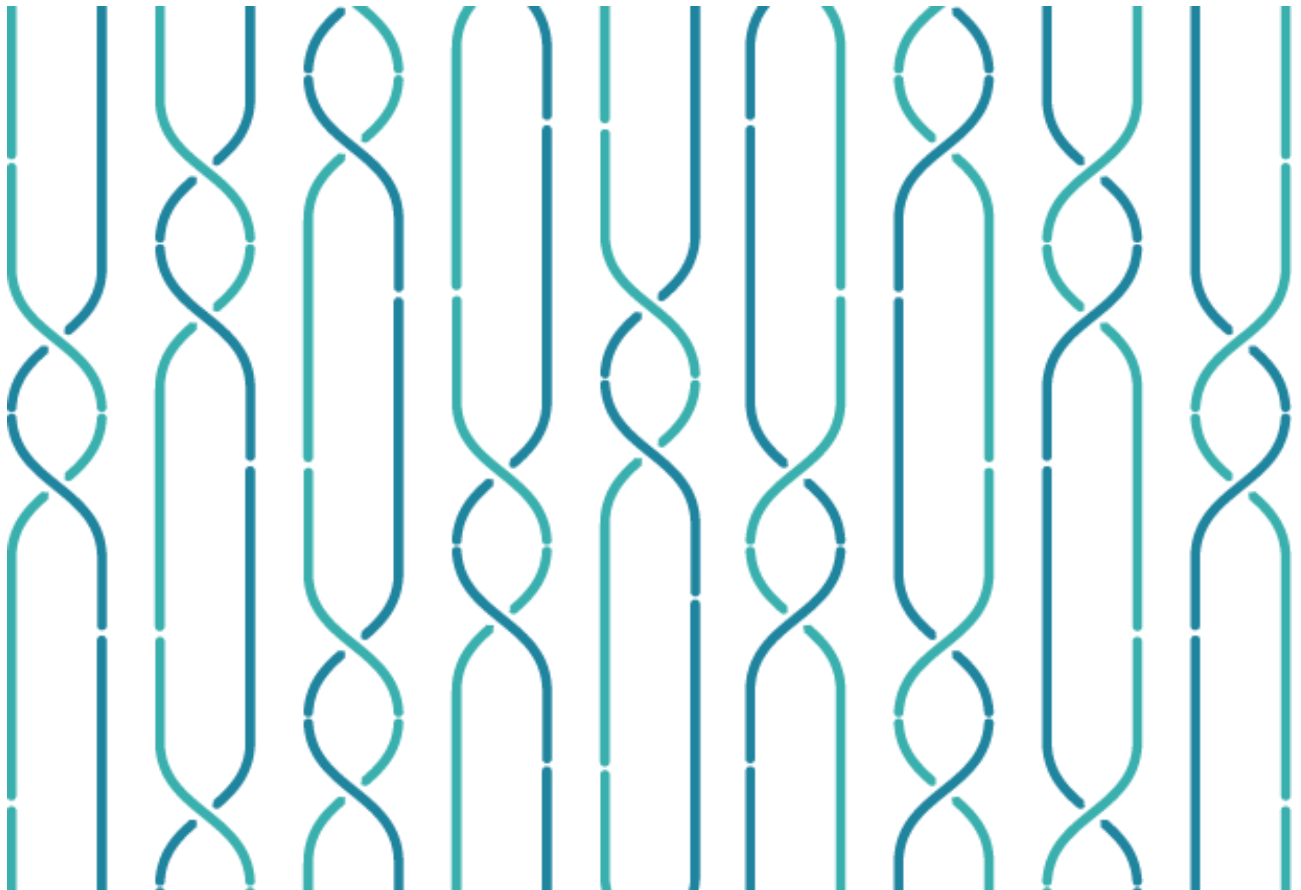


PUBLIC HEALTH SURVEILLANCE STRATEGY 2025–2030



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Foreword

Public health surveillance systems provide essential information for detecting and understanding health threats. Just as diagnostic tests are important for managing diseases in individuals, our surveillance systems are critical for managing threats at a population level and are critical enablers of public health action.

The context for public health surveillance has changed rapidly over the past two decades, with the emergence of new diseases and health threats and new data sources and technologies. In response, public health surveillance in New Zealand must be flexible, to address changing demands and take advantage of new opportunities. For example, the system must adapt to changing patterns of disease caused by climate change and embrace emerging technologies, such as whole genome sequencing.

Existing barriers to effective public health surveillance must also be addressed if we are to achieve a world class system. A key barrier is a lack of centralised coordination. Currently, surveillance is performed through a collection of systems and programmes across a network of organisations. Better coordinating activities within a surveillance ecosystem can generate value for all stakeholders. With a coordinated system, communication channels can be improved, duplication can be avoided, shared system priorities can be established, and – critically – system readiness to respond to new challenges or opportunities can be enhanced and ensured.

The strategic directions and focus areas outlined in this strategy arose out of a close collaboration between the Public Health Agency within the Ministry of Health (the Ministry), the National Public Health Service within Health New Zealand, other parts of the Ministry and Health New Zealand, and the Institute of Environmental Science and Research. The strategy emphasises the importance of strengthening quality governance, leadership and coordination, as well as a focus on public health priorities, a readiness to meet challenges and embrace opportunities, and continuous quality improvement.

We can be proud of the work that has been done to develop public health surveillance in New Zealand over many years. This strategy charts the direction for the next five years towards a truly world-class public health surveillance system.

Thank you to all of those that have been involved, and continue to be involved, in the development and implementation of the Public Health Surveillance Strategy 2025–2030.

Dr Andrew Old
Deputy Director-General of Health
Public Health Agency

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Director of Public Health
Public Health Agency



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Introduction

Public health is a collective effort to protect all people against health risks and threats, prevent illness, reduce disparities, improve health outcomes and promote health and wellbeing. Every person is significantly influenced across their life course by public health activities.

Public health *surveillance* is the ongoing systematic collection, analysis, and interpretation of health-related data and is essential to planning, implementation and evaluation of public health practice. It is critical to inform decision-making about both short- and longer-term public health actions (World Health Organization 2017; Centers for Disease Control and Prevention 2012).

Surveillance information is vital for real-time decision-making and immediate action for public health programmes; monitoring and responding to events as they occur. For example, it is used to detect disease outbreaks and to identify areas of low immunisation coverage for prompt operational response.

Surveillance also informs policy, prevention and strategic planning by providing comprehensive, big-picture insights from observing patterns over time. Data from multiple sources is often integrated to support decision-making. For example, studying long-term trends (over years or decades) in population health can inform public health policies and resource allocation. Horizon scanning can help to identify and prepare for upcoming health threats.

Finally, surveillance is required to support monitoring and evaluation activities to ensure our public health practice is achieving the desired outcomes.

The importance of public health surveillance is underpinned by the suite of Pae Ora strategies and health sector principles required by the Pae Ora (Healthy Futures) Act 2022 (Minister of Health 2023a-f), and the Government Policy Statement on Health 2024-2027 (GPS) (Minister of Health 2024).

The GPS includes a specific expectation to 'strengthen public health surveillance to increase the detection and response to communicable and non-communicable diseases, and to inform on the distribution of wider determinants of health and wellbeing' (Objective 3.2). Public health surveillance will also contribute to monitoring of the wider system under the new strategic monitoring framework set out in the GPS.

For maximum effectiveness, public health surveillance must identify health threats and opportunities to enable timely responses. It must also be well organised, equitable, culturally appropriate and ethically sound. It needs to recognise that human, environment and animal health are interdependent, in keeping with mātauranga Māori and the One Health approach¹.

¹ **One Health** is an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals, and the environment.



In New Zealand, surveillance is a collaborative endeavour. The Public Health Agency (PHA), within the Ministry of Health, is responsible at the strategic and ecosystem level, while the National Public Health Service (NPHS) within Health New Zealand, is responsible for operational responses. The Institute of Environmental Science and Research (ESR) provides specialist national health intelligence, surveillance and public health laboratory services to prevent and control infectious and notifiable diseases and environmental health threats. There are also specific surveillance roles within the University of Otago, Massey University and others.

The current lack of centralised coordination of public health surveillance risks gaps, and creates inefficiencies within the system. A high-functioning and intentional system requires strong and coordinated governance and leadership for priority setting, resource allocation, strategic alignment, continuous improvement and preparedness within the system for new and emerging issues.

The Public Health Surveillance Strategy 2025–2030 (the strategy) guides responsible entities towards a unified surveillance ecosystem by establishing a centralised governance, leadership and coordination model. This system shift is a critical enabler of ongoing improvements to public health surveillance, which will be guided by four strategic directions, as follows.

1	Strengthening governance, leadership, and coordination
2	Focussing on the things that matter
3	Responding to emerging public health challenges and opportunities
4	Continuously improving

This strategy sets a five-year direction for the development of action plans that fall under its umbrella. These will contain specific actions for relevant health agencies and the sector to deliver. The action plans will also set out timeframes and accountabilities and be monitored to ensure delivery.

By implementing this strategy and associated action plans, we will achieve our vision of ‘a world class public health surveillance system that provides timely information for action, planning and evaluation to effectively respond to public health threats; protect and promote health and health equity; and prevent disease, disability or injury.’

The PHA led the strategy’s development as a collaborative project with the wider sector. Previous analyses of New Zealand’s public health surveillance system were considered during strategy development (Baker et al 2010; Allen and Clarke 2009; Ministry of Health 2020). In addition, a wide range of stakeholders, including Māori and Pacific health experts, academics, medical officers of health and other clinicians, data and digital experts, and microbiologists contributed their expertise.



Public health surveillance in New Zealand

Purpose

The information produced from public health surveillance enables people, communities, and organisations to invest their attention and resources to have the most impact. The scope of public health surveillance is broad. It includes communicable and non-communicable disease; wellbeing; the social, commercial, and behavioural determinants of health; primary care activities; and environmental hazards, over both short-term and longer-term time horizons.

Practical applications of public health surveillance information include:

- detecting new threats and informing risk assessments
- estimating the magnitude of a problem, risk or threat
- determining the distribution of a disease
- enabling public health response and community action
- generating hypotheses and stimulating research that will improve public health understanding
- evaluating control measures
- monitoring changes in infectious agents
- monitoring community resilience and wellbeing
- quantifying and identifying disparities in health outcomes for different populations
- monitoring behaviours related to disease control measures
- detecting changes in behaviours such as vaping and alcohol consumption
- facilitating planning and policy development
- facilitating quality improvement, monitoring and evaluation.

Leadership for public health surveillance

Public health surveillance is a collaborative endeavour across several entities. Currently, the PHA, as part of the Ministry of Health, is responsible for public health stewardship, strategy, policy and monitoring across the health system. The PHA advises the



Director-General of Health and Ministers on matters relating to public health. As part of Health New Zealand, the NPHS is responsible for responding to public health threats and commissioning or providing health promotion, prevention and protection activities at local, regional and national levels.

ESR supports both the PHA and the NPHS through the provision of specialist public health surveillance and public health laboratory services for infectious and notifiable diseases and environmental health threats. ESR has a leadership role in horizon scanning, scientific development and research, international surveillance, risk assessments, and aspects of domestic surveillance and intelligence.

Other groups within Health New Zealand that are integral to public health surveillance include those with data and digital, hauora Māori and Pacific health responsibilities. Aspects of surveillance are also conducted by the Evidence, Research and Innovation, and Regulation and Monitoring directorates within the Ministry.

The existing Shared Public Health Leadership Group provides cross-agency leadership, oversight and direction for the public health work programme and a forum for discussing and collectively agreeing key decisions. Membership comprises leadership across the PHA, the NPHS and Hauora Māori Services within Health New Zealand.

The Pae Ora (Healthy Futures) Act 2022 outlines relevant roles and responsibilities for Iwi Māori Partnership Boards (IMPBs) and the Hauora Māori Advisory Committee (HMAC). IMPBs were established to represent local Māori perspectives on the needs and aspirations of Māori with respect to planning and decision-making for health services at the local level. They are important collaborating entities within the health sector. The HMAC provides the Minister of Health with independent, tangible and actionable advice and guidance on Māori health priorities at a national level. It also assists with monitoring of Māori health outcomes and system performance. While the HMAC provides advice to the Minister of Health, and IMPBs are rooted in (and accountable to) communities, public health surveillance information supports both in their roles.

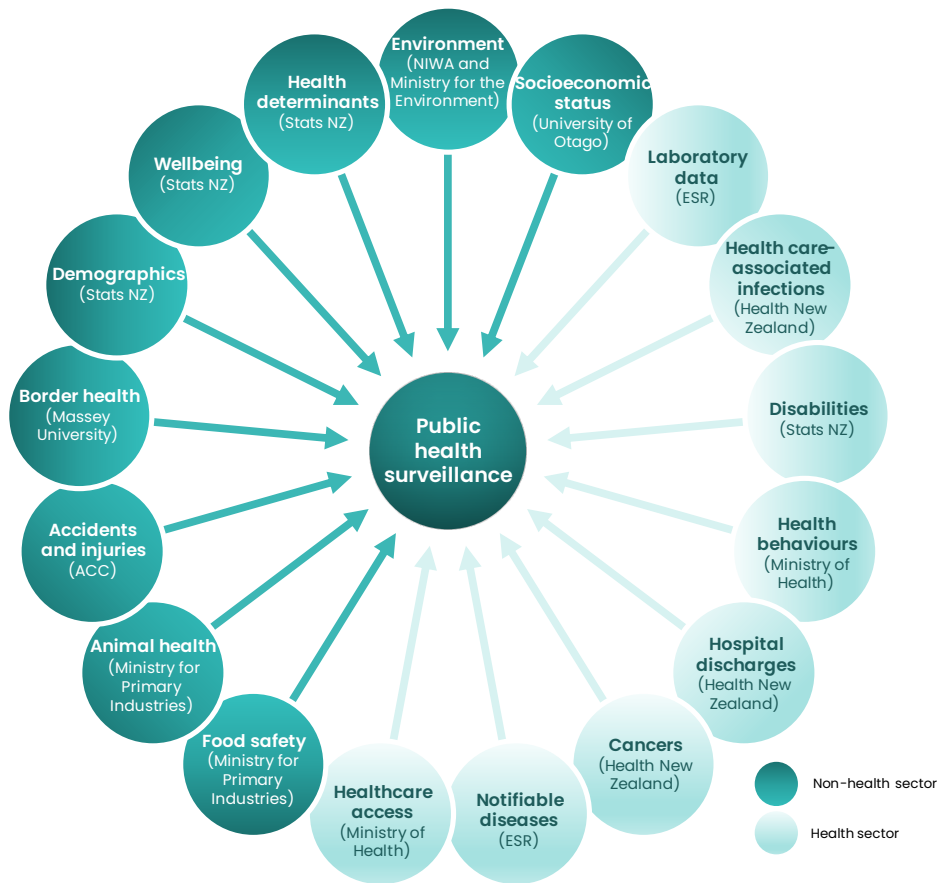
Surveillance data

Many sources of data are used to answer public health surveillance questions and inform public health action. Not all these sources of data sit within the health system, and some of the data is collected for a purpose other than public health surveillance. For this reason, not all surveillance data can be directly targeted for improvement by this strategy. However, consideration can be given to how to use the data effectively for surveillance purposes and where the health sector can influence data quality.

Figure 1 below shows some sources of data used in public health surveillance. It is not exhaustive; rather, it presents some examples to show the diversity of data sources and how they commonly sit outside of the health system.



Figure 1: Example types and sources of data used for public health surveillance



Surveillance ethics

As surveillance involves the collection and use of information about people, the system must protect individual rights to informed consent, privacy and confidentiality. Surveillance should only be undertaken with a justifiable purpose and with careful attention to ethical principles, data sovereignty and data management.

Key ethical principles for the responsible collection use of public health surveillance data include the following (World Health Organisation 2017, Healthcare Ethics and Law 2024).

- **Beneficence:** ensuring that surveillance activities are of public health benefit. Data is collected for a legitimate public health purpose, and surveillance is followed by clear decision-making or public health action (or both)
- **Minimisation of harm:** taking measures to minimise the potential harms associated with surveillance activities, such as stigma, discrimination, racism or breaches of trust, and ensuring that data collection methods are proportionate to the public health threat
- **Privacy and confidentiality:** balancing the need to collect and share data for public health purposes with individuals' rights to privacy and confidentiality, ensuring that personal information is protected and anonymised whenever possible.

It is often possible to conduct population-based surveillance without the use of personally identifiable information; however, care must be taken to avoid stigmatising groups when using this approach

- **Justice:** ensuring that the distribution of costs and benefits of surveillance activities is fair, equitable and appropriate
- **Transparency and accountability:** maintaining transparency in surveillance activities, including in the way data is collected, used and shared, and ensuring accountability in decision-making processes and actions taken based on surveillance findings
- **Data quality and integrity:** ensuring that surveillance data is as accurate, reliable and representative of the population being monitored as possible, and that appropriate measures are in place to prevent misuse or misinterpretation of data
- **Collaboration and community engagement:** involving communities and stakeholders in the design, implementation, and evaluation of surveillance systems; respecting their perspectives; and actively addressing their concerns throughout the process.

Public health laboratory system

Public health pathology and laboratory services are an essential component of an effective public health system – as the COVID-19 pandemic highlighted. The public health laboratory system comprises a network of all laboratories, health agencies and cross-sector agencies (including universities and sector experts) that, together, provide public health laboratory services for New Zealand.

The main public health surveillance products that laboratories deliver are data, intelligence and knowledge at an environmental, food, animal or human (individual, group or population) level, particularly regarding the causative organisms or agents of public health events or cases and, based on this, the potential links between cases and/or events.

An effective public health laboratory system is of strategic importance to public health surveillance because the two systems have significant interdependencies. We need a public health laboratory system that is highly connected and agile to deliver effective public health pathology and laboratory services and advice that supports public health actions and decisions and will continue to do so.

The PHA are also leading a programme focused on strengthening the laboratory system for public health (Appendix 1) that sits as a key deliverable under this strategy (1.4.c).



Strategic directions and focus areas

This strategy's strategic directions and focus areas provide the basis for developing action plans to improve the public health surveillance system. The strategic directions respond to current challenges within the public health surveillance system in New Zealand.

These strategic directions are necessary to shift the system towards the following vision.

'A world class public health surveillance system that provides timely information for action, planning and evaluation to effectively respond to public health threats; protect and promote health and health equity; and prevent disease, disability, or injury.'

The four strategic directions are:

1. Strengthening governance, leadership, and coordination
2. Focussing on the things that matter
3. Responding to emerging public health challenges and opportunities
4. Continuously improving

This section presents opportunities and challenges under headings that pertain to each strategic direction, as well as focus areas for action.

Strengthening governance, leadership and coordination

Opportunities and challenges

Limited coordination and public health leadership in the past has led to gaps and inefficiencies across a fragmented surveillance system, coupled with a lack of clarity on roles and responsibilities. Public health surveillance needs to function, as much as possible, as one system coordinated across agencies (and partner organisations).

System governance and leadership should recognise the health sector principles set out in the Pae Ora (Healthy Futures) Act 2022 and ensure that public health surveillance is conducted in a manner that recognises cultural respect.



Why is this important?

A high-functioning and intentional surveillance system requires strong and coordinated governance and leadership on priority setting, resource allocation, strategic alignment, continuous improvement and preparedness within the system for new and emerging issues. Coordinated governance and leadership reduces duplication and increases people's confidence in decision-making and the investment of resources across the surveillance system. Strong leadership will ensure the effective development and delivery of action plans that fall under this strategy.

What does it look like in practice?

The PHA, NPHS, ESR and other entities within the public health surveillance system demonstrate strong active relationships within an agreed governance and leadership model.

Roles, responsibilities, and accountabilities among entities within the surveillance system are established, and shared interests and goals are identified. Decisions are made at the appropriate level. All entities within the public health surveillance system:

- know what the joint priority areas for surveillance are
- know their role in terms of surveillance of the priority areas
- are aware of surveillance workplans
- have the resources and support they need to play their part
- are supported to foster effective relationships
- understand the communication requirements specific to them.

Entities should demonstrate active partnerships with Māori in designing and implementing public health surveillance activities and ensuring that Māori are able to access Māori data for the purpose of improving Māori health outcomes.

Focus areas

1.1 Establish system governance and leadership

- a. Establish a public health surveillance governance, leadership and coordination model that reduces duplication and improves decision making. Clearly set out the roles and responsibilities of agencies and leaders including leaders from across the health system.

1.2 Identify system requirements

- a. Identify the surveillance information needs of key users; map these against existing data sources, metrics and products; and determine what is needed to maintain and expand the system.
- b. Undertake an analysis of workforce needs and requirements across the whole surveillance system; provide recommendations for addressing gaps; and ensure this workforce is specifically accounted for in health workforce planning.



1.3 Develop system resources

- a. Develop, maintain and share a collaborative map of entities, expertise and activities across the surveillance system, defining the roles, responsibilities, scope and contribution of each (with a particular focus on ensuring this is documented for surveillance priority areas).
- b. Develop, maintain and publish an online public directory of surveillance activities and data and information repositories within New Zealand.
- c. Establish public health surveillance technical advisory groups to support specific topic areas/actions, alongside community experts (eg, from Māori, Pacific, people with disabilities and Rainbow communities) as required.
- d. Ensure that data and analysis platforms across the health system account for surveillance information needs.

1.4 Strengthen links across the system

- a. Explore opportunities to work with IMPBs to support them to generate and use surveillance data effectively.
- b. Undertake work with stakeholders (including agencies, entities, communities and external information providers) to improve communication across the system.
- c. Strengthen the public health laboratory system and identify areas for strategic alignment and improved integration between laboratory and wider public health surveillance work.

Focussing on the things that matter

This strategic direction aims to ensure that public health surveillance attention and investment is directed towards agreed public health priorities and is consistent with the direction set out in the GPS to deliver timely access to quality healthcare, and the purpose of the Pae Ora (Healthy Futures) Act 2022.

Opportunities and challenges

There is currently no process to establish which public health concerns and opportunities we should prioritise. This has led to gaps in coverage in some areas; for example, health care-associated infections. There is also an imbalance between the attention given to communicable diseases and that given to other threats to health and wellbeing.

In some areas of the health and social system, ethnicity data quality is poor, particularly for Māori and Pacific peoples. There are also data gaps for people with disabilities. Poor data quality for some groups may obscure disparities across population groups. The system lacks the ability to capture the voice and aspirations of populations.

Why is this important?

Public health surveillance has an important role in both informing actions related to existing public health priorities and setting new priorities. To fulfil this role, the surveillance system needs to be focusing on the right areas. A clearly established process to determine priority areas for surveillance activities is critical. Because public health risks and opportunities change over time, surveillance priorities should be periodically reviewed using robust, transparent processes that account for the need for continuity in public health surveillance.

What does it look like in practice?

The PHA, NPHS and other entities within the public health surveillance system share an approach to setting priority areas for surveillance activities. Established priorities are consistent with the overarching goal of the health system to improve life expectancy and quality of life and the system's ongoing commitment to improve equity and reduce health disparities. Resources are prioritised and approaches tailored and targeted across the surveillance system to meet shared goals. Priority areas for surveillance activities are reviewed periodically in a robust, transparent process and the system can readily adapt to shifting priorities. Clear governance is in place to support decommissioning or decreased resourcing when an area of surveillance is no longer a priority.

Focus areas

2.1 Establish prioritisation pathways

- a. Develop and implement a framework and process for establishing, monitoring and reviewing public health priorities for public health surveillance.
- b. Monitor progress on the incorporation of prioritisation frameworks, models and tools across public health surveillance sector activities.

2.2 Respond to Māori priorities

- a. Support local relationships with IMPBs and respond to local hauora Māori priorities and needs as identified by IMPBs.
- b. Develop an understanding of Māori aspirations and expectations in terms of public health surveillance and identify specific areas for attention, improvement or development, working alongside IMPBs and HMAAC.

2.3 Improve equity data collection and reporting

- a. Identify gaps and develop standards, methods and a common language for reporting health inequities and influencing factors, such as those related to social and economic factors.
- b. Develop initiatives to improve the quality and visibility of data, analytics and intelligence for population groups with known data gaps (eg, Māori, Pacific, people with disabilities and Rainbow communities).



- c. Identify new ways that public health surveillance could be used to advance equity for different population groups.

Responding to emerging public health challenges and opportunities

Opportunities and challenges

The public health surveillance system needs to be more future focused, resilient and adaptive to changes. In recent years, the system has missed some opportunities to harness new and emerging technologies that could improve the efficiency, effectiveness, quality and reach of public health surveillance.

Currently, horizon scanning for emerging challenges and opportunities is limited, reducing the system's ability to take advantage of new information or technologies. We need to clarify roles, responsibilities and capacity across the system, to facilitate rapid adaptation that gives us the ability to meet emerging needs or take advantage of new methods.

Why is this important?

Effective horizon-scanning mechanisms are crucial for keeping surveillance systems responsive and relevant to our changing world. The capability and capacity to stand up or adapt public health surveillance quickly allows timely detection of and response to emerging health threats. Early intervention leads to better health outcomes. Rapid adaptation ensures the system stays effective in addressing evolving challenges and maximising opportunities to improve surveillance methods.

What does it look like in practice?

The public health surveillance system can swiftly integrate new information, adjust surveillance strategies and methods, and communicate information to responding entities. The system addresses climate change, new technologies, new information needs (eg, in relation to the emergence of a novel pathogen), demographic changes, international surveillance, hazards, and emerging threats (eg, antimicrobial resistance, food safety), as necessary.

Focus areas

3.1 Strengthen horizon scanning

- a. Link with horizon scanning the Ministry of Health, Health New Zealand and ESR are already undertaking. Work collaboratively to clearly specify horizon scanning roles, accountabilities, monitoring and knowledge mobilisation across the public health surveillance network.



3.2 Strengthen system preparedness

- a. Prepare IT systems (hardware and software), the surveillance workforce and legislative and policy mechanisms to quickly respond to new, urgent or emergent public health threats.
- b. Support the surveillance component of relevant emergency plans led by the PHA or the NPHS.

Continuously improving

This strategic direction aims to embed continuous quality improvement as an integral component of the public health surveillance system, to support system stewardship, monitoring and evaluation. It also aims to address known (and identify unknown) system gaps and opportunities and create efficiencies in the system.

Opportunities and challenges

Without centralised governance and leadership, improvement occurs at the level of individual surveillance systems, but not at the ecosystem level.

The reformed health system presents us with an opportunity to coordinate expanded functional capabilities in public health surveillance and prioritise quality improvement activities across the broader ecosystem.

Why is this important?

With quality improvement frameworks, processes and practices in place, our current surveillance systems will be more efficient and effective. We will make use of new surveillance systems for emerging situations with confidence and speed.

Stewards of the public health system require quality monitoring data to make informed decisions on resourcing to improve system performance. Routine performance monitoring across the surveillance system will reduce variation in quality and outcomes.

What does it look like in practice?

The Ministry of Health, Health New Zealand and other entities contributing to public health surveillance use performance information to make decisions that support system improvement.



Focus areas

4.1 Effective system stewardship and monitoring

- a. Develop and implement a monitoring and evaluation framework for the public health surveillance system that facilitates stewardship and continuous quality improvement.

4.2 Strengthen quality improvement across the system

- a. Develop a quality improvement framework to continuously improve aspects of public health surveillance, with a focus on iterative change, learning and adaptation.

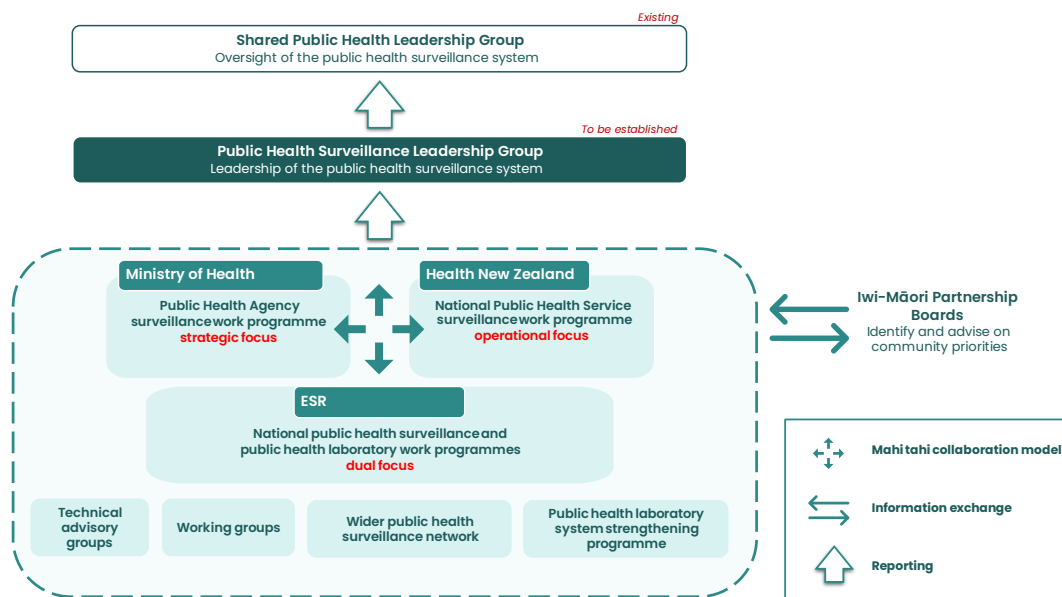
4.3 Address known areas for improvement in the system

- a. Continue to develop pathways, data governance, and standards for data and information sharing across the system.
- b. Review the current legislative environment relating to public health surveillance to identify enablers of and barriers to high-quality surveillance information.

Governance, leadership and coordination model

Coordinated governance and leadership is a prerequisite for priority setting, resource allocation, strategic alignment, continuous improvement, and preparedness within the surveillance system for new and emerging issues. For this reason, our initial focus is on the establishment of a governance, leadership and coordination model to organise the system and ensure delivery of this strategy and public health surveillance (Figure 2).

Figure 2: Proposed governance, leadership and coordination model for public health surveillance



This model is designed to be congruent with the existing public health authorising environment. The groups are explained further in the following table. The model will be fine-tuned in light of ongoing health system changes and as roles and responsibilities are further clarified.



Model overview

Entity	Role	Responsibilities
Shared Public Health Leadership Group <i>(existing)</i>	Governance and oversight of the public health system	<ul style="list-style-type: none"> • Direction setting for public health • Approval of priorities • Approval of system design • Definition of roles and responsibilities
Public Health Surveillance Leadership Group <i>(to be established)</i>	Surveillance system leadership	<ul style="list-style-type: none"> • Implementation of Public Health Surveillance Strategy • System design • Development of action plans • Encouragement of resource sharing • Coordination of the system • Oversight of PHA and NPHS surveillance work programmes and working and technical advisory groups
Ministry of Health, Public Health Agency	Programme delivery	<ul style="list-style-type: none"> • Production and monitoring of Public Health Surveillance Strategy • Implementation of surveillance action plans • Establishment of systems for surveillance • Strategic surveillance • Horizon scanning • International surveillance and liaison • Monitoring of implementation of action plans across entities • Monitoring of surveillance system
Health New Zealand	Programme delivery	<ul style="list-style-type: none"> • Implementation of action plans • Operational surveillance and response • Domestic risk assessments
ESR	Programme delivery	<ul style="list-style-type: none"> • Provision of surveillance activities • National public health laboratory sciences • International and other risk assessments • Horizon scanning • Scientific research and development
Technical and expert advisory groups <i>(cross-agency and community, as required)</i>	Guidance for work programmes	<ul style="list-style-type: none"> • Provision of expertise to programme delivery and leadership groups • Representation of iwi, technical, data and digital, and academic experts, alongside community-specific experts (eg, from Māori, Pacific, people with disabilities and Rainbow communities), as required
Working groups <i>(cross-agency, as required)</i>	Programme delivery	<ul style="list-style-type: none"> • Advancement of specific work areas

Entity	Role	Responsibilities
Wider surveillance network	Surveillance delivery	<ul style="list-style-type: none"> Operational and strategic surveillance (Potentially) horizon scanning, international surveillance and domestic threat assessments, as subcontracted Management of surveillance databases and underlying hardware
Public Health Laboratory System Strengthening Programme	Bridge between public health system and operational delivery at pathology and laboratory level	<ul style="list-style-type: none"> Public health laboratory system stewardship and strategy Public health laboratory system leadership and coordination Information exchange with Leadership Group and programme teams
Iwi-Māori Partnership Boards	Guidance for work programmes	<ul style="list-style-type: none"> (Potentially) advice on surveillance work programmes via the Hauora Māori Services within Health New Zealand



Implementation

This strategy sets a 5-year direction for improving the public health surveillance system. It defines a vision and indicates the changes we will need to make to achieve that vision. The strategy marks a commitment to establishing a centralised governance, leadership and coordination model for public health surveillance.

The focus areas that appear in this strategy under each strategic direction indicate where we should direct resources. As a next step, these focus areas will be advanced through the development of action plans, led by the Public Health Surveillance Leadership Group.

The action plans will give specific information on each action, and identify timeframes, and the lead agencies responsible for delivery. We will determine action plan phasing using prioritisation criteria such as system need, equity, cost-effectiveness, and the funding and resources we have available. The action plans will reflect the long-term directions of this strategy.

We will develop performance measures and indicators to track progress in delivering the key actions and initiatives outlined in the action plans and to determine whether we are achieving the intended outcomes of this strategy. We will make adjustments as required.

The Shared Public Health Leadership Group will provide strategic oversight of implementation. The wider surveillance sector can use this strategy and the action plans to come as a basis for collective actions and work towards a shared vision for public health surveillance.

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Glossary

Equity

This plan adopts the Ministry of Health's definition of equity: In New Zealand, people have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes.

Māori data governance

Māori data governance is the principles, structures, accountability mechanisms, legal instruments and policies through which Māori exercise control over Māori data (Kukutai, 2023).

One Health approach

One Health is an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals, and the environment.

Public health

Public health in this context means population-level initiatives and approaches that focus on:

- the health of whole populations rather than individuals
- the identification and elimination of health inequities
- the prevention of communicable and non-communicable diseases
- the promotion of good health and wellbeing
- the determinants of health, such as income, housing and water quality
- protection against population health risks and threats.

Public health horizon scanning

Horizon scanning in the context of public health involves the systematic monitoring, analysis and forecasting of emerging health threats, trends and opportunities that may affect public health in the future. It aims to anticipate and prepare by identifying early warning signs or trends, supporting the evaluation of their impact, and informing decision-making and planning processes in public health policy and practice.

Public health intelligence

Public health intelligence is meaningful information for decision-making. It is developed using a range of analytic, critical and interpretive skills. Many of the skills and techniques used to generate public health intelligence are shared with other domains of public health, such as epidemiology (Regmi et al 2016).

Public health surveillance

Public health surveillance is the ongoing systematic collection, analysis, and interpretation of the health-related data essential to planning, implementation and evaluation of public health practice. It is critical to inform decision-making about both short- and longer-term public health actions.



Public health system stewardship

Public health system stewardship in this context refers to accountability for setting strategic direction and ensuring that resources are managed responsibly, policies and programmes are implemented effectively and the health needs of the population are addressed fairly and equitably. The PHA is responsible for public health system stewardship in New Zealand. Its stewardship role applies to all aspects of public health, including public health surveillance.

Appendix 1

Strengthening the National Laboratory System for Public Health

The PHA are leading a programme focused on strengthening the laboratory system for public health (SLPH). The programme seeks to maximise the use of pathology and laboratory science and services in supporting public health surveillance objectives and the wider public health knowledge and surveillance system.

To be most effective, the public health laboratory system needs to have the right breadth and depth of capacity. It also needs to be strategically aligned to public health surveillance priorities, including equitable outcomes for underserved communities. Further, it must be future focused, to ensure emerging threats and core public health issues are identified, and that the system effectively adapts to address them.

An operating model has been proposed to provide a bridge between governance of the public health system at the agency level and operational delivery at the pathology and laboratory level. The model has three operating components:

1. **stewardship and strategy:** focused on the effective strategic oversight and guardianship of the SLPH, cross-sector alignment, and ensuring public health laboratory science expertise is integrated into key sector decision processes, strategies, policies and plans
2. **leadership and coordination:** focused on the provision of public health laboratory leadership, co-ordination of the network of laboratories providing public health laboratory services (surveillance, readiness and response), coordination and facilitation of the SLPH, and mechanisms for integrated analysis
3. **laboratory science in practice:** focussed on how pathology and laboratory science, through diagnostic testing, surveillance, monitoring and research, is used to support public health decisions, actions and responses at local, regional, national and international levels.

The SLPH programme and this strategy are complementary. Work to strengthen the public health laboratory and the public health surveillance systems will be integrated and aligned via the Public Health Surveillance Leadership Group (see the section 'Governance, leadership and coordination model').

