/or your objective and/or on Te Whatu Ora if the risk occurred?	E.g., High (17) Moderate / Highly Probable	In this part of the template pu the **controls (if any) that are already in place**.	High (17) Moderate / Highly Probable	In this part of the template put the **control title**. In the nex table list and describe the controls in detail (Section 5.2). E.g., PIA01 – Access controls PIA02 – Authorisation	E.g, Medium (6) Almost Never / Moderate	**Explain** why you have rated the risk the way you have, noting whether the controls will mitigate consequences and/or likelihood of the risk being realised **Future mitigations:** describe any additional mitigations that will be implemented after the go-live, when they will be implemented, who is responsible and what impact this will have on the risk rating.
1	That the reason for storing information is questioned by consumers.	Low / Low		Low / Low	The information fields to be recorded have a clinical and identity basis and are aligned to other similar medical records.	Low / Low	

Risk Reference Number	Privacy Risk Description	Raw Risk Rating Consequence / Likelihood	Existing Controls	Current Risk Rating Consequence / Likelihood	Planned Controls	Target Risk Rating Consequence / Likelihood	Rationale for Target Risk Rating
2	Consumers object that data is sourced from systems not from consenting individuals.	Low / Low	Consumers will be directly identified by the Vaccinator or administration staff before receiving the vaccination. During the vaccination processes the Vaccinator will be required to verify contact and identification details directly with the Consumer. This will be recorded by the Vaccinator in AIR when verification has occurred.	Low / Low	This will be reinforced during training.	Low / Low	
3	Consumers are concerned about a lack of transparency as to how their data is handled	Low / Low	A simple privacy statement will be available e.g., on posters and within Facilities), with links provided to the Ministry website for a more detailed explanation. The Privacy Statement would also link to this Assessment. Consent will be obtained from each Consumer before administering the vaccination.	Low / Low		Low / Low	
4	Consumers are concerned that personal information is collected by unlawful, unfair, or unreasonably intrusive means	Low / Low	AIR users will be guided by Standard Operating Procedures. Where data for young people is involved, there are steps to ensure appropriate consents are obtained (both in terms of authorisation for immunisation and collection of information).	Low / Low		Low / Low	

Risk Reference Number	Privacy Risk Description	Raw Risk Rating Consequence / Likelihood	Existing Controls	Current Risk Rating Consequence / Likelihood	Planned Controls	Target Risk Rating Consequence / Likelihood	Rationale for Target Risk Rating
5	Offshore data storage with AWS is not secure.	Low / Low	Personal information is held and managed in accordance with the Privacy Act 2020 and Health Information Privacy Code 2020. The data storage arrangements are used by other parts of Te Whatu Ora and have undergone stringent testing. All access will be restricted to credentialed users and the access will be traced and audited.	Low / Low	Information on the AIR will be encrypted in transit and all personally identifiable and clinical data is encrypted in storage. Appropriate security testing of AIR will be performed before go live. A backup facility for AIR will provide appropriate business continuity.	Low / Low	
6	Concern is raised about who can access consumer data.	Low / Low	Consumers can obtain confirmation from Te Whatu Ora around individual data holdings and how to access their information. Consumers are covered by the Privacy Act of 2020.	Low / Low	Te Whatu Ora will have a national contact point for Consumers to make contact and request access to their information. Controls will be put in place to prevent unauthorised access and to monitor for inappropriate use of data.	Low / Low	
7	Consumers cannot correct mistakes in data held about them.	Medium / Medium	Standard Te Whatu Ora policies will apply about access to and correction of personal information.	Medium / Medium	Corrections to consumer data can be made via an AIR Administrator but can be requested via a vaccinator.	Low / Medium	

Risk Reference Number	Privacy Risk Description	Raw Risk Rating Consequence / Likelihood	Existing Controls	Current Risk Rating Consequence / Likelihood	Planned Controls	Target Risk Rating Consequence / Likelihood	Rationale for Target Risk Rating
8	Concern is expressed about accuracy of information held about a consumer	Low / Medium	New NHIs can be requested through current processes for individual Consumer registration, as the source of Consumer information will come from the NHI database. The AIR will have minimal free text manual entry fields to help with accuracy.	Low / Medium	The vaccinator will identify the individual before vaccination.	Low / Medium	
9	Data is retained when it should not be.	Low / Low	Data will be retained in accordance with the Health (Retention of Information Retention) Regulations 1996.[1] Data is retained for the purposes of clinical safety.	Low / Low	The Te Whatu Ora Data Governance Group will be responsible for ensuring that personal contact details and any other data is securely deleted once legally able to be disposed of. Retention is likely to be aligned to national dataset collections and may be retained indefinitely (as implications for individuals into the future may require retention of a full record of what immunisation was provided and when).	Low / Low	

[1] http://www.legislation.govt.nz/regulation/public/1996/0343/latest/DLM225616.html

Risk Reference Number	Privacy Risk Description	Raw Risk Rating Consequence / Likelihood	Existing Controls	Current Risk Rating Consequence / Likelihood	Planned Controls	Target Risk Rating Consequence / Likelihood	Rationale for Target Risk Rating
10	Information is not used for the purpose it was obtained.	Low / Low	The Privacy Statement describes for Consumers the purposes for which the information collected by the AIR may be used.	Low / Low	The Governance Group established to govern the operation of the NIS will provide oversight of the use of the data to ensure that use matches the purpose.	Low / Low	

Risk Calculation Tables

Risk Probability Criteria								
Cyber Security	**General**							
It is easy for the threat to exploit the vulnerability without any specialist skills or resources or it is expected to occur within **1 – 6 months.**	**Future Potential:** Expected to occur regularly under normal circumstances **Historic Experience:** Occurred repeatedly last year	**Almost Certain**	**Probability**	**Medium 11**	**High 16**	**High 20**	**Very High 23**	**Very High 25**
It is feasible for the threat to exploit the vulnerability with minimal skills or resources or it is expected to occur within **6 – 12 months.**	**Future Potential:** More than an even chance of occurring at some time in the next year. **Historic Experience:** Occurred once last year.	**Likely**		**Medium 7**	**Medium 12**	**High 17**	**High 21**	**Very High 24**
It is feasible for the threat to exploit the vulnerability with moderate skills or resources or it is expected to occur within **12 – 36 months.**	**Future Potential:** Above average chance the risk will occur at least once in the next 3 years &/or often reported elsewhere in the past. **Historic Experience:** Has not occurred in the last two years.	**Possible**		**Medium 4**	**Medium 8**	**Medium 13**	**High 18**	**Very High 22**
It is feasible but would require significant skills or resources for the threat to exploit the vulnerability or it is expected to occur within **3 – 5 years.**	**Future Potential:** Not likely to occur in normal circumstances and/or is unlikely to occur within the next three years. **Historic Experience:** Has not occurred in the last 5 years.	**Unlikely**		**Low 2**	**Medium 5**	**Medium 9**	**High 14**	**High 19**
It is difficult for the threat to exploit the vulnerability or it is not expected to occur within **5 years.**	**Future Potential:** Conceivable but would only occur in extreme circumstances &/or will probably not occur in the next 5 years. **Historic Experience:** Has not occurred for more than 5 years	**Rare**		**Low 1**	**Low 3**	**Medium 6**	**Medium 10**	**High 15**
				Consequence				
				Minimal	**Minor**	**Moderate**	**Significant**	**Severe**

Risk Consequence Criteria					
Category	**Minimal**	**Minor**	**Moderate**	**Significant**	**Severe**
Reputation	No media coverage	• Negative references in local publications • No need to raise the issue with Minister or other external stakeholders	• Negative references in regional publications • Minister advised of the issue as part of general or one-off briefing	• Negative references in national publications and on social media websites • It is likely that the event would result in the Minister asking for an explanation but would maintain confidence in the Ministry	• Negative references in international publications and on social media websites • It is likely that the event would result in the Minister expressing concern on the confidence in the performance of the Ministry
Trust and Confidence - Public and Health Sector	Negligible impact on the perceived trust and confidence of the Public **AND/OR** Health Care Sector in the Ministry's ability.	The Public **OR** Health Care Sector express a 'one-off' or isolated case of a reduction in trust and confidence in the Ministry's ability.	The Public **AND** Health Care Sector express a 'one-off' or isolated case of a reduction in trust and confidence in the Ministry's ability.	The Public **OR** Health Care Sector express repeated cases of a reduction in trust and confidence in the Ministry's ability.	The Public **AND** Health Care Sector express repeated cases of a reduction in trust and confidence in the Ministry's ability.
Strategic	No impact on the Ministry's ability to achieve its strategic objectives	Small delay in achieving the objectives of the strategic plan	Delay in achieving the objectives in the strategic plan that requires re-deployment of resources	Non-achievement of the strategic plan objectives	Complete questioning of the strategic plan
Operational	• No measurable operational impact to the Ministry, treated as a routine issue • Manager oversight of issue and actions but employee manages the problem	• Small impact felt to a single area of the Ministry • Management intervention required	• Impact felt in multiple areas of the Ministry; degradation of operations and service • Tier 3 management oversight of issue and actions taken, tier 2 manager aware	• Significant impact felt throughout the organization • Tier 2 oversight of issue and actions taken, DG aware	• Exceeds organization's capacity to respond • Permanent degradation of operations or service • Immediate Executive and DG oversight of issue and actions required.
Health and Safety	No injury or damage to worker health	Superficial injury, first aid required, not affecting ability to work or causing long term damage	Injury requiring medical attention and/or short-term injury, restricted or alternate duties may be required short term	Notifiable injury or illness, significant duration lost time injury, several people injured, permanent or partial disability	Fatality or multiple fatalities
Financial – DE	• Additional, unbudgeted expenditure - Less than $500,000 **AND** • Will not result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $500,000 - $1m **AND** • Will not result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $1m - $4m **OR** • Forecast to result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $4m - $10m **OR** • Forecast to result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - exceeding $10m **OR** • Forecast to result in a potential breach of appropriation in the financial year
Financial – NDE	• Additional, unbudgeted expenditure - Less than $1,000,000 **AND** • Will not result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $1m - $10 m **AND** • Will not result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $10m - $25m **OR** • Forecast to result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - $25m - $50m **OR** • Forecast to result in a potential breach of appropriation in the financial year	• Additional, unbudgeted expenditure - exceeding $50 m **OR** • Forecast to result in a potential breach of appropriation in the financial year
Financial – Capital Projects	Additional, unbudgeted capital expenditure - Less than $500,000	Additional, unbudgeted capital expenditure - $500,000 - $1m	Additional, unbudgeted capital expenditure - $1m - $3m	Additional, unbudgeted capital expenditure - $3m - $15m	Additional, unbudgeted capital expenditure - exceeding a WOLC of $15m
Legal/ Compliance	No breach of statutory obligations	No breach of statutory obligations	Breach of legislation with minor consequences	Significant breach of statutory obligations	Failure to comply with legal or statutory requirements resulting in criminal or civil prosecution, imprisonment and/or fines.
Contract Performance	No breach of contract	Minor breach of contract	One-off failure to carry out contracted services	Consistent failure to carry out contracted services	Legal dispute due to failure to carry out contracted services
Environment	No environmental damage	No environmental damage	Short-term, on-site environmental damage	Long-term, on-site environmental damage	Long-term, on-site and off-site environmental damage
Technology	Isolated end-user device failure	• Isolated infrastructure equipment failure • Loss of data causing operational inconvenience but no impact on service delivery	• Multiple/related infrastructure equipment failures. • Widespread end-user device failure. • Loss of data adversely impacting internal objectives at department level but no external impact	• Infrastructure equipment failure or security breach compromising the integrity or confidentiality of data • Loss of data adversely impacting external parties • Loss of a business system for an extended period	• Unrecoverable loss of significant Ministry data • Complete loss of IT infrastructure or multiple core business systems for an extended period of time.

When calculating the above, consider the impact on the person or persons whose information is involved. The higher the impact on an individual, and/or the higher the number of individuals affected, the greater the consequences will be for Te Whatu Ora. Consider, for example, reputational damage or impact on trust in the health system; the business impact of staff being redeployed to manage an incident; and potential for litigation, adverse action by the Office of the Privacy Commissioner, and/or compensation to be paid.

For most privacy impacts, the areas affected for Te Whatu Ora will be Reputation and Trust and Confidence. Major incidents involving information about a large number of people could also impact Financial, and incidents involving staff information could have an impact under Health & Safety.

The impact only has to be in one area for the rating to apply. Below is a guide based on the categories of harm in s69(2)(b) of the Privacy Act 2020.

Impact on affected individual(s)				
Rating	Description	Loss, damage, or injury	Rights and interests	Reputation and feelings
5	Severe	Major incident or health impact involving loss of life or severe physical injury with permanent serious physical and/or psychological effect	Access to health services irreparably denied to one or more individuals, or significant lost benefit or opportunity or financial harm/loss to a large number of individuals or a community	Significant ongoing humiliation, loss of dignity, or damage to reputation of a large number of individuals or a community
4	Significant	Serious incident or health impact with long-term physical and/or psychological effects and/or impact on quality of life for one or more people	Lost benefit or opportunity, significant financial harm/loss, or access to health services delayed for an extended period for a large number of individuals or a community	Significant humiliation, loss of dignity, or damage to reputation of a large number of individuals or a community
3	Moderate	Incident involving injury or health impact requiring medical attention	Lost benefit or opportunity, significant financial harm or loss, or access to health services delayed for an extended period for one or a few individuals	Significant humiliation, loss of dignity, or injury to feelings of one or a few individuals
2	Minor	Incident involving minor injury or health impact to one or a few people not requiring medical attention	Minor limited or short-term financial harm or access to health services or to a health benefit or opportunity for one or a few individuals delayed for a limited period	Limited humiliation, loss of dignity, or injury to feelings of one or a few individuals
1	Minimal	Health impact or injury made possible but avoided	Short-term delayed access to a health benefit or opportunity for one or a few individuals	Minor embarrassment or injury to reputation or feelings of one or a few individuals

Glossary

The following are definitions used in this Assessment:

Term	Description
AWS	Amazon Web Services
CIR	COVID-19 Immunisation Register
Cohort	A few people grouped by a common attribute
CPN	Consumer Practitioner Number
FVP	Flu Vaccination Programme (FVP)
GP Notification	A general term for a message going back to the GP, currently supported by HealthLink over Connected Health in the form of HL7 Messages
Health UI	A Web Based user interface for the NHI, used in a swivel chair fashion.
HealthCloud	Salesforce Data Model and associated accelerators for Health
HISO	Health Information Standards Organisation
HNZ	Health NZ
HPI	Health Practitioner Index
Immunisation Handbook	The “manual” for immunisation in New Zealand. Much of what we are supporting is encompassed in here. https://www.health.govt.nz/publication/immunisation-handbook-2020
Immunisation history	An individual’s Immunisation history limited by the information HealthNZ hold in NIR and in Salesforce (CIR, Flu)
ISD	Information Service Delivery - Vaccinator Portal
ISM	Information Service Management – Admin Portal, tool for AIR Admins
MHA	My Health Account. A Ministry of Health service that connects you to your health information and online health services.
Ministry	The Ministry of Health
NES	National Enrolment System to a General Practitioner.

NHI	National Health Index – this is the unique identifier that is assigned to every person who uses health and disability support services in New Zealand.
NIR	National Immunisation Register
NIR Admin	Refer to the users of NIR made up of staff across the Country within DHBs
NIS	National Immunisation Register (now referred as Aotearoa Immunisation Register)
Opted IN/OUT	Currently you can opt in or out of the schedule. There is also opting in and out of correspondence.
PMS Provider	Provider of Practice Management System used by GPs
Provider	The term related to an entity providing vaccination services
Schedule	Currently has multiple meanings and concepts. We are preparing a model to articulate this.
Vaccination Record	Refers to the actual vaccination record, which is realised as either an entry from ISD, ImmuniseNow or GP. A vaccination event is the act of giving a vaccination.