

The National Infection Prevention and Control Strategy

Developed 2022



Foreword

Aotearoa continues to face global health threats, such as the COVID-19 pandemic, emerging infectious diseases and antimicrobial resistance. In response, an inter-disciplinary group of experts has provided national infection prevention and control (IPC) leadership in the development of a National IPC Strategy.

The National Infection Prevention and Control Leadership Group (NIPCLG) was established by the Ministry of Health (the Ministry) in 2021, to support infection prevention and control (IPC) best practice in the health sector and providing leadership and governance to enable the development and implementation of the infection prevention and control strategy. NIPCLG will work with the reformed health system and health partners, to embed the strategy's objectives, promote IPC leadership and knowledge to deliver safer healthcare and reduce acquired infections.

The national IPC strategy will support the five key priority areas: Leadership and governance; Strategic IPC workforce planning; IPC Health intelligence; Environment, equipment and infrastructure, and Outbreak management.

NIPCLG chair

(to be completed)

The role of the NIPCLG chair is to provide leadership, set direction and facilitate the activities of the workstreams, and to represent the group in other forums as required.

Signatory sign off

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Introduction

Infection prevention and control is crucial for prevention of healthcare-associated infections (HAIs) and reducing the spread of antimicrobial resistance (AMR). HAIs are one of the most common adverse events from healthcare delivery and place an economic burden on society and healthcare.

HAIs are a major public health problem that has an impact on morbidity, mortality and quality of life. At any one time, up to 7 percent of patients in developed countries have at least one HAI (WHO, 2016). The recent results from the New Zealand Health Quality and Safety Commission's (the Commission) HAI point prevalence survey (2022)¹ reported 6.6 percent of adult patients across public hospitals as having a HAI.

Purpose of the IPC Strategy

The purpose of this strategy is to enable those in leadership, planning, and co-ordination roles, to make and influence decisions, that will support the reformed health system to reduce HAIs and AMR over the next five years and onwards.

The strategy is intended to strengthen whole system integration, collaboration and be relevant to any setting where healthcare is delivered. Settings include but are not limited to acute hospitals, community settings, age and disability related residential care, primary care, correctional health facilities, private and public sector facilities.

Equity

There is a disproportionate representation and inequity of health outcomes including serious infectious diseases for indigenous populations globally, including for Māori in Aotearoa (Baker et al, 2012). As such, a key priority for health services in New Zealand is equitable health outcomes for not only Māori, but also other groups who are overrepresented with poorer health outcomes such as Pasifika and people with disabilities.

Outbreaks of infection are hard to control and represents a significant public health problem. Such threats are also impacted by socioeconomic deprivation. Research supports the need for stronger IPC efforts as well as broader policy measures to reduce the impact that social inequalities such as inadequate housing and poor access to health services have (Baker et al, 2012).

¹ Health Quality & Safety Commission National Healthcare Associated Point Prevalence Survey Report <https://www.hqsc.govt.nz/resources/resource-library/pps-report-2022/>

A key purpose of this strategy is to enable a reduction in incidence of HAIs through effective IPC measures for Māori and others as an achievable goal for improvement. Through the five key priority areas, specific focus on equity for Māori will aim to reduce the impact that HAIs and AMR have on Māori consumers, whānau and staff.

Alignment and Linkages

The following section describes the important areas that this strategy is required to be aligned to and have linkages with.

Te Tiriti o Waitangi

The Ministry, as the kaitiaki and steward of the health and disability system, has the responsibility to enable Māori to exercise authority over their health and wellbeing and achieve equitable health outcomes in ways that enable Māori to live, thrive, and flourish.

The principles of Te Tiriti, underpin the Ministry's commitment to Te Tiriti. These principles apply to all health and disability services:

(a) Tino rangatiratanga

Providing for Māori self-determination and mana motuhake in the design, delivery, and monitoring of health and disability services.

This means enabling Māori governance, implementation and decision making for IPC, validating and embedding Māori led solutions.

(b) Equity

A system wide commitment to achieving equitable health outcomes for Māori. This means IPC has a specific focus on equity for Māori and actively pursues equitable health outcomes by collectively ensuring Māori have access to high quality, culturally appropriate and safe health and disability services.

(c) Active protection

Acting to the fullest extent practicable to achieve equitable health outcomes for Māori. This includes ensuring that the Crown, its agents, and its Treaty partners under Te Tiriti are well informed on the extent, and nature, of both Māori health outcomes and efforts to achieve Māori health equity.

This means IPC practice safeguards Māori health and wellbeing, by acting to the fullest extent, to achieve Māori health gain. Health professionals are well informed on the extent and nature of both Māori health outcomes and efforts to achieve Māori health equity through good IPC.

(d) Options

Providing for and properly resourcing kaupapa Māori health and disability services. Furthermore, the Crown is obliged to ensure that all health and

disability services are provided in a culturally appropriate way, that recognises and supports the expression of hauora Māori models of care.

This means committing to enabling IPC in kaupapa Māori health and disability services, including the support, utilisation and development of kaupapa Māori epidemiology and Māori data sovereignty resource.

(e) Partnership

Working in partnership with Māori in the governance, design, delivery, and monitoring of health and disability services – Māori must be co-designers, with the Crown, of the primary health system for Māori.

This means working in partnership with Māori as kaitiaki to create, maintain and protect sustainable governance and systems that enable equitable IPC outcomes. Whānau need to be at the centre of governance, design and delivery.

He Korowai Oranga

The *Health and disability services standard* builds on the framework of He Korowai Oranga: Māori Health Strategy. He Korowai Oranga was originally launched in 2002 and provided a 10-year outlook with an overall aim of whānau ora (healthy families). He Korowai Oranga was refreshed in 2014; the overall aim is now Pae ora: healthy futures for Māori. The vision of He Korowai Oranga and the standard is to achieve the best outcomes for the health and disability system. This includes a desire to see all New Zealanders living longer, healthier, and more independent lives.

Whakamaua

The strategy's long term coordinated actions seeks to align with Whakamaua, the Ministry's Māori Health Action Plan 2020-2025. Whakamaua is the implementation plan for He Korowai Oranga, New Zealand's Māori Health Strategy, which will help achieve better health outcomes for Māori, by setting the government's direction for Māori health advancement over the next five years. The overall aim of He Korowai Oranga is Pae ora: healthy futures for Māori. Pae ora is a holistic concept that includes three interconnected elements: Mauri ora (healthy individuals), Whānau ora (healthy families) and Wai ora (healthy environments). The aim is that achieving strong and effective IPC will support this.

The Health and Disability System Reforms

With the changing landscape that the Health and Disability System reforms will create, there is both challenge and opportunity. This newly developed strategy will be well positioned to profile the essential role IPC has for every frontline health worker in the developing health system.

The reforms propose changes which are relevant to this National IPC strategy such as developing and supporting innovative Māori-specific population health initiatives. In addition, the reformed system is required to monitor and report on the performance of the health and disability system with respect to Māori health outcomes and equity.

This strategy will also reflect the Ngā Paerewa Health and Disability Services Standard NZS8134: 2021 for Infection Prevention and Antimicrobial Stewardship.

Stakeholders

Stakeholders for this strategy are those impacted by health care and those who provide or influence health care. Stakeholders will contribute, review and have approved the content, and the associated processes and deliverables. Health agencies' senior level and frontline workers will be key in successful implementation of this strategy.

Additional to the Ministry of Health, below is a non-exhaustive list of stakeholders:

- Māori health leaders/consumers/advisors/providers
- Pacific health leaders/consumers/advisors/providers
- Public hospitals and Locality networks
- Health NZ/Māori Health Authority
- Primary Health Organisations and general practice teams
- Health Quality and Safety Commission (HQSC)
- Institute of Environmental Science and Research (ESR)
- Aged care sector
- Primary and community care providers
- Allied health professionals (eg dentists, pharmacists, optometrists etc)
- Non-governmental health sector including private hospitals
- Health Certification bodies
- NZ Microbiology Network
- Professional colleges
- Consumer groups (Pacifika, Disability etc)
- Public Health Agency
- AMR and AMS stewardship groups
- Occupational Health
- Health Workforce New Zealand
- Health and Disability Review Transition Unit
- Accident Compensation Corporation
- Ministry for Primary Industries
- Tertiary Education Providers (Health)

New Zealand IPC context

Despite an internationally respected health system, the COVID-19 pandemic has highlighted previously known national IPC challenges. IPC specialists throughout the system support the

frontline health workforce to apply, monitor and manage IPC in their everyday practice. National bodies such as the Commission have quality improvements programmes to reduce harm from HAI, such as Hand Hygiene NZ, Surgical Site Infection Improvement and the Target Central Line Associated Bacteraemia Zero programmes. However, further developments are required to advance IPC in other areas.

National IPC vulnerabilities include variable national IPC leadership and governance; insufficient IPC workforce with deficient knowledge and inconsistent IPC practice throughout health providers; underdeveloped surveillance, risk management and monitoring systems and structures; inappropriate environments, equipment and infrastructure and under prepared system for outbreak management.

During the COVID-19 pandemic, developments in scientific understanding of how the virus transmits, has also had implications for Aotearoa's IPC recommendations and practice. Combined with the initial aim of an elimination status, the changes have necessitated adjustments/modifications in IPC practice with resultant review of air and ventilation controls and PPE requirements.

International IPC

Since the updated publication of the World Health Organization (WHO) core components for infection prevention and control in (WHO, 2016), the threats posed by epidemics, pandemics and AMR have been recognised as ongoing challenges and a top priority for action on the global health agenda. The first global survey to assess the core components was published in 2022 (Tomczyk et al, 2022).

The International Health Regulations (WHO, 2005) place effective IPC, as a key strategy for managing public health events of international concern. The Joint External Evaluation tool enables a country to assess its prevention, preparedness, and response capability to public health threats. The United Nations Sustainable Development Goals have highlighted the importance of IPC as a contributor to safe, effective high-quality health service delivery (WHO, 2016).

The WHO state party self-assessment annual reporting tool (WHO, 2018) enables New Zealand IPC function to be objectively reviewed. An expert panel, with the Ministry, completed the 2022 annual report. New Zealand IPC function was rated with improvement possible in the three key assessment areas: national IPC programme; healthcare associated infections surveillance programme; and safe environment in health facilities.

A UK report made two fundamental recommendations. Firstly, that addressing the threat of AMR must be effectively integrated with the delivery of strong IPC. Secondly, that tackling any transmissible organism must be addressed comprehensively across the whole consumer journey. "Bugs don't differentiate between primary and secondary care or between hospitals and home, yet most of the IPC focus to date has been on the hospital. It is time now to move to a whole health economy approach. This will require measures of HAI that span health sector boundaries and look at the whole patient pathway" (Health Foundation, 2015).

Vision:

Infection prevention and control is consistently integrated in all types of health care in Aotearoa by implementing evidence-based IPC practices. Provision of healthcare is undertaken in a safe environment to prevent healthcare associated infections.

The changing landscape of emerging infectious diseases requires increased awareness and attention to IPC. A culture and infrastructure supporting IPC will equip stakeholders, communities, and policy makers to respond to, and manage outbreaks, and prevent the spread of infectious diseases.

The New Zealand health system needs well governed structures in which all health care providers adhere to IPC standards which are firmly embedded and assured through accreditation/certification bodies and quality improvement programmes.

Key priority areas

The strategy is supported by five workstreams:

- Leadership and governance
- Strategic IPC workforce planning
- IPC health intelligence
- Environment equipment and infrastructure
- Outbreak management

1. Leadership and governance

Leadership is the action and skill that influences or guides other individuals. Governance requires identifying priorities, establishing goals and objectives, finding resources, and allocating funds to support the decisions that need to be made around strategic planning. Good governance ensures that resources devoted to the health sector are adequate, accessible, and improve equitable health outcomes.

Goal:

Inclusive and effective leadership and governance structures in place at national, regional, and local levels that also provide true Māori partnership.

2. Strategic IPC workforce planning

Clinically effective IPC practice has a central role in health care and public health services. Consumers receiving health care are at risk of developing HAIs due to their potentially compromised health, underlying medical conditions, and contact with healthcare interventions such as surgery, diagnostic testing or invasive devices. The health sector needs to ensure there is a skilled IPC workforce to successfully deliver IPC programmes, interventions and education to healthcare workers and consumers.

Goal:

Improved health outcomes in all settings where health care is provided through a sustainable, skilled and diverse IPC workforce that is responsive to the needs of Māori and all New Zealanders.

3. IPC health intelligence

Surveillance systems are essential to detect, track and monitor emerging and re-emerging infection threats or risks. Surveillance enables healthcare facilities and clinicians to measure the effectiveness of strategies that are implemented to decrease infection rates.

Risk management may be associated with single adverse events, or near misses. Harm has not yet occurred but there is a potential for harm. Monitoring includes reporting of process measures, outcome measures and environmental controls which will support quality improvement programmes to reduce harm.

Surveillance risk and monitoring inform developments to improve health outcomes for Māori at all levels of the health and disability system. A co-design and co-led approach with kaupapa Māori epidemiologists and Māori data sovereignty experts will enable appropriate and informative collection, collation, and analysis of data.

Goal:

A comprehensive and connected IPC intelligence programme that is accessible and user-friendly to all parts of the health system.

4. Environment, equipment and infrastructure

The health system has the responsibility to provide safe health care environments and a safe workplace. The aim is to remove or reduce infection risks within the built environment through updated guidance for the design of new facilities and guidance on risk management and mitigation strategies for existing facilities. This would include strategies for containing infectious aerosols through appropriate ventilation.

Complex and diversely built healthcare environments throughout New Zealand necessitate risk management, updated standards and development of appropriate advice including resourcing and funding. Māori health providers require appropriate built environment, equipment, and infrastructure, including finding solutions that build on Mātauranga Māori.

Goal:

Buildings and equipment are designed to prevent the spread of infection. Where existing facilities cannot be upgraded then appropriate mitigation strategies are in place.

5. Outbreak management

Lessons learned from the COVID-19 pandemic must be applied to future outbreaks. A nationally directed approach across the system is required to manage future outbreaks to reduce the impact on the delivery of health care services and limit the number of people affected. A commitment to have outbreak management systems that have a pro-equity design that protects Māori and other at-risk populations is required.

Goal:

Improved national and local health system capacity and capability to rapidly identify, investigate, and manage outbreaks.

Implementation

The Ministry will oversee the implementation of the strategy through the action plan, establish workplans for each of the action plan goals, and monitor and evaluate performance to ensure that the focus areas of the action plan are met.

NIPCLG will work with the Ministry on the implementation of the strategy. NIPCLG will provide governance to support the National IPC strategy's implementation and in supporting provision of a broader longer-term direction for IPC in Aotearoa in alignment with the strategic priorities.

The Ministry, in collaboration with NIPCLG, will update the strategy as required and identify additional actions.

After release of the Strategy, the Ministry IPC team will report progress to the Director-General of Health. Reports will include progress on each of the identified objectives. Reporting will consider indicators in all key priority areas to monitor and evaluate progress towards achieving the vision of the strategy.

Approach

Action plan

The Action Plan will have an associated work programme which will be reviewed at national NIPCLG meetings with all stakeholders and the Ministry involved.

Work plan

A workplan will be developed with nominated responsible key leads for the relevant activities identified in the action plan. Organisational input will be required to support activities, outcome measures and reporting. The development of focused working groups will need to be established to enable each priority area to progress.

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