“The major gains in health in this [20th] century have been attributable largely to the impact of public health and disease prevention, rather than to medical interventions.”


THIS RESOURCE PROVIDES AN OVERVIEW OF PUBLIC HEALTH FOR:
- the boards of District Health Boards (DHBs) and advisory committees
- DHB staff and providers
- organisations involved in public policy development
- non-government organisations (NGOs) that provide health and related services
- anyone interested in health issues and services.

THIS RESOURCE DESCRIBES:
- the concept of public health and the types of services and activities that come under the public health umbrella in New Zealand
- the interface between public health and other parts of the health and wider social sectors.
What is PUBLIC HEALTH?

Public health has been defined as “the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society”.

PUBLIC HEALTH IS ABOUT:

• promoting well-being
• preventing ill health before it happens.

It is about keeping people healthy and improving the health of populations rather than treating diseases, disorders and disabilities in individuals.

PUBLIC HEALTH TAKES A POPULATION HEALTH APPROACH:

• taking into account all factors which determine health
• planning how these factors can be tackled.

A population health approach can be used by all parts of the health sector.

PUBLIC HEALTH ACTION CAN:

• take place at many levels throughout the health sector and beyond
• be planned and implemented in collaboration with other sectors
• advise other sectors on the health impact of their activities, and where necessary, regulate these
• support other parts of the health sector to take a population health approach to service planning and delivery.

Factors which determine health:
peace, shelter, education, food, sufficient income, a stable eco-system, sustainable resource use, social justice, equity.

“Effective public health activities involve long-term investments that decrease the risk of injury and disease, improve the quality of life, prolong life and may decrease the need for health care services.”

What is the MāORI PERSPECTIVE on public health?

Tangata whenua have a long history of maintaining the health of populations through concepts and practices such as tapu, noa, and rāhui that protected water supplies, food sources and safety of whānau.

For Māori, the concepts of health and well-being go beyond physical well-being. Good health is recognised as being dependent on a balance of factors that affect well-being.

**TE TAHA WAIRUA** spiritual health, including the practice of tikanga Māori in general

**TE TAHA HINENGARO** the emotional and psychological well-being of the whānau and of each individual within it

**TE TAHA TINANA** the physical aspects of health

**TE TAHA WHĀNAU** the social environment in which individuals live – the whānau of family, the communities in which whānau live and act.

In the *whare tapa whā* model of health described above, the four components represent the four walls of a house. If one of those walls fails, the house will fall.

In public health there are two other perspectives which are seen as particularly important.

**TE AO TUROA** the environment: the relationship between Māori and te ao turoa is one of tiakitanga [stewardship]. It is the continuous flow of life source. Without the natural environment, the people cease to exist as Māori.

**TE REO RANGATIRA** expresses the values and beliefs of people and is a focus of identity. The root of all cultures is the language, and te reo is a vital expression of rangatiratanga.

Māori health must be understood in the context of the social, economic and cultural position of Māori in the present day, as well as the effects of the past on Māori of today.

Public health practice in New Zealand recognises the interconnectedness of public health and development of whānau, hapu and iwi. Through Māori development initiatives across education, employment, housing, justice and health, there is potential to improve the health of the Māori population.
What is the DIFFERENCE between PUBLIC HEALTH and PUBLICLY FUNDED HEALTH?

The two terms are often confused but public health is not the same as publicly funded health. Publicly funded health includes all the health and disability services funded from our taxes including public health services and personal health services (services delivered to individuals).

Publicly funded health services also include mental health services, early detection and treatment services and disability support services that are paid for by the Government.

What is the RELATIONSHIP between PUBLIC HEALTH and PERSONAL HEALTH?

- Public health is about improving the health of populations.
- Personal health is about improving the health of individuals within those populations or communities.

Public health services and health services for individuals are complementary. They are both important and necessary to achieve positive change in the health of populations and individuals. Neither is effective alone.

Public health services and services for individual people sometimes work closely together for a two-way benefit.

Example of the relationship

Data from public health surveillance systems that monitor the health of the population show that there is an increase in respiratory diseases in a particular community. Clinical staff in that community report a worrying increase in the number of people they are seeing with chest complaints. The link is made between the increase in disease and substandard housing conditions in that community. Health promotion staff decide to get together with people from other sectors to take action to improve the quality of housing in the community.
What sorts of things does the PUBLIC HEALTH SECTOR do?

The public health sector ensures that potential risks to the health of the population are monitored, managed and promoted by:

- monitoring our environment to ensure risks to the health of the public are managed
- licensing organisations and premises as required by regulation
- enforcing public health legislation, including investigating complaints and taking appropriate action
- planning for emergencies, so that if one does happen things can swing into action without delay to protect our health
- providing environmental advice for the Government and local bodies on an ‘as required’ basis
- advocating for policy change at national, regional and local levels
- being involved in policy development at national, regional and local levels
- promoting the development of physical and social environments that are conducive to good health
- raising public awareness of health-related issues
- developing and managing population-based screening programmes
- working with communities and the wider health sector to develop and establish public health programmes
- assisting schools with the implementation of the Health and Physical Education curriculum and the development of a health promoting environment
- working with the media on public health issues – interviews, press releases, talk-back radio programmes
- running national media campaigns
- developing and distributing resources – pamphlets, posters, videos, newsletters, teaching kits, interactive websites
- training professionals, community workers and youth peer educators.
What’s SPECIAL about PUBLIC HEALTH SERVICES?

• They are offered to populations or groups of people – not to individuals
  They aim to reach and influence entire population groups – policy makers, communities, organisations, families and groups of individuals.

• Public health is about creating or advocating for healthy social, physical, and cultural environments

A HEALTHY SOCIAL ENVIRONMENT WHERE:
– people have equal opportunities for education and for employment
– individuals and whānau have adequate incomes
– people feel part of the community and not outside it
– people are not discriminated against
– communities are peaceful and non-violent
– there are fewer influences – such as tobacco advertising – which support unhealthy lifestyle choices
– healthy choices are the easy choices – for example, where nutritious food is cheaper than unhealthy food.

A HEALTHY PHYSICAL ENVIRONMENT WHERE:
– the water we drink is free from contamination by toxins and disease-causing micro-organisms
– effective sewage and waste water systems are in place
– people are able to travel easily and safely to shops, schools, employment and services
– there are good opportunities within communities for leisure activities
– adequate housing is available for all.

A HEALTHY CULTURAL ENVIRONMENT WHERE:
– there is full participation of tangata whenua in decision-making
– the traditions, languages and spiritual beliefs of all cultures are valued and respected.

“Inequalities in income, housing, employment, education and life skills. There is clear international evidence that these issues are key determinants of health. Strong relationships have been identified between poor health status and poor socio-economic conditions like income inequalities, low income, poor housing, low educational achievement and unemployment.”

• The rewards are sometimes a long time in the future

There can be immediate benefits to a community from public health activities.

• A water supply becomes contaminated by micro-organisms. The reason for the contamination is quickly identified and communities are advised to boil all drinking-water until further notice. Steps are also taken to prevent similar problems recurring.

But with some activities – for a variety of reasons – it takes longer to achieve positive outcomes.

• An effective approach to a community-based public health programme is one that uses a community development process. The service is not imposed on a community, but is developed with people in that community. Considerable time is needed to identify key members of a community and to work with them to design and deliver the programme.

• The benefits of a well-balanced diet during childhood may be greatest in middle age.

• Public health services are often invisible

Everyday, everyone in New Zealand benefits from some public health services. These services:

• help keep our food, air and drinking-water safe
• help protect us from infectious diseases
• help protect us against poisonings and injuries from toxic and hazardous substances and radiation dangers.

We often don’t think about these services unless they fail.

• Public health services are ‘public benefits’

Public health services, such as those which safeguard our drinking-water and protect New Zealand against exotic insect pests, need to be available to everyone at no cost – not just to those who can afford them. They are funded by the Government to ensure that the health of the whole population is protected.
A good public health strategy is based on evidence of effective interventions, is well planned and comprehensive. It is likely to involve:

- several providers
- several programmes
- health protection and health promotion activities

and is likely to be linked locally, regionally and nationally.

**AUHAI KORE: REDUCING THE HARMFUL EFFECTS OF SMOKING**

Towards a Tobacco-Free New Zealand

The plan for the funding of tobacco control for the five years from 1999 to 2003.

New Zealand’s national tobacco policy guides a comprehensive tobacco control programme involving:

- **legislation** (restricting the advertising, sale and use of tobacco products)
- **taxation** (increasing the price of tobacco products)
- **health promotion** (encouraging changes in attitude and behaviour)
- **cessation services** (helping smokers to quit).

There are more than 40 providers throughout New Zealand involved in delivering the strategy. Ministry of Health has contracts with general, Māori and Pacific providers. There is a mix of health protection and health promotion activities.

**WHAT makes a GOOD PUBLIC HEALTH STRATEGY?**

- **RED – LOCAL SERVICES** designed to reach and benefit people in one District Health Board area.
- **A national Quit Line is set up to advise people on nicotine replacement therapy.**
- **A media campaign carried on regional radio stations encourages smokefree homes so babies can grow up smokefree.**
- **A national provider plans and implements a hard-hitting anti-smoking television and radio campaign.**
- **A smokefree poster competition is run in schools.**
- **Smokefree officers check that retailers are not selling tobacco products to children and that tobacco products are not advertised or promoted.**
- **Data about the effect of raising the price of cigarettes on smoking rates of different age groups is made widely available for use by community groups and other providers around New Zealand.**
### WELL-PLANNED STRATEGY

**THE HARMFUL EFFECTS OF SMOKING**

#### Tobacco-Free New Zealand

<table>
<thead>
<tr>
<th>GREEN – REGIONAL SERVICES</th>
<th>BLUE – NATIONAL SERVICES</th>
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<td>designed to reach and benefit people across more than one District Health Board area.</td>
<td>designed to reach and benefit people across all of New Zealand.</td>
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#### Activities

- **Māori providers from across the region meet to plan and co-ordinate an Auahi Kore marae-based campaign.**

- **The organisers of a national Māori netball tournament plan and implement activities to promote the smokefree message to players, officials, whaea, kaumatua, whānau at the event.**

- **Several providers plan together to work with local schools to promote ‘Smokefree Schools’.**

- **Several providers make submissions to a select committee considering tobacco legislation.**

- **Workplaces are monitored to check that staff are protected from passive smoking.**

- **A policy on tobacco sales to minors is developed by the Ministry of Health prior to adoption by Parliament.**

- **A provider talks to the manager of a bar about how to ensure that there are smokefree areas in the bar.**

- **A regional Pacific provider assists a school to set up smokefree awareness sessions for the school’s senior sports teams and helps the librarian plan a smokefree reading programme for students.**

- **Smokefree/Auahi Kore education materials are developed and distributed nationwide.**
There is an increasing body of work that shows that public health programmes are effective in improving the health of the community. A recent OECD report notes a dramatic increase in New Zealanders’ life expectancy due in part to public health interventions. In some of the following examples short-term indicators were measured to demonstrate progress towards achieving long-term outcomes. These will be measured over a longer timeframe.

**MĀORI NUTRITION training programmes**

**What:** Training courses providing basic nutrition knowledge and skills to Māori community people empowering them to promote nutrition in their communities.

**Results:** Changes in kai and nutrition practices on marae, Kōhanga reo and in other Māori organisations and whānau were observed: a greater variety of food was available, consumption of fat, salt and sugar decreased, consumption of salads and drinking-water increased. An unintended result was that the number of smokefree venues increased.

**A city-wide INJURY PREVENTION programme**

**Who:** Māori, Pacific and mainstream public health providers, community organisations, the police, City Council.

**What:** Joint planning and action on how to reduce injury levels within the city.

**Results:** There have been marked increases in the use of child restraints in motor vehicles, swimming pool fencing, fire guards, stair guards and protective equipment for sport. Injury levels in the city have significantly reduced since the project began. In other parts of the same urban area where the programme was not operating, injury rates rose over the same period. Outcome evaluation findings demonstrated significant reductions in hospitalisation rates for all age groups in the city with the injury prevention programme.

Measuring the effectiveness of public health programmes – especially quantifiably – presents challenges.

- Interventions are often long-term and observable changes can be slow in coming.
- They may involve community development processes that move at the pace of the community involved. External factors such as an increase in unemployment can have impact on outcomes.
- Many determinants of health lie outside the health sector’s direct control and it is difficult to directly measure the impact of intersectorial work.
- It is often necessary to develop short-term indicators to measure progress towards achieving a desired long-term outcome.
IMMUNISATION

What: Promotion in New Zealand of immunisation against *Haemophilus influenzae* type B (Hib).

Results: As a result of public health surveillance, the New Zealand Immunisation Schedule was revised to include immunisation against Hib. “Prior to the introduction of immunisation in 1994, Hib was the commonest cause of life-threatening bacterial infection in children under the age of five... However since the vaccine was introduced in January 1994, there has been a dramatic reduction in the incidence of this disease – as has occurred in other countries. There has been an over 80% reduction in disease within six months of adding the vaccine to the schedule.”

FLUORIDATION of water supplies

What: Promotion of the fluoridation of drinking-water supplies for communities of 1000 or more people.

Results: Fluoridation significantly reduces rates of tooth decay. It is estimated that water fluoridation prevents between 58,000 and 267,000 decayed, missing or filled teeth in New Zealand each year. Based on current levels of 50 percent of the population receiving fluoridated water, it is estimated that the annual cost savings are up to $14.3 million. As well as these dollar savings, there are savings for individuals in terms of time and reduced discomfort and pain.

SAFE DRINKING-WATER supplies for small communities and marae

What: The Hokianga Drinking-Water Pilot involved the development, installation and evaluation of safe drinking-water supplies for small, generally marae-based, communities in the Hokianga region. Once completed, the drinking-water treatment plants are operated and maintained by the communities themselves.

Results: Safe drinking-water was provided to 34 communities and marae at a cost of $1.5 million. In a number of overseas studies, cost–benefit ratios of a safe drinking-water supply have been assessed to lie in the range of 8–50 (i.e. the benefits greatly outweigh the costs).

The project evaluation reports are very positive of the benefits that have accrued. The direct benefit is that small communities now have safe water supplies. Incidental benefits are that people in those communities have developed ownership over the water supplies, an increased sense of empowerment and an increased awareness of health issues. The project has made other communities aware of the benefits of safe drinking-water.
WHO makes the KEY DECISIONS about PUBLIC HEALTH SERVICES?

Both the District Health Boards and the Ministry of Health have responsibilities for public health.

The Ministry of Health has overall responsibility for the funding and planning of public health services.

The New Zealand Public Health and Disability Act 2000 (section 22) states that every District Health Board has a responsibility to:

- improve, promote and protect the health of people and communities
- reduce health disparities by improving health outcomes for Māori and other population groups
- reduce, with a view to eliminating, health outcome disparities between various population groups within New Zealand by developing and implementing, in consultation with the groups concerned, services and programmes designed to raise their health outcomes to those of other New Zealanders
- promote the reduction of adverse social and environmental effects.

The Ministry of Health therefore works in collaboration with District Health Boards on public health planning and funding.
WHAT sorts of ORGANISATIONS PROVIDE PUBLIC HEALTH SERVICES?

Around half the funding for public health services goes to Public Health Units in the District Health Boards to provide services in communities. There are 12 Public Health Units providing core public health services across the country. Some cover more than one District Health Board area to provide the most effective coverage across an area. There is usually a component of each contract that requires the delivery of services to Māori and to other specific ethnic populations.

Public Health Units deliver both health protection and health promotion activities, such as monitoring food safety and providing information to the public about nutrition and physical activity.

There are more than 200 non-government organisations (NGOs) that receive the other half of the funding. These providers include:

- organisations that provide services for the general population
- Māori governed and managed services that provide services specifically for Māori or for the general population
- Pacific governed and managed services that provide services for Pacific people.

Some NGO services are national, some regional or local, and some are a combination of these. Some providers have services that address a wide range of issues. For example, regional iwi providers deliver Well Child, Auahi Kore (Smokefree), nutrition and physical activity, alcohol and drug, and mental health programmes and services.

Some special interest providers focus on one issue. Examples are the National Heart Foundation and the Mental Health Foundation.

The staff in the Ministry of Health’s Public Health Directorate are also part of the public health sector. They provide direct advice to the Minister of Health and other sectors and manage public health risks, as well as planning and co-ordinating strategies.
WHO ARE the people who work in PUBLIC HEALTH within the health sector?

People with commitment to and passion for improving the health of communities and individuals within these communities.

The people include:

- **health protection officers** – plan and implement activities that protect health and well-being in communities. Health protection officers are designated by the Director-General of Health

- **health promoters** – plan, implement and evaluate activities that promote health and well-being in communities

- **public health physicians** (doctors with specialist training in public health medicine) – fill a range of public health roles. Many are Medical Officers of Health who are appointed by the Director-General of Health to enforce a range of statutory functions

- **public health practitioners** (people trained in public health) – fill a range of roles, including service development and contract negotiation, management and monitoring

- **programme managers** – plan and implement specific projects or programmes

- **epidemiologists** – study the occurrence and distribution of diseases in populations and communities

- **policy analysts** – develop public health policy advice, including advice for the Minister of Health

- **social science researchers** – study the social factors that impact on the health of communities

- **community health workers** – use specific cultural knowledge and strong networks within their own communities to promote health

- **public health nurses** (registered nurses who work in public health) – do health education work in the community with children and families

- **public health dietitians** – plan and implement a range of health promotion activities in the community around food, nutrition and physical activity.

Some of these people work in both public and personal health, providing clinical services to their clients as well as health promotion to the communities they work in.
Is there an INTERNATIONAL MODEL on which PUBLIC HEALTH PLANNING is based?

In 1986 in Ottawa, Canada, the World Health Organization (WHO) developed an approach to improving the health of populations and individuals. This is known as the Ottawa Charter and is used in New Zealand as a framework for planning public health strategies.

The Ottawa Charter shows that to improve the health of populations and individuals there is a need to look wider than just providing health services. If people are able to take responsibility for the health of their families and themselves they need:

- protection from environmental factors that could lead to health risks
- adequate housing
- a liveable income
- employment
- educational opportunities
- a sense of belonging and being valued
- a sense of control over life circumstances.

What is the RELATIONSHIP BETWEEN the TREATY OF WAITANGI and the OTTAWA CHARTER?

There is a close relationship between the two. Māori health workers – and many others in public health – consider that the Treaty of Waitangi foreshadowed the intent of the Ottawa Charter as it includes the right of individuals and communities to determine the health of themselves and their environments.
How should the TREATY OF WAITANGI and the OTTAWA CHARTER translate into PUBLIC HEALTH PRACTICE?

<table>
<thead>
<tr>
<th>THE FIVE COMPONENTS OF THE OTTAWA CHARTER FRAMEWORK</th>
<th>TRANSLATION OF THE FIVE COMPONENTS OF THE OTTAWA CHARTER FRAMEWORK TO A TREATY PERSPECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building healthy public policy</td>
<td>Māori health has high priority from the highest political levels and policies are developed in partnership with Māori</td>
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<tr>
<td>Creating supportive social, physical and cultural environments for health</td>
<td>Māori concepts and practices are recognised and acted on in developing and providing public health services</td>
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<tr>
<td>Strengthening community action for health</td>
<td>Māori have control over their own health and development and are supported in this through having equitable access to resources</td>
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<tr>
<td>Developing personal skills so people can take action to improve their own health</td>
<td>Empowerment is facilitated through equitable access to training, education and funding</td>
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<tr>
<td>Reorienting health services if necessary to make them accessible and acceptable to the population they serve</td>
<td>Health services are provided for Māori, by Māori and mainstream health services ensure they are responsive to Māori needs</td>
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</tbody>
</table>

[More information on how services can be made more effective for Māori can be found in *He Taura Tieke: Measuring Effective Health Services for Māori*, Ministry of Health, 1995.]
What does this mean in terms of PUBLIC HEALTH PLANNING and IMPLEMENTATION?

The Treaty contains within it specific responsibilities and obligations which require the Government, as treaty partner, to address the disparities between Māori and non-Māori.

Public health action takes this into account. The relationship between Māori and the Crown in the health and disability sector is based on three principles as detailed in the New Zealand Health Strategy:

- participation of Māori at all levels
- partnership in service delivery
- protection and improvement of Māori health status.

In relation to the development of health promotion programmes, participation and partnership indicate that Māori should be able to determine their own health goals and have an active role in achieving them.

HOW do we achieve an IMPROVEMENT in the HEALTH of populations, communities and individuals?

To achieve this, four things need to be in place:

- All sectors – including education, justice, employment, transport, police and local government – work together with their communities to address the wider determinants of health.
- Public health strategies are planned using a mix of actions related to the Treaty of Waitangi and the five components of the Ottawa Charter framework.
- The strategies include a combination of public health regulation, health protection and health promotion actions.
- They also include both public health programmes and activities and personal health and disability services for individuals and groups of individuals.
Hūtia terito o te harakeke,  
kei whā ekō te kori mako?  
Māu eui mai, heaha te māa nui o te ao?  
māku e ki atu,  
Hetangata, hetangata, hetangata.

If you pull out the heart of the flax bush  
from where will the bellbird sing?  
If you ask, what is the greatest thing in the world?  
I will tell you,  
It is people, people, people

“Focusing on the underlying determinants of health  
will assist us to put our effort into the fundamental  
causes of poor health rather than dealing with the  
consequences.”