# **Core Public Health Functions** for New Zealand

A report of the New Zealand Public Health Clinical Network

**30 September 2011** 

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# 1. Purpose

The purpose of this report is to:

- improve understanding of **the ways public health services contribute** to improved health outcomes; and
- help ensure that the health sector **invests in an appropriate mix and configuration** of public health services.

The report describes the public health principles and the core public health functions that are combined in various ways by a range of providers to produce the public health services essential for a highly-functioning New Zealand health system. It then outlines the implications of this core functions model for public health service delivery.

# 2. Background

The Ministry of Health and District Health Boards are mandated to improve, promote and protect the health of their populations and to reduce health disparities (Health Act 1956, New Zealand Public Health and Disability Act 2000). Our health system faces growing pressure due to an ageing population, an increasing burden of chronic diseases, increasing treatment costs, and fiscal constraints. In this context, effective delivery of public health services which help improve health status and manage health care demand is increasingly important.

The outcomes<sup>1</sup> sought by public health services are:

- A healthier population
- Reduction of health disparities
- Improvement in Māori health
- Increased safeguards for the public's health
- A reduced burden of acute and chronic disease

There is growing evidence for the effectiveness of public health services (Appendix 1). Public health services add value to the health sector by helping manage demand for health care services and by helping the sector understand how we can improve population health. The public health sector helps connect the health sector to a wide range of other organisations which influence health outcomes. The public health sector also plays a key role in managing emerging health risks. Failure to invest in public health can be very costly (Appendix 2).

This report has been developed by the Public Health Clinical Network. It is intended to assist the Ministry of Health and District Health Board Chairs, CEOs and Planning and Funding Managers in optimising public health service delivery within the health sector.

The Public Health Clinical Network comprises the Clinical Directors and Managers of the twelve DHB Public Health Units, and the Ministry of Health's Director of Public Health. Many public health services are delivered by providers outside District Health Boards and the Ministry of Health. Valuable advice was received from a range of individuals and organisations during development of this report (Appendix 3). The content of the report remains the responsibility of the Public Health Clinical Network.

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<sup>&</sup>lt;sup>1</sup>The outcomes listed in the World Health Organisation Western Pacific Region Core Functions framework have been adapted for this report by replacing the term "health inequalities" with the New Zealand Public Health and Disability Act's term "health disparities", and by adding specific reference to Māori health improvement.

# 3. Key principles inform and shape public health service delivery in New Zealand

Public health principles can be defined in many ways. The key principles agreed by the Public Health Clinical Network are:

- a. focusing on the health of **communities** rather than individuals
- b. influencing health determinants
- c. prioritising improvements in Māori health
- d. reducing health disparities
- e. basing practice on the best available evidence
- f. building effective **partnerships** across the health sector and other sectors
- g. remaining **responsive** to new and emerging health threats.

# 4. Public health's "core business" comprises five core public health functions

The five core public health functions agreed by the Public Health Clinical Network are:

- 1. Health assessment and surveillance
- 2. Public health capacity development
- 3. Health promotion
- 4. Health protection
- 5. Preventive interventions

Table 1 includes brief descriptions and a list of key strategies for each of the core public health functions. The development of these functions and strategies by the Public Health Clinical Network is outlined in Appendix 4.

# **5.** Effective public health services combine strategies from several "core functions" to improve health outcomes

The core public health functions are **interconnected**; core functions are rarely delivered individually. Effective public health service delivery generally **combines strategies from several core functions** to achieve public health outcomes in one or more public health issue or setting (see Figure 1). Public health services are not static, but **evolve** in response to changing needs, priorities, evidence and organisational structures.

Appendix 5 uses tobacco control and earthquake response and recovery as examples of the way effective public health services combine strategies from several core functions.

Table 1. Core functions, descriptions and strategies

Core function	Strategies
Health assessment and surveillance: understanding health status, health determinants and disease distribution	<ul> <li>Monitoring, analysing and reporting on population health status, health determinants, disease distribution, and threats to health, with a particular focus on health disparities and the health of Māori.</li> <li>Detecting and investigating disease clusters and outbreaks (both communicable and non-communicable).</li> </ul>
Public health capacity development: ensuring services are effective and efficient	<ul> <li>Developing and maintaining public health information systems.</li> <li>Developing partnerships with iwi, hapü, whānau and Māori to improve Māori health.</li> <li>Developing partnerships with Pacific leaders and communities to improve Pacific health</li> <li>Developing human resources to ensure public health staff with the necessary competencies are available to carry out core public health functions.</li> <li>Conducting research, evaluation and economic analysis to support public health innovation and to evaluate the effectiveness of public health policies and programmes.</li> <li>Planning, managing, and providing expert advice on public health programmes across the full range of providers, including PHOs, Planning and Funding, Councils and NGOs.</li> <li>Quality management for public health, including monitoring and performance assessment.</li> </ul>
3. Health promotion: enabling people to increase control over and improve their health	<ul> <li>Developing public and private sector policies beyond the health sector that will improve health, improve Māori health and reduce disparities.</li> <li>Creating physical, social and cultural environments supportive of health.</li> <li>Strengthening communities' capacities to address health issues of importance to them, and to mutually support their members in improving their health.</li> <li>Supporting people to develop skills that enable them to make healthy life choices and manage minor and chronic conditions for themselves and their families.</li> <li>Working in partnership with other parts of the health sector to support health promotion, prevention of disease, disability, injury, and rational use of health resources.</li> </ul>
Health protection:     protecting communities     against public health     hazards	<ul> <li>Developing and reviewing public health laws and regulations<sup>2</sup>.</li> <li>Supporting, monitoring and enforcing compliance with legislation.</li> <li>Identifying, assessing, and reducing communicable disease risks, including management of people with communicable diseases and their contacts.</li> <li>Identifying, assessing and reducing environmental health risks, including biosecurity, air, food and water quality, sewage and waste disposal, and hazardous substances.</li> <li>Preparing for and responding to public health emergencies, including natural disasters, hazardous substances emergencies, bioterrorism, disease outbreaks and pandemics.</li> </ul>
Preventive interventions: population programmes delivered to individuals	<ul> <li>Developing, implementing and managing primary prevention programmes (targeting whole populations or groups of well people at risk of disease: eg immunisation programmes).</li> <li>Developing, implementing and managing population-based secondary prevention programmes (screening and early detection of disease: eg. cancer screening).</li> </ul>

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<sup>&</sup>lt;sup>2</sup> Public health legislation covers a wide variety of issues, including communicable disease control, border health protection, food quality and safety, occupational health, air and drinking water quality, sewerage, drainage, waste disposal, hazardous substances control, control of alcohol, tobacco and other drugs, injury prevention, health information, screening programmes, and control of medicines, vaccines and health practitioners.

Figure 1 - Core Functions, Services and Outcomes.

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New Zealanders lead longer, healthier and more independent lives									
Ministry of Health intermediate	Good hed independ protect prom	ence are ed and	A more unified a improved health disability syste	and	health	e receive better n and disability services	sys	stem an sted an	and disability d services are d can be used onfidence
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ght	Public Health Service Outcomes								
Outcomes Sought	A healthier and more productiv population		cing health sparities	Improvir hea	•	Increas safeguards public's h	for the		uced burden of e and chronic disease
						Î			Î
			Public	Healtl	n Servic	es			
Core	Health assessm and surveillance	e capa	ic health city llopment	Health p	romotion	Health prote	ection		ntative entions
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Seven principles underpinning public health service delivery	Focusing on the health of communities rather than individuals	Influencing health determinants	Prioritising improvements in Māori health	Reduc health dispan	rities	Basing practice on the best possible evidence	Building effective partners across the health s and othe sectors	e ships he ector	Remaining responsive to new and emerging health threats

# 6. A range of providers deliver public health services

Public health services are diverse, and are provided by a **wide range of organisations**, including the Ministry of Health, District Health Boards (especially their public health units and planning and funding divisions), Crown Research Institutes, other government Ministries, primary care, non-government organisations, local councils and universities, Pacific providers, and Iwi, hapu and Māori organisations. Public health providers are described in more detail in Appendix 6.

Many but not all providers are funded from Vote: Health. Only some providers currently see public health as their core business. Health-funded public health providers play an important role in **supporting a public health approach in other organisations** both within and outside the health sector and in supporting intersectoral strategies such as Whānau ora.

# 7. There are many examples of excellent public health practice in New Zealand, but there are important gaps in service planning and co-ordination

As outlined in Appendix 5, tobacco control and the public health response to the Canterbury earthquakes provide examples of excellent public health practice in New Zealand. However, current public health service purchasing is based on historical decisions and outdated service specifications. Overall, the sector is fragmented, public health competency in some key agencies is limited, and strategic planning and quality improvement are patchy. The current emphasis on clinical leadership, regional alignment and value for money provide important opportunities for improving public health service delivery.

# 8. Public health faces important future challenges

#### These include:

- Maintaining an effective response to traditional but evolving public health issues such as communicable disease control, tobacco and alcohol control, and environmental health protection.
- Developing and maintaining partnerships with iwi, hapü, whānau and Māori to improve Māori health.
- Responding to the needs of other populations and communities with specific needs, including Pacific and Asian people, the young, those living with disability and older people.
- Developing comprehensive responses to stem the increasing incidence of costly chronic diseases such as diabetes.
- Developing effective partnerships on behalf of the health sector with the many organisations outside health which impact on health determinants.
- Developing intersectoral responses to emerging public health threats such as climate change and environmental sustainability.

# 9. Implications for public health service delivery

#### General

- It is important to the whole health sector that public health services are delivered effectively and efficiently, so that they achieve the greatest impact on health outcomes.
- The five core functions provide a framework for ensuring that public health services are comprehensive and robust. District Health Boards need to understand how each of the functions is provided or accessed within their district and how public health services contribute to District Health Board objectives.
- Most public health services include strategies from several core functions, so to be
  effective providers need either the capacity to deliver comprehensively across several
  functions themselves or ready access to support from other public health organisations.

#### Table 2: National regional and local service provision

#### National services

For reasons of effectiveness or efficiency there are some public health services which should be delivered once for the country. These include:

- Legislative oversight and a range of technical support, including specialised advice, reference laboratory services and nationally used manuals for communicable disease control and environmental health.
- Surveillance and analysis of national/international communicable and non-communicable disease trends.
- Co-ordination of inter-district emergency responses.
- National programmes, registers or information systems NIR and immunisation policy, screening programmes, drinking water programme.
- Public health workforce planning and development.
- National public health and intersectoral policy analysis and development.
- Developing and maintaining for the full spectrum of public health services a clear strategic direction, consistent service
  specifications and a transparent funding model which takes into account the particular public health needs of New
  Zealand's very varied local communities.

#### Regional services

Some services should be accessible to all districts and public health providers, but can be provided or supported by regional public health services or networks. There is potential to improve the co-ordination of these services across the country to improve efficiency and effectiveness. They include:

- Advanced surveillance and analysis, including GIS.
- Public health policy analysis.
- Programme design and evaluation.
- Environmental health technical expertise.
- Support for outbreak investigation and control, including surge capacity support.
- Health impact assessment.
- Development of consistent operational protocols to suit local needs.
- Public health workforce training.

### Local services

Most public health programmes are provided in partnership with a range of other health and non-health providers. Effective delivery depends on well-supported local public health staff, local relationships and an understanding of local communities and their needs. Delivery of regulatory services also requires national consistency and strong national links. Local programmes include:

- Identification of locally emerging public health issues.
- Communicable disease and outbreak control.
- Public health emergency response.
- Regulatory controls on alcohol, tobacco and the physical environment, and associated health promotion.
- Immunisation co-ordination.
- Liaison with and support for local authorities, DHBs and PHOs.
- Support and co-ordination for health promotion in settings (eg. workplaces, education, primary care).
- Planning and funding of health care and public health programmes to meet local needs.

At a local level, public health providers must have (or have access to) an appropriate range of public health skills, be comprehensively linked with other services, and the planning framework must be flexible enough to allow providers to respond to local need.

- As with many specialised health services, effective and efficient delivery requires appropriate and co-ordinated services at **national**, **regional and local** levels. Some public health services should be delivered once for the country. Their importance must be acknowledged in Ministry of Health structures and planning. However, most public health services are provided by partnerships of public health and other health and non-health providers, and effective delivery depends on well-supported local public health staff, local relationships and an understanding of local communities and their needs. There is potential to improve co-ordination and alignment of some specialised public health services across regions within New Zealand (see Table 2).
- Vote: Health public health services will be more effective if they develop strong and effective **partnerships** with key non-health agencies such as other government Ministries, local councils, universities and Iwi, hapu and Māori organisations, which have a key influence on public health practice and outcomes.
- Public health services should be based on the best available **evidence**. For many services, this should mean a **nationally consistent** approach.

# Funding and capacity

- Public health services are important, but are complex, longer-term, and often relatively invisible so in an environment of fiscal restraint public health funding requires protection.
- The public health workforce is small and specialised. **Organisational and workforce capacity** are key assets. Further fragmentation would jeopardise effective service delivery.

# Local services

- Because local public health services evolve over time in response to changing needs, priorities and relationships, funding arrangements should allow for **flexibility and** responsiveness in local service development.
- The five core public health functions are central to DHBs' success in achieving health outcomes, and should be clearly **reflected in District and Regional Plans**.

### 10. Summary

- a. Public health services are an **integral part** of a high-functioning New Zealand health system.
- b. The five core public health functions describe the different ways public health contributes to health outcomes, and provide a framework for ensuring services are comprehensive and robust.
- c. Effective public health service delivery **combines** components of several core functions. Public health services are not static, but evolve in response to changing needs, priorities, evidence and organisational structures.
- d. Effective public health service delivery depends on provision of the **appropriate range** of public health services at national, regional and local level.
- e. There are **gaps** in the way New Zealand public health services are currently planned and co-ordinated. These provide important opportunities for service improvement.
- f. It is important to the whole health sector that public health services are delivered effectively and efficiently, so that they achieve the greatest impact on health outcomes.

# 11. Definitions

**Core public health functions**: the fundamental components of a public health

system that effectively improves population health.

**Public health services**: public health initiatives that combine components

of several core functions to achieve health

outcomes.

**Public health issues**: determinants of or threats to population health

status.

**Population health outcomes**: changes in a population's health status or

vulnerability.

# Appendix 1. Evidence for the effectiveness of public health services

As health systems around the world respond to pressures such as ageing populations, increasingly expensive medical technology, a growing burden of chronic lifestyle-related disease, and emerging and re-emerging infectious diseases, a number of countries have recognised that they cannot continue to deliver effective and efficient health care unless they also take prevention seriously [1-3].

A significant and growing body of evidence exists that demonstrates the cost-effectiveness of public health interventions in averting disease and death. An Australian report 'The Health and Economic Benefits of Reducing Disease Risk Factors' [4], outlines the economic benefits of making feasible reductions in the prevalence of six behavioural risk factors (obesity, alcohol, smoking, exercise, diet and domestic violence) that contribute to chronic diseases. Over the lifetime of the 2008 Australian adult population, opportunity cost savings were conservatively estimated to lie between approximately \$2,000 million to \$3,000 million. The Australian ACE (Assessing Cost Effectiveness) Prevention study [5], the largest and most rigorous evaluation of preventive strategies undertaken anywhere in the world, examined 150 preventive interventions. These were ranked from the most to least cost-effective interventions by cost per disability adjusted life year. Some interventions were found to be cost-saving, averting one million DALYs (disability adjusted life years) over the lifetime of the 2003 Australian population, costing the health sector \$4.6 billion, but averting \$11 billion in healthcare costs. The UK Wanless Report modelled three scenarios for a publicly funded comprehensive high quality health service and found that the scenario which invested significantly in public health, also was the least expensive and delivered the best health outcomes [6].

Current New Zealand research will inform future health service planning on the cost-effectiveness and population health impact of various preventive interventions. This research is being carried out through the University of Otago, Wellington School of Medicine's Burden of Disease Epidemiology, Equity and Cost-Effectiveness programme (BODE3), including New Zealand's own Assessing Cost-effectiveness: Prevention study. Results are anticipated mid 2012 (NZ-ACE).<sup>3</sup>

# Appendix 2. The cost of failing to invest in public health

The following well-known examples illustrate just some of the many ways that failure to invest in public health services may result in increased costs to the health system and to society.

- a) TB outbreaks in prisons in eight US states (1978) with significant community spread and in New York a threefold rise in cases [7, 8]
- b) Walkerton, Ontario (2000) a waterborne E. coli outbreak with 2,000 sick and six deaths due to contamination of the municipal water supply [9].
- c) Toronto (2005) SARS outbreak with 44 deaths and major economic impact on tourism [10]
- d) New Zealand (1990s-present) evidence of increasing alcohol-related harm [11].

# Appendix 3. Peer reviewers and advisors

Names of peer reviewers for this version:

Maxine Shortland – General Manager, Ngati Hine Health Trust

<sup>3</sup> See http://www.wnmeds.ac.nz/academic/dph/research/bode/bode\_index.html for further information.

Anna Bailey – Service Manager, Health Star Pacific

Dr Gay Keating – National Executive Officer, Public Health Association.

Dr Alison Blaiklock – Executive Director, Health Promotion Forum.

*Names of stakeholders who provided comments on an earlier version:* 

Professor Jennie Connor - Head of Department, Preventive and Social Medicine, Dunedin School of Medicine.

Associate Professor Cindy Kiro - Head of School, Centre of Public Health Research, Massey University.

Professor Philip Schluter – Head of Department of Public Health and General Practice, University of Otago.

Dr Pat Neuwelt – Primary Health Care Reference group, Health Promotion Forum.

Dr Gay Keating – National Executive Officer, Public Health Association.

Dr Alison Blaiklock - Executive Director, Health Promotion Forum.

# **Appendix 4. Core public health functions**

Since the mid-1990s there have been a series of projects to define core or essential public health functions in different jurisdictions [2, 12-16]. Although the nature of public health is universal, the way public health services are delivered varies widely around the world, as do the reasons for developing core services frameworks; so core functions frameworks developed for one country are not necessarily transferrable to other countries.

A core functions framework for NZ must take into account those aspects of public health which are unique to NZ, in order to meet NZ-specific needs and responsibilities (particularly the Treaty of Waitangi and existing Māori health disparities). Although there has been some discussion of core public health functions in NZ [17-22], there has been no agreed core functions framework.

This report defines five core public health functions for New Zealand: health assessment and surveillance; public health capacity development; health promotion; health protection; and preventive interventions. The five functions are based on the strategies described in the British Columbia Core Services Framework [23] and the outcomes outlined in the WHO Western Pacific Region model [24], but have been adapted for New Zealand by the Public Health Clinical Network's Core Services Working Group.

A key message of this report is the interconnectedness of the core functions and services. Effective public health service delivery combines components of several core functions. Public health services are not static, but evolve in response to changing needs, priorities, evidence and organisational structures. This report includes examples of public health services. However, rather than attempting to define a static list of public health services, the framework seeks to improve understanding of the complex ingredients which services represent.

Appendix 5. Examples of public health services.

Core function	Strategies	Examples (tobacco control)	Examples (Earthquake response & recovery)		
Health assessment and surveillance: understanding health status, health determinants and disease distribution	Monitoring, analysing and reporting on population health status, health determinants, disease distribution, and threats to health, with a particular focus on health disparities and the health of Māori.  Detecting and investigating disease clusters and outbreaks (communicable and noncommunicable).	<ul> <li>National smoking surveys, including Census and Year 10 ASH survey</li> <li>National and local monitoring, analysis and mapping of tobacco sales volumes, outlet distribution etc.</li> <li>National and local analysis of the impact of tobacco-related disease, including impact on specific population sub-groups and on health disparities.</li> </ul>	<ul> <li>Enhanced post-earthquake surveillance for gastroenteritis and influenza.</li> <li>Collecting, analysing and mapping water quality data.</li> <li>Development and reporting of health success indicators for recovery, with a particular focus on the hardest-hit communities.</li> </ul>		
2. Public health capacity development: ensuring services are effective and efficient	Developing and maintaining public health information systems.	<ul> <li>National Public Health IT Strategy</li> <li>Local systems to monitor tobacco outlets, Smokefree         Environments Act complaints, enforcement activities, controlled         purchase operations.</li> <li>Local systems to monitor smoking status of patients in primary and         secondary care.</li> <li>Local systems to monitor cessation support activities (eg. AKP,         ABC)</li> </ul>	Reviewing international literature to ensure recovery initiatives are evidence-based.     Providing regular public health situation reports.		
	Developing <b>partnerships</b> with iwi, hapü, whänau and Māori to improve Māori health.  Developing partnerships with Pacific leaders and communities to improve Pacific health  Developing <b>human resources</b> to ensure public health staff with the necessary competencies are available to carry out core public health functions.	<ul> <li>Working in partnership with iwi, hapü, whānau and Māori to ensure services meet Māori needs.</li> <li>Working with Pacific leaders and communities to ensure cessation services are accessible and appropriate for Pacific people</li> <li>Workforce planning, recruitment, training and ongoing professional development of staff involved in primary and secondary care, cessation support, enforcement, policy analysis and informatics.</li> </ul>	<ul> <li>Supporting development of marae-based community recovery hub.</li> <li>Working with Pacific church leaders to provide information and support to Pacific communities.</li> <li>Training all public health staff in emergency response procedures.</li> <li>Ensuring surge capacity plans are in place to allow regional and national staffing support.</li> <li>National and regional co-ordination of staff support.</li> </ul>		
	Conducting <b>research</b> , <b>evaluation</b> and <b>economic analysis</b> to support public health innovation and to evaluate the effectiveness of public health policies and programmes.	<ul> <li>Research studies to develop and assess innovative ways to decrease smoking initiation and effectively support cessation.</li> <li>Providing national and local economic analysis to highlight the impact of tobacco on health services, wider society and specific population groups, and the potential to decrease costs with decisive action.</li> </ul>	<ul> <li>Telephone survey to assess compliance with boil water notices</li> <li>Evaluating resource use (eg. Integrated Recovery Guide).</li> <li>Research on the nature of public health hazards postearthquake (eg. microbial contamination of liquefaction silt).</li> <li>Research on protective and risk factors for individual and community coping post-earthquake.</li> </ul>		
	Planning and managing public health programmes across the full range of providers, including PHOs, Planning and Funding, Councils and NGOs.	<ul> <li>Developing national and regional tobacco control strategies.</li> <li>Developing and supporting development of tobacco control plans for DHBs, PHOs, and PHUs, ensuring integration of local plans.</li> </ul>	<ul> <li>Developing national public health emergency response plans and systems.</li> <li>Working with councils to develop testing and public information programmes to support boil water notices and chlorination.</li> <li>Supporting CERA community engagement programme.</li> <li>Incorporating a health determinants approach into DHB recovery planning.</li> </ul>		
	Quality management for public health, including monitoring and performance assessment.	Standard-setting, reporting and audit of all tobacco control activities to ensure targets are achieved.	Conducting debriefs for all staff     Providing reviews and reports of public health response.		
3. Health promotion: enabling people to increase control over and improve their health	Developing public and private sector <b>policies</b> beyond the health sector that will improve health, improve Māori health and reduce disparities.	<ul> <li>Developing fiscal policies to support tobacco sales reductions.</li> <li>Developing local council smokefree policies (eg smokefree playgrounds and sports venues, smokefree public events).</li> <li>Developing tobacco policies for businesses and organisations (eg smokefree marae, employer support for smoking cessation, tobacco-free retailers).</li> </ul>	<ul> <li>Supporting a "health in all policies" approach in recovery agencies (eg CCC, CERA) with advice, committee membership, submissions and staff secondments.</li> <li>Developing tools to promote consideration of longer-term impacts of recovery on health (eg. Integrated Recovery Guide).</li> </ul>		

Core function	Strategies	Examples (tobacco control)	Examples (Earthquake response & recovery)
	Creating physical, social and cultural environments supportive of health.	<ul> <li>Increasing the number of smokefree places (eg. playgrounds, other public places and events, marae, clubs, homes).</li> <li>National, regional and local education and marketing campaigns to highlight the dangers of tobacco, encourage cessation and promote smokefree as a positive choice, including sponsorship and promotion of the "Smokefree" brand.</li> </ul>	Working with EQC to prioritise winter heating support for people at high risk of hospital admission. Identifying and supporting opportunities to increase active transport in urban rebuild. Identifying potential for health gain from general improvements to home heating and insulation during rebuild.
	Strengthening communities' capacities to address health issues of importance to them, and to mutually support their members in improving their health.	<ul> <li>Supporting local communities to develop local smokefree policies (eg marae, playgrounds)</li> <li>Supporting community initiatives and events to raise tobacco awareness (eg World Smokefree Day).</li> </ul>	<ul> <li>Providing public information on the need to connect with and support others.</li> <li>Working with schools in hardest-hit areas to develop community hubs and help co-ordinate community support.</li> <li>Supporting citizens and community groups, particularly those within disadvantaged communities, to engage in participatory democratic processes for recovery and rebuilding.</li> </ul>
	Supporting <b>people to develop skills</b> that enable them to make healthy life choices and manage minor and chronic conditions for themselves and their families	<ul> <li>ABC programmes in primary and secondary care.</li> <li>Community cessation services (eg Aukati Kai Paipa), with a particular focus on those least able to access mainstream services.</li> <li>Quitline</li> </ul>	Providing public information about management and reporting of minor illness post-earthquake.
	Working in partnership with other parts of the health sector to support health promotion, prevention of disease, disability, and injury, and rational use of health resources.	<ul> <li>Supporting DHB and PHOs in addressing local tobacco issues (eg developing smokefree campuses, co-ordinating tobacco control initiatives, recording of patient smoking status, ensuring accessible cessation support)</li> </ul>	<ul> <li>Incorporating a health determinants approach into DHB recovery plans.</li> <li>Providing information on normal responses and self-care for post-earthquake stress, along with appropriate referral via primary care for specialist support.</li> </ul>
4. Health protection: protecting communities against public health hazards	Developing and reviewing <b>public health laws</b> and regulations <sup>iv</sup> .	<ul> <li>Development and updating of Smokefree Environments Act (SFEA) and other regulatory controls on tobacco use, sales, sponsorship.</li> </ul>	Ministry of Health advice on Canterbury Earthquake Recovery Act 2011.
	Supporting, monitoring and enforcing compliance with legislation.	<ul> <li>Educating retailers and employers about SFEA responsibilities.</li> <li>Supporting compliance (eg providing advice and signage)</li> <li>Receiving and investigating complaints about SFEA breaches.</li> <li>Conducting controlled purchase operations.</li> <li>Undertaking prosecutions for breaches of legislation.</li> </ul>	Using powers under Health Act and other legislation to provide protection against hazards (eg. closure of contaminated rivers to fishermen and whitebaiters).
	Identifying, assessing, and reducing communicable disease risks, including management of people with communicable diseases and their contacts.	<ul> <li>Publicly highlighting tobacco use as an important risk factor for certain communicable diseases (eg meningococcal disease, legionnaire's disease).</li> </ul>	<ul> <li>Monitoring and advising welfare centres for displaced people, including management of unwell residents.</li> <li>Promptly identifying and controlling communicable disease outbreaks.</li> <li>Communicating practical public advice about safe sewage disposal and hand hygiene.</li> </ul>
	Identifying, assessing and reducing environmental health risks, including biosecurity, air, food and water quality, sewage and waste disposal, and hazardous substances.	<ul> <li>Highlighting tobacco smoke as key indoor air pollutant. Increasing the number of smokefree places (eg playgrounds, other public places and events, marae, clubs, homes).</li> </ul>	<ul> <li>Monitoring, assessing and advising on contamination of air, water and soil.</li> <li>Supporting return of recreational and drinking water to prequake quality.</li> </ul>
	Preparing for and responding to <b>public health</b> emergencies, including natural disasters, hazardous substances emergencies, bioterrorism, disease outbreaks and pandemics.	<ul> <li>Address post-disaster smoking relapses as part of disaster recover plans, through information, education and cessation support.</li> </ul>	Ensuring adequate emergency planning and training for all public health and associated staff.

Core function	Strategies	Examples (tobacco control)	Examples (Earthquake response & recovery)	
5. Preventive interventions: population programmes delivered to individuals	Developing, implementing and managing primary prevention programmes (targeting whole populations or groups of well people at risk of disease: eg immunisation programmes).	<ul> <li>Providing targeted information to youth discouraging smoking initiation (eg individual letters from GP at age 12).</li> </ul>	Increasing eligibility and coverage for influenza vaccination in vulnerable groups.	
	Developing, implementing and managing population-based <b>secondary prevention programmes</b> (screening and early detection of disease: eg cancer screening).	<ul> <li>Routine collection of smoking status in primary and secondary care, with systematic brief intervention follow-up (eg ABC) and referral to more intensive cessation support as indicated.</li> </ul>	•	

# Appendix 6. Providers of public health services

Public health programmes and services are delivered by a wide range of organisations and staff. This section describes major current responsibilities for public health delivery in New Zealand, with a particular focus on those public health services funded by government through Vote:Health.

- a) The **Minister of Health** has the ultimate responsibility for all health policy decisions and all expenditure from Vote:Health.
- b) The **Ministry of Health** is the key agent of the Minister in the health and disability system and maintains the core of government's responsibilities for the health and participation of New Zealanders. The Ministry is the principal policy advisor, regulator, and funder and also provides some national services. It provides leadership across the system to improve performance. With respect to public health, the Ministry are responsible for the national regulatory and policy frameworks, for providing technical and operational advice to the sector, as well as funding public health services both directly to providers and also through **DHBs** via its business arm the National Health Board (NHB). In addition, the NHB and wider Ministry are responsible for deciding which services should be planned, funded and provided at national, regional and local levels, and how that should change over time.
- c) Other government ministries and departments such as the Ministry of Social Development, Te Puni Kokiri, New Zealand Food Safety Authority, Department of Labour and others, have responsibilities and concerns for issues of population health, wellbeing and safety. Intersectoral collaboration between the health sector and these other areas of government is critical to the achievement of population health outcomes. Whānau Ora is an example of a current programme which employs this intersectoral approach.
- d) **Local government** has an important role in protecting and promoting community health and wellbeing through services, healthy public policy, environmental protection and engaging with communities. Some examples of local government's public health responsibilities include the provision of clean, safe drinking water, urban planning and design, and local policy making around such issues as gambling, smokefree and alcohol. The Local Government Act 2002 and the Resource Management Act 1991 provide opportunities for public health issues to be considered and for the community to have input.
- e) Environmental Science and Research (ESR) is a Crown Research Institute which is the principal science advisor to the Ministry and provides epidemiological services to the Ministry of Health and technical epidemiological and associated surveillance support services to public health units. ESR is also the national reference laboratory.
- f) Universities and other tertiary institutions are key players in training the public health workforce, along with some NGOs (The Health Promotion Forum of NZ, for example). Universities and public health associated academic departments, funded through contestable grant processes also provide research to support evidence-based public health practice, and can play a role in public health advocacy. Sometimes they also hold one-off contracts to provide research and advice on specific issues of public health importance. For example, Massey University provides technical drinking water support and advice and the

- University of Otago, Dunedin maintains a Creutzfeldt Jakob disease (CJD) registry.
- g) **District Health Boards** are mandated to work within their allocated resources to improve, promote and protect the health of the population within their districts. (New Zealand Public Health and Disability Act 2000). Whilst public health services are centrally funded by the Ministry they are delivered by the 12 DHB-owned public health units as well as numerous non-governmental organisations (NGOs). DHB-based services and NGOs each deliver approximately half of such services. Planning and Funding Units within DHBs have a role in prioritisation in health service decision-making which is usefully informed by evidence-based public health information.
- h) The range of health and disability services delivered by **non-governmental organisations** vary enormously from single issue and community level to more wide ranging and national level services. These organisations are well placed to identify and work with and on behalf of their communities of interest and can play a valuable role in public health advocacy. Examples of such organisations include Public Health Association, Health Promotion Forum, Cancer Society, National Heart Foundation, ALAC, Problem Gambling Foundation and many others.
- i) **Community and iwi / Maori organisations** make up a significant number of NGO health providers providing kaupapa public health services.
- j) **Pacific PHO and NGO providers and leadership** are an important vehicle for any health programmes directed at improving health outcomes for Pacific peoples.
- k) **Primary Health Organisations (PHOs)** are funded by District Health Boards for the provision of a set of essential primary health care services to those people who are enrolled with the PHO. The Primary Health Care Strategy (2001) has encouraged PHOs to adopt more of a population health focus to their work in addition to their role in improving personal health. In addition primary care is involved in screening, immunisation, child health and other preventive services delivered to individuals but often with wider population health effects.
- 1) The diversity of the public health workforce reflects the diversity of public health services and providers; public health is a multidisciplinary enterprise. Those working in public health include HPOs, health promoters, public health physicians, public health nurses, general practitioners and other primary care nurses, analysts, researchers, managers, scientists, kaiäwhina, community health workers, and community development workers. Many others who might not see public health as their core business are nevertheless in roles which support the public health effort, for example through their special knowledge and skills in working with particular sections of the community or through working in service areas such as well-child, occupational safety or water management.
- m) Public health has a key role to promote **community engagement** as a critical component to improving health. During the influenza pandemic public health was proactive in developing and supporting resources and key messaging to support other parts of the health sector and communicating key messages directly with the public. Citizen engagement throughout the Christchurch rebuild will be crucial for community empowerment and recovery.

## References

- 1. Wanless, D., *Securing Good Health for the Whole Population* 2004, Her Majesty's Stationery Office: London.
- 2. Institute of Medicine, *The Future of Public Health*. 1988, Institute of Medicine Committee for the Study of the Future of Public Health: Washington DC.
- 3. Canadian Institutes of Health Research, *The Future of Public Health in Canada: Developing a Public Health System for the 21st Century.* 2003, The *Ad Hoc* Committee on the Future of Public Health in Canada. p. 1-49.
- 4. Cadilhac, D., et al., *The health and economic benefits of reducing disease risk factors*, in *Prepared for Vic Health*. 2009, Vic Health.
- 5. Vos, T., et al., Assessing Cost-Effectiveness in Prevention (ACE-Prevention): Final Report. 2010, University of Queensland, Brisbane and Deakin University, Melbourne.
- 6. Wanless, D., *Securing our future health; taking a long term view.* 2002, HM Treasury: London.
- 7. CDC, Current Trends Prevention and Control of Tuberculosis in Correctional Institutions: Recommendations of the Advisory Committee for the Elimination of Tuberculosis. MMWR, 1989. **38** (18): p. 313-320,325.
- 8. Reichman, L.B., *On Target: A Tuberculosis Control Strategy Whose Time Has Come*. Annals of Internal Medicine, 1999. **131**(8): p. 617-618.
- 9. Bruce-Grey-Owen Sound Health Unit, *The Investigative Report of the Walkerton Outbreak of Waterborne Gastroenteritis: May June, 2000.* 2000, available at <a href="http://water.sesep.drexel.edu/outbreaks/WalkertonReportOct2000/REPORT\_Oct00.PDF">http://water.sesep.drexel.edu/outbreaks/WalkertonReportOct2000/REPORT\_Oct00.PDF</a>.
- Health Canada National Advisory Committee on SARS and Public Health, Learning from SARS - Renewal of Public Health in Canada
   Ottawa.
- 11. Connor, J., et al., *The burden of death, disease, and disability due to alcohol in New Zealand*. New Zealand Medical Journal, 2005. **118**(1213).
- 12. WHO Regional Office for the Western Pacific, Essential Public Health Functions: A Three-Country Study in the Western Pacific Region. 2003: Manila
- 13. Pan American Health Organisation / World Health Organisation, *Public Health in the Americas: Conceptual Renewal, Performance Assessment, and Bases for Action* 2002, Washington, DC.
- 14. National Public Health Partnership Programme, *Public Health Practice in Australia Today A Statement of Core Functions*. 2000, National Public Health Partnership Programme Secretariat: Melbourne, Australia.
- 15. Ministry of Health Services (British Colombia) Population Health and Wellness, *Public Health Renewal in British Colombia: An Overview of Core Functions in Public Health*. 2005.
- 16. World Health Organisation Regional Office for Europe, *Strengthening Public Health Capacities and Services in Europe: A Framework for Action, Interim Draft*, in *First meeting of the European Health Policy Forum for High-Level Government Officials*. 2011: Andorra.
- 17. McCracken, H., Essential Public Health Functions; Carpe Diem Time for New Zealand? 2004, Ministry of Health: Wellington. p. Draft paper [internal document].

- 18. Loring, B., *Literature review: review of arrangements for public health services in comparable jurisdictions*. 2009, Ministry of Health: Wellington. p. Draft paper [internal document].
- 19. Clarke, K., *Options on Optimal Delivery of Public Health in New Zealand*. 2010, Ministry of Health: Wellington. p. Draft paper [internal document].
- 20. Medical Officers of Health, *Planning and Purchasing of Public Health Services Medical Officer of Health Advice to the Director of Public Health and Director-General of Health.* 2009. p. [internal document].
- 21. Medical Officers of Health, *National Health Board / Medical Officers of Health* 2010: Wellington. p. [internal document].
- 22. Health & Safety Developments Management Research & Consultancy, *Public Health Workforce Development Background Literature Review*. 2004, Prepared for (Viv Head on behalf of Maggie McGregor) Public Health Directorate, Ministry of Health: Auckland.
- 23. Ministry of Health Services (British Columbia) Population Health and Wellness, *Public Health Renewal in British Columbia: An Overview of Core Functions in Public Health*. 2005: Vancouver.
- 24. World Health Organisation Regional Office for the Western Pacific, *Essential Public Health Functions: A Three-Country Study in the Western Pacific Region*. 2003: Manila.