

Appendix 1 Data extracted for individual countries: Research question 1

This Appendix reflects the data collected to describe how Public Health systems and structures of selected countries function at national, regional and local levels. Data were collected from organisations' websites, an electronic database and a grey literature search and mapped to the 12 essential Public Health functions. It should be noted that the terminology used by the included countries differed. For example, Australia described federate, state and territory level delivery, and Canada described federate, territory and province; these were equated with national, regional and local level delivery, respectively. Data collected were verified by representatives from key national-level organisations.

Australia

[Australia's health system](#) is jointly run by all levels of Australian government – federal (national), state (regional) and territory (local). It is funded by:

- all levels of government
- non-government organisations
- private health insurers
- out-of-pocket costs from individuals for products and services that are not fully subsidised or reimbursed.

While the [federal government](#) regulates private health insurance, pharmaceuticals, and therapeutic products, it plays a minor role in direct service delivery. The management of public hospitals, ambulances, public dental care, community health (primary and preventive care), and mental healthcare is the responsibility of the states. Local governments play an important role in the delivery of community health and preventative health programs including immunisations and food safety regulations.

National

In 2020, the [National Federation Reform Council](#) (NFRC) was established which saw the cessation of the [Council of Australian Governments](#) (COAG). The NFRC is tasked with finding strategies in which the Commonwealth, states and territories operate effectively and productively. The NFRC is comprised of the Prime Minister, Premiers,

Chief Ministers, Treasurers and President of [the Australian Local Government Association](#). The NFRC discuss and tackle issues such as emergency management in relation to the COVID-19 pandemic, climate change and economic issues, for example, unemployment.

[The Australian Health Protection Principal Committee](#) (AHPPC) is the key decision-making committee for health emergencies. It is comprised of all state and territory Chief Health Officers and is chaired by the Australian Chief Medical Officer. The AHPPC has an ongoing role in advising the [Health Chief Executives Forum](#) (HCEF) on health protection matters and national priorities. AHPPC is also tasked with the role of mitigating emerging health threats related to infectious diseases, the environment and other disasters. It does so by working with states and territories to create national health protection guidelines and policies.

The HCEF is an intergovernmental forum for joint decision-making and strategic policy discussions that helps to deliver health services in Australia. It is made up of the health department chief executive officer from each state and territory and the Australian Government.

[The Communicable Diseases Network](#) Australia (CDNA) provides national public health coordination and leadership, and supports best practices for preventing and controlling communicable diseases. CDNA is a sub-committee of the AHPPC.

[The Public Health Laboratory Network](#) (PHLN) is a collaborative group of laboratories with expertise and services in public health microbiology in Australia and New Zealand. PHLN is now a subcommittee of the AHPPC. The PHLN subcommittee is comprised of state and territory, expert, national and observer members. Each Australian state or territory is represented on PHLN by representatives from one or two organisations, as appropriate. National members include representatives from the [Australian Animal Health Laboratory](#) (AAHL) and CDNA. There is an expert member from the World Health Organization (WHO) Collaborating Centre for Reference and Research on Influenza. Observer members include representatives from Private Pathology, Forensic and Technical Intelligence - Australia Federal Police and New Zealand Jurisdictions. PHLN's vision is to be an action-oriented national public health microbiology network, providing advice and services that add value and form a foundation of the broader Australian public health system.

[The Infection Control Expert Group](#) (ICEG) provides expert advice and information to support best practices related to infection prevention and control in community, hospital and other institutional settings. ICEG advises the AHPPC, the PHLN,

the CDNA, the National Health Emergency Management Standing Committee (NHEMS) and the Environmental Health Standing Committee (enHealth) on infection prevention and control issues.

The Australian Government established [the Office of the National Rural Health Commissioner](#) (ONRHC) in 2017 to support reforms of rural health in Australia. The ONRHC's areas of reform include primary healthcare, health workforce and training.

[The Australian Commission on Safety and Quality in Health Care](#) contributes to better health outcomes and experiences for all patients and consumers and improved value and sustainability in the health system by leading and coordinating national improvements in the safety and quality of healthcare. The Commission is a corporate Commonwealth entity and part of the Health portfolio of the Australian Government.

[The Independent Hospital Pricing Authority](#) (IHPA) aims to ensure all Australians have access to a sustainable, locally controlled health system that appropriately funds public hospital services.

[The Australian Institute of Health and Welfare](#) (AIHW) is an independent statutory Australian Government agency producing authoritative and accessible information and statistics to inform and support better policy and service delivery decisions.

[The Australasian Faculty of Public Health Medicine](#) (AFPHM) is a Faculty of the [Royal Australasian College of Physicians](#) (RACP). It provides training and continuing education for Public Health Medicine Fellows and trainees. Along with providing education and training in public health medicine, AFPHM supports public health medicine research and development, advocates for the highest standard of population health and promotes public debate on matters that affect the health of the community.

[The National Health and Medical Research Council](#) (NHMRC) is Australia's leading body for supporting health and medical research, for developing health advice for the Australian community, health professionals and governments and for providing advice on ethical behaviour in healthcare and in the conduct of health and medical research. NHMRC is the key driver of health and medical research in Australia. Public health is the cornerstone of NHMRC activities.

[The Australian Radiation Protection and Nuclear Safety Agency](#) (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear

safety. ARPANSA regulates Commonwealth entities that use or produce radiation with the objective of protecting people and the environment from the harmful effects of radiation. ARPANSA undertakes research, provides services, and promotes national uniformity and the implementation of international best practices across all jurisdictions.

[Australian Industrial Chemicals Introduction Scheme](#) (AICIS) helps to protect Australians and the environment by assessing the risks of industrial chemicals and providing information to promote their safe use.

The [Department of Agriculture, Water and the Environment](#) works to protect Australia's natural resources and helps to develop strong agricultural industries. The Department works with other government departments to ensure land, water, and heritage are well-managed, protected and productive. The Department, through regulation and partnership enhance Australia's agriculture, environment, heritage and water resources.

The [Food Standards Australia New Zealand](#) (FSANZ) develops standards that regulate the use of ingredients, processing aids, colourings, additives, vitamins and minerals, the composition of some foods and foods developed by new technologies.

The [Therapeutic Goods Administration](#) (TGA) is Australia's regulatory authority for therapeutic goods. The TGA is part of the Australian Government Department of Health. It is responsible for regulating therapeutic goods, including prescription medicines, vaccines, sunscreens, vitamins and minerals, medical devices, blood and blood products.

The [Commonwealth](#) also shares responsibility with the states and territories for other activities under national agreements such as the COAG. These other activities include:

- funding public hospital services
- preventive services, such as free cancer screening programs including those under the [National Bowel Cancer Screening Program](#)
- registering and accrediting health professionals
- funding [palliative care](#)
- [national mental health reform](#)
- responding to national health emergencies.

The [National Health Reform Agreement](#) (NHRA) is an agreement between the Australian Government and all state and territory governments. The NHRA coordinates health reform using the key mechanism of transparency, governance and financing of Australia's public hospital system. The states and territories are system managers of public hospitals and have responsibility for determining the mix of the services and functions delivered in their jurisdiction and system-wide public hospital service planning and performance.

The [Administrative Arrangements Order](#) sets out the laws that ministers are responsible for administering. The Department of Health pursues the achievement of the portfolio outcomes in association with a number of other agencies and statutory office holders in the portfolio, including the [Australian Commission on Safety and Quality in Health Care \(ACSQHC\)](#), the [AIHW](#) and the [NHMRC](#).

Regional

States own and manage service delivery for public hospitals, ambulances, public dental care, community health (primary and preventive care), and mental healthcare. They contribute their own funding in addition to that provided by the federal government. States are also responsible for regulating private hospitals, the location of pharmacies, and the healthcare workforce.

[State government responsibilities](#) include:

- managing and administering public hospitals
- delivering preventive services such as breast cancer screening and immunisation programs
- funding and managing community and mental health services
- public dental clinics
- ambulance and emergency services
- [patient transport and subsidy](#) schemes
- food safety and handling regulation
- regulating, inspecting, licensing and monitoring health premises.

The new [Public Health Act 2016](#) provides modern legislation to regulate public health. The Act provides a flexible and proactive framework for the regulation of public health, key features include:

- promoting public health and wellbeing in the community
- helping to prevent disease, injury, disability and premature death

- informing individuals and communities about public health risks
- encouraging individuals and their communities to plan for, create and maintain a healthy environment
- supporting programs and campaigns intended to improve public health
- collecting information about the incidence and prevalence of diseases and other public health risks for research purposes
- reducing the health inequalities in public health of disadvantaged communities.

Local

[Local governments](#) play a role in the delivery of community health and preventive health programs, such as immunisations and the regulation of food standards. They provide a range of environmental and public health services, community-based health and home care services.

[Primary health networks](#) (PHNs) are organisations that coordinate health services in local areas. There are 31 PHNs across Australia. PHNs:

- support community health centres, hospitals, GPs, nurses, specialists and other health professionals to help improve patient care
- coordinate different parts of the health system — for example, between the hospital and GP when a patient is discharged
- assess the health needs of their local area
- provide extra services that are needed, such as:
 - after-hours services
 - mental health services
 - health promotion programs
 - support for primary care (GPs), including continuing education.

As PHNs tailor health services to the needs of the community and take their own approach to connecting services, each region has a different model, but all are guided by the [national priorities](#) set by the Australian Government.

PHNs are funded through a [grant process](#). Their funding is dependent on performance, which is assessed against national and local indicators set out in the [performance framework](#).

Figure 1. Overview of the Australian Public Health System (image from Commonwealth Fund).

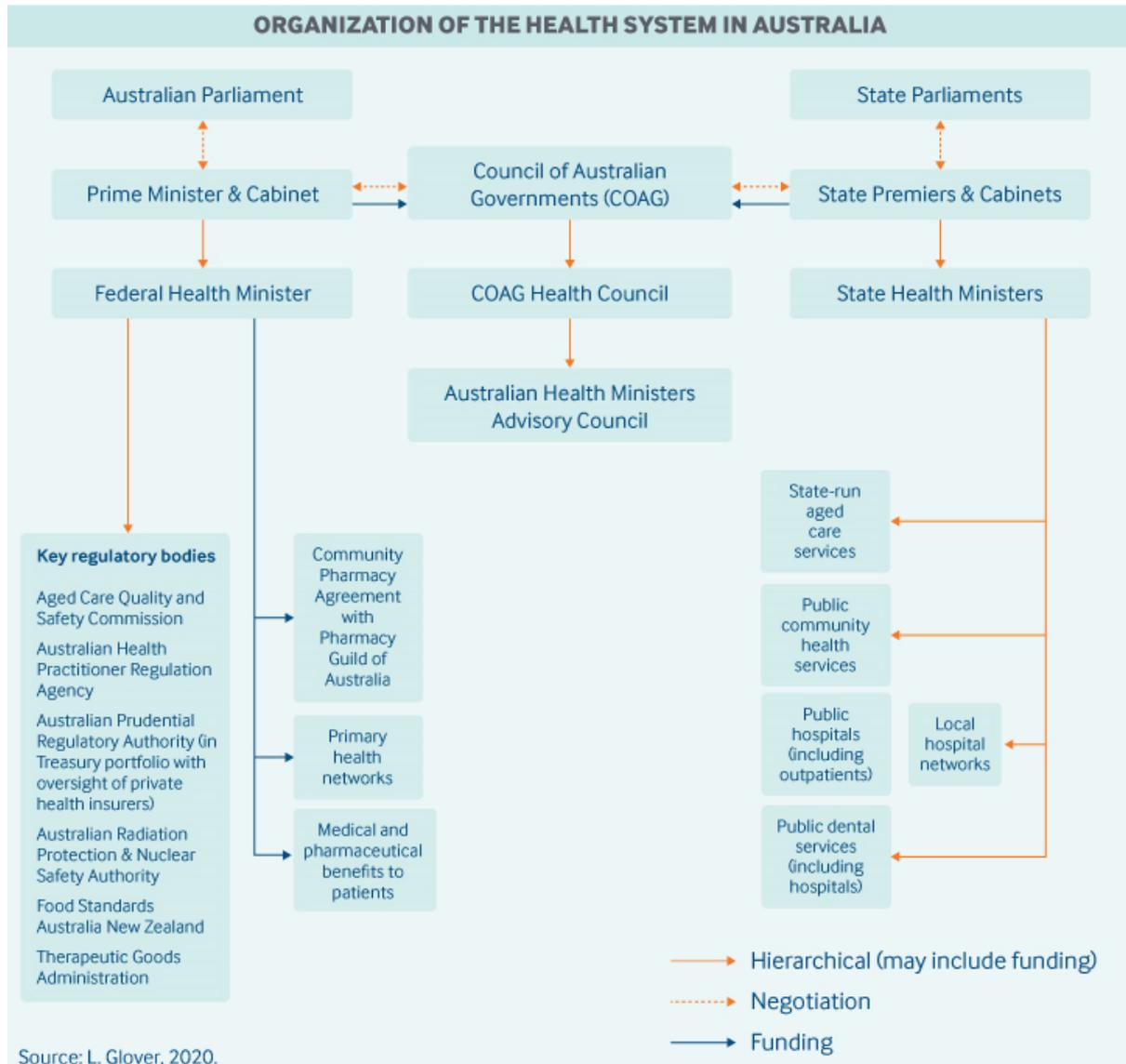


Table 1 Essential Public Health Functions and how they are delivered in Australia

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	In Australia, the National Cabinet (which is the Australian intergovernmental decision-making forum) is advised and supported by the Australian Health Protection Principal Committee (AHPPC). The AHPPC comprises Chief Health Officers from all states and territories in Australia and is chaired by the Australian Chief Medical Officer. The committee works with states and territories to develop and adopt national health protection policies, guidelines, standards and to align plans. The Public Health Laboratory Network (PHLN) is a subcommittee of the AHPPC; this is a collaborative group of laboratories with expertise and services in Public Health microbiology in Australia and New Zealand. The PHLN was established as part of the National Communicable Diseases Surveillance Strategy to complement the Communicable Diseases Network Australia (CDNA). The CDNA provides national Public Health co-ordination and leadership, and supports best practice for the prevention and control of communicable diseases. The CDNA advises the National Health Emergency Management Subcommittee (NHEMS) on how to include a CDNA component in its development of forward plans for AHPPC engagement in national health sector exercises and how to include appropriate public health/communicable disease practices in national emergence frameworks. The CDNA provides advice on research priorities to strengthen domestic disease surveillance and control. The AHPPC is advised by the Infection Control Expert Group (ICEG) which provides expert advice and information to support best practice related to infection prevention and control in community, hospital and other institutional settings.
Public health emergency management (EPHF 2)	As described under EPHF 1, the Australian Health Protection Principal Committee (AHPPC) is the key decision making committee for health emergencies. It comprises all state and territory Chief Health Officers and is chaired by the Australian Chief Medical Officer. The AHPPC has an ongoing role to advise the Australian Health Ministers' Advisory Council (AHMAC) on health protection matters and national priorities. AHPPC is also tasked with the role of mitigating emerging health threats related to infectious diseases, the environment as well as natural and human made disasters. The Committee also works with states and territories to develop and adopt national health protection policies, guidelines, standards and alignment of plans.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	In Australia, the federal government provides funding and indirect support for inpatient and outpatient care and is responsible for regulating private health insurance, pharmaceuticals, and therapeutic goods; however, it has a limited role in direct service delivery. The Administrative Arrangements Order sets out the laws that ministers are responsible for administering. Regulation activities can include accreditation of individuals and organisations, monitoring, reviews, investigations and complaints. The largest regulator is the Therapeutic Goods Administration, it is responsible for regulating prescription medicines, vaccines, sunscreens, vitamins and minerals, medical devices, blood and blood products. The Aged Care Quality and Safety Commissioner regulates the quality of care or services

	<p>being delivered to people receiving aged care services. Compliance safeguards include regular audits and reviews, education activities, investigations and risk monitoring. These safeguards ensure health and aged care professionals meet their responsibilities and that public funds are protected.</p> <p>The Australian Department of Health policies inform long-standing and emerging health priorities including:</p> <ul style="list-style-type: none"> ▪ funding Australia’s health systems, such as Medicare and the Pharmaceutical Benefits Scheme (PBS) ▪ public health programs, such as cancer screening, immunisation, and preventing chronic disease ▪ primary healthcare services and mental health services ▪ shaping, distributing and managing the health and aged care workforce ▪ providing health services for different groups of people, including Aboriginal and Torres Strait Islander people ▪ promoting best practice healthcare across a broad range of needs ▪ ensuring therapeutic goods and medical devices are safe and effective working with stakeholders such as health professional and consumer groups to improve the health system ▪ funding, regulating and overseeing activities ▪ the Private Health Insurance Ombudsman protects the interests of private health insurance consumers.
<p>Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)</p>	<p>In Australia, before the COVID-19 pandemic, intergovernmental collaboration and decision-making occurred through the Council of Australian Governments (COAG), with representation from the prime minister and the first ministers of each state. The COAG focused on the highest-priority issues, such as major funding discussions and the interchange of roles and responsibilities among governments. In May 2020, the COAG was dissolved and replaced by the National Cabinet; their main responsibility was endorsement and coordination of national actions in Australia in response to the COVID-19 pandemic. The Health Chief Executives Forum (HCEF) is an intergovernmental forum for joint decision-making and strategic policy discussions that helps to efficiently deliver health services in Australia. It consists of the health department chief executive officer from each state and territory and the Australian Government. The HCEF supports the Health Ministers' Meeting (HMM) to deliver national work priorities and its governance and processes align with the HMM and National Cabinet. The HCEF established a Reform Implementation Group to lead implementation of the National Health Reform Agreement (NHRA). This is an agreement between the Australian Government and all state and territory governments. The NHRA coordinates health reform using the key mechanisms of transparency, governance and financing of Australia’s public hospital system. The states and territories are system managers of public hospitals and are responsible for determining the mix of the services and functions delivered in their jurisdiction, and system-wide public hospital service planning and performance.</p>

<p>Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)</p>	<p>The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. ARPANSA protects the Australian people and the environment from the harmful effects of radiation through understanding risks, best practice regulation, research, policy, services, partnerships and engaging with the community. The Department of Agriculture, Water and the Environment work to protect Australia's natural resources and help develop strong agricultural industries. The Department works with other government departments to ensure land, water and heritage are well-managed, protected and productive. The Department aims to enhance Australia's agriculture, environment, heritage and water resources through regulation and partnership. The Biosecurity Act 2015 explains how to manage biosecurity threats to plant, animal and human health in Australia and its external territories. Many biosecurity management functions are administered by the Australia Government, but State and Territory governments, industry and the community also have a role to play. The Australian Industrial Chemicals Introduction Scheme (AICIS) assesses the risks of industrial chemicals and provides information to promote their safe use. The Food Standards Australia New Zealand (FSANZ) develops standards that regulate the use of ingredients, processing aids, colourings, additives, vitamins and minerals, composition of some foods and foods developed by new technologies.</p>
<p>Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)</p>	<p>The Communicable Diseases Network Australia (CDNA) provides national Public Health co-ordination and leadership, and supports the prevention and control of communicable diseases. CDNA is a sub-committee of the Australian Health Protection Principal Committee (AHPPC). CDNA provides advice on research priorities to strengthen domestic disease surveillance and control. State, territory and local government responsibilities include delivering preventive services such as breast cancer screening and immunisation programmes. Primary health networks (PHNs) are organisations that coordinate health services in local areas. There are 31 PHNs across Australia. PHNs support community health centres, hospitals, GPs, nurses, specialists and other health professionals to help improve patient care and provide extra services that are needed, including health promotion programmes.</p>
<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Australian Institute of Health and Welfare has a mandate to produce biennial reports on the current health issues in Australia, such issues include determinants of health and the health of Indigenous Australians. In Australia, primary health services are delivered in settings such as general practices, community health centres and allied health practices. General practitioners (GPs), nurses, nurse practitioners, allied health professionals, midwives, pharmacists, dentists, and Aboriginal health practitioners are all considered primary healthcare professionals. On 1 July 2015, the Australian Government established Primary Health Networks (PHNs) as part of its reform of the primary healthcare system. Priorities of the reform programme included complex and chronic disease management;</p>

	better recognition and treatment of mental health conditions; and greater connection between primary healthcare and local hospitals (private and public).
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	In Australia, the Australian Department of Health consults and engages with all stakeholders, including health and aged care professional and industry groups, other Commonwealth, state and territory government departments and agencies, health professionals, the general public, non-government organisations, governments and health and ageing organisations in other countries and the National Cabinet. The Australian Department of Health Stakeholder Engagement Framework sets out the principles and standards that apply for consulting and engaging with these stakeholders.
Ensuring adequate quantity and quality of public health workforce (EPHF 9)	In Australia, the Health Chief Executives Forum (HCEF) is an intergovernmental forum for joint decision-making and strategic policy discussions that helps to efficiently deliver health services in Australia. It is made up of the health department chief executive officer from each state and territory and the Australian Government. The HCEF supports the Health Ministers' Meeting (HMM) to deliver national work priorities and its governance and processes align with the HMM and National Cabinet. The HCEF has established specialist working groups to advise on and help deliver specific areas of the work program for these priorities within the Health portfolio, including health practitioner workforce. The Australian Government established the Office of the National Rural Health Commissioner (ONRHC) in 2017 to support reforms of rural health in Australia. The ONRHC's areas of reform include health workforce and training. The Australasian Faculty of Public Health Medicine (AFPHEM) is a Faculty of the Royal Australasian College of Physicians (RACP). It provides training and continuing education for Public Health Medicine fellows and trainees.
Assuring quality of and access to health services (EPHF 10)	The Australian Commission on Safety and Quality in Health Care leads and coordinates national improvements in the safety and quality of healthcare. The Commission is a corporate Commonwealth entity and part of the Health portfolio of the Australian Government. The Office of the National Rural Health Commissioner (ONRHC) aims to bring about system-wide improvements in health outcomes for regional, rural and remote communities of Australia. This includes promotion of, and innovation in, rural medicine, improved rural health policies, strengthened rural training and improved rural health workforce retention. The Independent Hospital Pricing Authority (IHPA) aims to ensure all Australians to have access to a sustainable, locally controlled health system that appropriately funds public hospital services.
Advancing public health research (EPHF 11)	In Australia, research is funded, coordinated and delivered by different areas of the department and portfolio agencies, including the Medical Research Future Fund, National Health and Medical Research Council (NHMRC) and the Australian Institute of Health and Welfare. Research is also undertaken with other government departments,

	<p>individuals and professional and academic organisations. NHMRC is Australia's leading body for supporting health and medical research. NHMRC advise the Australian Government and facilitate networking in the research community by bringing academics and industry together. Public Health is the cornerstone of NHMRC activities. NHMRC aim to provide policy makers, healthcare professionals and communities with the information they need to prevent disease, prolong life and promote health.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The Therapeutic Goods Administration (TGA) is Australia's regulatory authority for therapeutic goods. The TGA is part of the Australian Government Department of Health, and is responsible for regulating therapeutic goods including prescription medicines, vaccines, sunscreens, vitamins and minerals, medical devices, blood and blood products. Almost any product for which therapeutic claims are made must be entered in the Australian Register of Therapeutic Goods (ARTG) before it can be supplied in Australia. The TGA carry out a range of assessment and monitoring activities to ensure therapeutic goods available in Australia are of an acceptable standard with the aim of ensuring that the Australian community has access, within a reasonable time, to therapeutic advances.</p>

Canada

The 13 provinces and territories of Canada have different [Public Health systems](#). Budgets are administered by provincial governments, who also provide technical aid and planning support. In addition, they are in charge of coordinating regional health authorities and municipal or local Public Health units around the country. There are about 80 of these authorities and units, which provide direct Public Health services to local residents.

National

The [Canada Health Act](#) is the federal legislation that provides the foundation for the Canadian healthcare system. Health Canada administers the Act, the federal department with primary responsibility for maintaining and improving the health of Canadians. However, the *Canada Health Act* does not provide Health Canada with direct authority to regulate the health insurance plans that give effect to the publicly funded health insurance system that is in place across the country. Instead, the Act establishes certain values and principles and sets out criteria and conditions that each publicly funded health insurance plan is required to meet to qualify for federal funding through the Canada Health Transfer. As federal funding is critical to the ability to fund “medically necessary” hospital and physician services, each provincial and territorial health insurance plan must satisfy the requirements of public administration, universality, portability, comprehensiveness, and accessibility.

The Minister of Health is responsible for maintaining and improving the health of Canadians. This is supported by the [Health Portfolio](#) which comprises:

- Health Canada
- the Public Health Agency of Canada (PHAC)
- the Canadian Institutes of Health Research
- the Patented Medicine Prices Review Board
- the Canadian Food Inspection Agency.

[Health Canada](#) is the Federal department responsible for helping Canadians maintain and improve their health. While the provinces and territories are responsible for delivering healthcare to most Canadians, the federal government has a number of key roles and responsibilities in areas that affect health and healthcare. This includes working with partners in the Health Portfolio, other federal departments and

agencies, non-governmental organisations, other countries, Indigenous partners and the private sector to help achieve their goals for maintaining and improving health. [Health Canada](#) is also responsible for ensuring adequate quantity and quality of public health workforce.

In accordance with the Health Canada Act, Health Canada:

- protects Canadians from unsafe food, health and consumer products
- promotes innovation in healthcare
- informs Canadians to make healthy choices.

The [Department](#) is committed to upholding the *Canada Health Act* and protecting the publicly funded healthcare system, which helps to ensure Canadians have access to quality, universal healthcare based strictly on their medical needs, not their ability and willingness to pay. They also promote innovation and the use of best practices across Canada.

The [Public Health Agency of Canada](#) (PHAC) is part of the federal health portfolio and, as such, provides a national leadership role for public health within the broader Health Portfolio. The PHAC has federal responsibility for the prevention and control of communicable and non-communicable diseases.

The PHAC provides federal funding for six [National Collaborating Centres for Public Health](#) (NCCPHs). These centres are located across Canada and serve as knowledge hubs for scientific research and other knowledge to inform public health action. They synthesise, translate and share knowledge, making it useful and accessible to practitioners, program managers and policy-makers and also promote the use of knowledge and evidence by public health practitioners and policy-makers across Canada. The NCCPHs stimulate research in priority areas, identify knowledge gaps, and link public health researchers with practitioners to build strong practice-based networks across Canada. The Centres collaborate with one another; each Centre focuses on a specific area of public health and has a national mandate to collaborate with a variety of partners on that topic. The [six NCCPHS](#) are as follows:

- [Aboriginal Health](#), Prince George, British Columbia
- [Determinants of Health](#), Antigonish, Nova Scotia
- [Environmental Health](#), Vancouver, British Columbia
- [Infectious Diseases](#), Winnipeg, Manitoba
- [Healthy Public Policy](#), Montreal Quebec
- [Methods and Tools](#), Hamilton, Ontario.

The PHAC has also published reports discussing important health inequalities in Canada. Such as the [Social determinants and inequities in health for Black Canadians: A Snapshot](#) report which provides national data on inequalities in health outcomes. [Public Health Agency of Canada and Health Canada](#) are jointly responsible for ensuring adequate quantity and quality of public health workforce.

The [Canadian Institutes of Health Research](#) (CIHR) is the agency responsible for funding health research in Canada. [CIHR](#) collaborates with partners and researchers to support the discoveries and innovations that improve health and strengthen the healthcare system. It is an independent agency and is accountable to Parliament through the Minister of Health. CIHR provides leadership and support to health researchers and trainees across Canada and comprises [13 Institutes](#). [CIHR's Institutes](#) are networks of researchers brought together to focus on specific health problems. The institutes are led by a [Scientific Director](#), and are supported through the advice of [Institute Advisory Boards](#). The 13 institutes are as follows

1. [Aging](#)
2. [Cancer Research](#)
3. [Circulatory and Respiratory Health](#)
4. [Gender and Health](#)
5. [Genetics](#)
6. [Health Services and Policy Research](#)
7. [Human Development, Child and Youth Health](#)
8. [Indigenous Peoples' Health](#)
9. [Infection and Immunity](#)
10. [Musculoskeletal Health and Arthritis](#)
11. [Neurosciences, Mental Health and Addiction](#)
12. [Nutrition, Metabolism and Diabetes](#)
13. [Population and Public Health](#)

The [Patented Medicine Prices Review Board](#) (PMPRB) regulates the prices of patented medicines that are sold in Canada and produces reports on pharmaceutical trends. They ensure that Canadians have access to [patented medicines at non-excessive prices](#).

The [Canadian Food Inspection Agency](#) (CFIA) safeguards food, animals and plants to enhance the health and well-being of Canada's people, environment and economy. It is the body responsible for enforcing and administering federal statutes and regulations which regulate the quality and safety of food sold in Canada, while supporting a sustainable animal and plant resource base. They share many of their core responsibilities with other federal departments and agencies, with provincial, territorial and municipal authorities, private industry, and national/international stakeholders.

The [CFIA](#) works with its partners to: manage food, animal and plant risks, implement food safety measures; incidents and emergencies; and promote the development of food safety and disease control systems to maintain the safety of Canada's high-quality agriculture, agri-food, aquaculture and fishery products. The Agency's activities include: verifying the compliance of domestic and imported products; registering and inspecting establishments; testing food, animals, plants and their related products; approving the use of many agricultural inputs; and, research and development to support monitoring programs and food safety investigations.

[Health Standards Organisation](#) (HSO) and its affiliate organisation, Accreditation Canada (AC), along with the [Canadian Patient Safety Institute](#) (CPSI), share a common interest in accelerating the quality and safety of healthcare and services. [HSO](#) develops evidence-based standards, assessment programs and quality improvement solutions. [Accreditation Canada](#) (AC) delivers a wide range of high-impact assessment programs for health and social service organisations that are customised to local needs. Established by Health Canada in 2003, the Canadian Patient Safety Institute works with governments, health organisations, leaders, patients and healthcare providers to improve patient safety and quality.

[The Canadian Agency for Drugs and Technologies in Health](#) (CADTH) was created by Canada's federal, provincial, and territorial governments in 1989. It is an independent, not-for-profit organisation responsible for providing healthcare decision-makers with evidence to help make informed decisions about the optimal use of health technologies. Other functions of CADTH include:

- helping healthcare decision-makers keep pace with technological change
- reviewing and making recommendations on new and existing health technologies
- undertaking Health Technology Assessments (HTA)
- examining practices, processes, and protocols to provide a better understanding of the current landscape in healthcare.

Regional

Canada's 13 provincial/territorial jurisdictions, [public health systems](#) are organised differently. There are approximately 80 regional health authorities and municipal or local public health units across the country, depending on the provincial/territorial structure. These provide public health services delivered directly to local populations. Provincial governments are responsible for coordinating these authorities and units, administering budgets, providing technical assistance and supporting overall planning.

Local

In Canada, within the provincial and territorial jurisdictions, the provision of public health services lies primarily at the municipal or local level. Provincial and territorial governments provide support for local public health services with assistance in the planning, administration of budgets, and the provision of technical assistance. While public health is primarily a provincial/territorial priority, the federal government has the authority to legislate aspects of public health as set out in the Department of Health Act and the [Public Health Agency of Canada Act](#).

Table 2 Essential Public Health Functions and how they are delivered in Canada

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	Health Canada and the Public Health Agency of Canada are two agencies with specific responsibility for surveillance. For Health Canada, this includes the assessment of health risks and the selection and implementation of effective risk management strategies. Public Health Agency Canada provides public health practitioners in Canada with data, analysis, web tools and technical advice that support policies, programs and public health interventions for chronic disease prevention. It also conducts activities related to the surveillance of specific diseases and threats to public health. This includes setting up systems to analyse and report data on relevant issues and emerging trends.
Public health emergency management (EPHF 2)	The Public Health Agency of Canada (PHAC) is part of the federal health portfolio and is responsible for Public Health, emergency preparedness and response. The PHAC provides a national leadership role for Public Health within the broader Health Portfolio that includes Health Canada, the Canadian Food Inspection Agency, the Canadian Institutes of Health Research, and the Patented Medicine Prices Review Board.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	Health Canada administers legislation and develops and enforces regulations under this legislation that have a direct impact on the health and safety of Canadians. The Department consults with the Canadian public, industry, non-governmental organisations and other interested parties in the development of these laws. Health Canada also prepares guidelines in order to help interpret and clarify legislation and regulations. It is responsible for the regulatory regime governing the safety of products including food, pharmaceuticals, medical devices, natural health products, consumer products, chemicals, radiation emitting devices, cosmetics and pesticides. It also regulates tobacco products and controlled substances, Public Health on aircraft, ships and other passenger conveyances. The Canada Health Act is the federal legislation that provides the foundation for the Canadian healthcare system. The Act is administered by Health Canada, the federal department with primary responsibility for maintaining and improving the health of Canadians.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	Public Health systems are organised differently across Canada's territorial and provincial jurisdictions. The Public Health Agency of Canada (PHAC) has a role in strengthening intergovernmental collaboration on Public Health and facilitating national approaches to Public Health policy and planning. The provincial governments are responsible for coordinating regional health authorities, administering budgets, providing technical assistance and supporting overall planning.

	<p>The following agencies are responsible for delivering all of the parts of EPHF 4 across the different provincial/territorial jurisdictions in Canada.</p> <ul style="list-style-type: none"> ▪ Newfoundland and Labrador Department of Health and Community Services ▪ Prince Edward Island Department of Health and Wellness ▪ Nova Scotia Department of Health and Wellness ▪ New Brunswick Department of Health ▪ Quebec Ministry of Health and Social Services ▪ Ontario Ministry of Health and Long-Term Care ▪ Manitoba Health, Healthy Living and Seniors ▪ Saskatchewan Health ▪ Alberta Health ▪ British Columbia Ministry of Health ▪ Yukon Health and Social Services ▪ Northwest Territories Department of Health and Social Services ▪ Nunavut Department of Health.
<p>Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)</p>	<p>Health Canada helps manage the health risks posed by environmental factors such as air, water, radiation and contaminants. The Canadian Food Inspection Agency is the body responsible for enforcing and administering federal statutes and regulations which regulate the quality and safety of food sold in Canada.</p>
<p>Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)</p>	<p>The Public Health Agency of Canada (PHAC) has federal responsibility for the prevention and control of communicable and non-communicable diseases. The PHAC WHO Collaborating Centre on chronic non-communicable disease policy is a designated centre of excellence. This collaborating centre is part of an international collaborative network to exchange information and develop technical cooperation with other institutions. This collaborating centre is dedicated to chronic disease policy and is recognised as a global authority in chronic disease policy development, implementation and evaluation. The National Collaborating Centre for Infectious Diseases (NCCID) is funded by the PHAC to be the national coordinator for infectious disease public health research and facilitates the use of evidence and emerging research on infectious diseases to inform public health programs and policy throughout the Canadian provinces and territories.</p>

<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Public Health Agency of Canada (PHAC) is responsible for health promotion. It promotes good physical and mental health, and provides information to support informed decision making. The PHAC established the Canadian Council on Social Determinants of Health to work with leaders from different sectors on the social determinants of health and improve health equity. Under the Rio Political Declaration on Social Determinants of Health in 2012, Canada and other member states pledged to take steps to improve health equity. They have documented examples of actions across various reports such as, the Key Health Inequalities in Canada: A National Portrait report discusses important health inequalities in Canada, and Social determinants and inequities in health for Black Canadians: A Snapshot. The Health Inequalities Data Tool contains a large set of data on health inequalities in Canada by subgroups of the Canadian population, including by social, economic and demographic factors. This is delivered through collaboration of the PHAC, the Pan-Canadian Public Health Network, Statistics Canada, and the Canadian Institute for Health Information (CIHI). The National Collaborating Centre for Determinants of Health (NCCDH) is one of six NCCs funded by the PHAC. The focus of the NCCDH is on the social and economic factors that influence the health of Canadians.</p>
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>The Partnerships and Citizen Engagement (PCE) branch of the Canadian Institutes of Health Research (CIHR) is responsible for a wide variety of tasks and projects which guide, facilitate, and manage partnerships and engagement activities.</p>
<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>Health Canada and the Public Health Agency of Canada are responsible for ensuring adequate quantity and quality of Public Health workforce. An evaluation of this work was conducted in accordance with the Five-Year Evaluation Plan 2015-2016 to 2019-2020.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>Many provinces have agencies responsible for producing healthcare system reports and for monitoring system performance. In addition, the Canadian Institute for Health Information produces regular public reports on health system performance, including indicators of hospital and long-term care facility performance. Many provinces have agencies responsible for producing healthcare system reports and for monitoring system performance.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The Public Health Agency of Canada (PHAC) funds six National Collaborating Centres for Public Health (NCCPH) to promote the use of knowledge and evidence by Public Health practitioners and policy-makers across Canada. The Canadian Food Inspection Agency carries out research and development to support monitoring programs and food safety investigations.</p>

<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>Health Canada the federal regulator for drugs and health products, plays an active role in ensuring that there is access to safe and effective drugs and health products. It strives to maintain a balance between the potential health benefits and risks posed by all drugs and health products. Working together with other levels of government, healthcare professionals, patient and consumer interest groups, research communities and manufacturers, they endeavour to minimise the health risk factors and maximise the safety provided by the regulatory system for these products. The Patented Medicines Price Review Board contributes to a modern and sustainable health system by ensuring that Canadians have access to patented medicines at affordable prices. The Canadian Agency for Drugs and Technologies in Health is an independent, not-for-profit organisation responsible for providing healthcare decision-makers with objective evidence to help make informed decisions about the optimal use of health technologies; this includes drugs, diagnostic tests and medical, dental and surgical devices and procedures.</p>
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Denmark

The Danish healthcare system has a universal coverage system financed via taxes, which provides free and equal access to healthcare for all citizens. The health system operates across three political and administrative levels: the state, the regions and the municipalities (national, regional and local levels). Regional and local governments deliver healthcare while planning and regulation are overseen nationally. The five Danish regions are responsible for hospitals and local general practitioners (GPs), while the 98 municipalities are responsible for out-patient care services such as, health promotion and prevention, rehabilitation and elderly care.

GPs are the gateway for citizens for all of healthcare including preventive health services, and treatment and coordination of services from various health professionals. Following consultation, the GP can refer the patient to a hospital, for treatment by a specialist, or to preventive services such as weight loss or smoking cessation. The GP is notified electronically about the citizen's journey through the treatment system, including hospitalisation and interactions with municipal offerings.

National

The Ministry of Health is responsible for defining the overall framework for the national healthcare system and health-related social services for the elderly. This includes legislation on formulating national health policies, the provision of healthcare, patients' rights, healthcare professionals, hospitals and pharmacies, medicines, vaccinations, maternity care and child healthcare. The legislation covers the tasks of the regions and municipalities within the field of health. There are nine agencies under the Ministry:

- [The Danish Health Authority](#) (also referred to as The National Board of Health) – Responsible for health promotion, screening, guidelines, childhood vaccination, preparedness and the control and management of infectious disease. Additionally, it has overall responsibility for the management of veterinary preparedness in a [One Health perspective](#) in the Danish Veterinary Consortium, which also includes the University of Copenhagen.
- [The Danish Medicines Agency](#) – Regulation of human and veterinary medicines and medical devices

Health Information and Quality Authority

- [Danish Agency for Patient Safety](#) – Responsible for patient safety across the health system
- [The Board of Patient Complaints](#) – Responsible for issues that arise from patients accessing services
- [The Danish Health Data Authority](#) – Creates coherent data on population health, manages national health data registries and develops digital solutions for the provision of health.
- [Statens Serum Institut](#) - a state-owned independent research institute that conducts public health research on infectious diseases, congenital disorders and biological threats
- [The Council of Ethics](#) - Advises on new bio- and genetic technologies that affect human life, nature, environment and food
- [National Committee on Health Research Ethics](#) – Oversees health research is conducted ethically and participants are protected
- [National Genome Centre](#) - Developing and operating Denmark's national infrastructure for personalised medicine.

As per the Danish Health Act 2005 (Sundhedsloven), the above agencies are tasked with the intelligence-oriented services and the enabler functions of regulation, planning, and supervision. They have high-level responsibility for the core public health functions, delegating many of the responsibilities to the municipalities, such as financing, and delivery of public health and health promotion.

The Ministry of Environment and Food includes the [Danish Veterinary and Food Administration](#) (DVFA) which is part of the Ministry of Food, Agriculture and Fisheries. The DVFA is responsible for food safety and health from farm to fork. In Denmark, the administration at the state level is managed by the Ministry of Environment and Food. At the regional and local levels, much of the administrative responsibility is delegated to the municipalities. The Ministry consists of five agencies and local centres across the country.

The [National Institute of Public Health](#) (NIPH) carries out research into the factors that most impact upon the population's health, morbidity and mortality. As a former sector research institute, the NIPH retains public sector tasks for the Danish Ministry of Health, which are governed by a framework agreement with annual goals and performance requirements. The NIPH has an advisory board that consists of research representatives and key national actors in the field of public health.

[Danish Society for Patient Safety](#) (PS!) is an independent organisation that serves as a single point of entry for all patients who wish to complain about healthcare

professionals and/or treatment provided in the healthcare system. It supervises the activities carried out by healthcare professionals within the healthcare system through inspections and is responsible for making sure that knowledge gained from patient complaints and compensation claims is used preventively. The PSI provides advice to legislators and stakeholders, arranges training programs and conferences, suggests standards for safe operation, creates consensus and initiates projects.

[The Danish Council on Ethics](#) is an independent and autonomous council whose overall responsibility is health research and whose funding lies with the Danish Ministry of Higher Education and Science.

Regional

The [Danish Health Act 2005](#) (Sundhedsloven) delegated a range of public health-related responsibilities to municipalities within regions, including the responsibility for delivering public health services. There are five regions, with each region controlling the provision of its primary care sector through contracts with general physicians and specialists. Within each region, there is a Regional Council which consists of 41 elected representatives and which constitutes the highest-level decision-making body in the region. Each Regional Council has a number of ad hoc committees covering the areas (including health) for which the regions are responsible. The regional politicians of the committees provide recommendations for the subject areas being addressed by their committees to the Regional Councils. These are [said](#) to be informed by dialogue with constituents via sizeable events such as Citizens' Summits, hearings and debate meetings and through both new as well as more traditional media.

A large population survey (2022: n= 324,000) is conducted every four years to inform the [health profile](#) of Denmark by the five regions, the National Board of Health and the National Institute of Public Health. The health profile is used to inform new health agreements between regions and municipalities, and to inform how preventive health programmes are targeted at a national, regional and local level. The scope of the survey includes the following issues; obesity, mental health, smoking, alcohol, mental health, health and wellbeing and morbidity.

In addition, a conference is held by the National Board of Health and Danish Regions every two years, and is aimed at decision-makers, planners and health professionals. Citizens can attend the [conference](#) via streaming with a limited number of places for participants, both physically and online. The [National Board of Health](#) prepares national clinical guidelines and national clinical recommendations.

The [Regions' Clinical Quality Development Program](#) (RKKP) designs new clinical registries and facilitates re-use of available data in hospitals and GP-surgeries to lighten the data collection burden, and optimise the use of available data sources. The aim is to improve the population's health and quality of life through the computer-aided development of the healthcare system. The formation of a registry can be initiated either top-down – RKKP asking clinicians to collect data on a given topic – or bottom-up with clinicians asking RKKP to manage a database on a topic of their interest. The Clinical Registries in Denmark are founded on a national initiative, mandated by law and regulated by the national government, but financed and owned by regional governments. Each registry has to pass appraisal by the National Health Authority every three years, where it is assessed as to whether it fulfils national criteria for functionality, data safety and methodology.

[Danish Regions](#), the independent umbrella organisation representing the five regional authorities, is also responsible for negotiating the annual financial framework for the regions with the national government. At the end of 2020, the Danish Regions organisation, in agreement with a large selection of health providers, lobbied the government for a [new public health law](#), which they say would be a framework to direct more resources to preventive healthcare. This would improve equality of access to services and provide more responsibility in decision making to the regions and municipalities. In addition, the Danish Regions' organisation argue that public health needs to be at the centre of all decision-making - employment, education, culture, housing, transport and social affairs, or other policy areas that have an impact on health, such as tobacco, food and alcohol policy.

The [Danish Health Technology Council](#) carries out evaluations as well as more comprehensive analyses for Danish regional governments, along with recommendations concerning the use of specific health technologies. The Council was established by the Danish Regions in the beginning of 2021.

The [Danish Medicines Council](#) is an independent council that evaluates the efficacy of pharmaceutical products and medical devices in comparison with costs. The Danish Regions established a [Treatment Council](#) at the beginning of 2021. The purpose of the Treatment Council is to target the health service's resources to the technologies and initiatives that provide the most health for the money. It must contribute to higher quality and to alleviate the expenditure pressure on the healthcare system.

There are 12 regional health research [ethics](#) committees under the National Committee on Health Research Ethics.

Local

The 98 municipalities are local administrative bodies governed by municipal councils. The municipalities are encouraged by the government to initiate efficient disease prevention and health promotion policies and are responsible for a number of health and social services. Local health and elderly care services include disease prevention and health promotion, rehabilitation outside hospital, home nursing, school health services, paediatric dental treatment, paediatric nursing, physiotherapy, alcohol and drug abuse treatment, home care services, nursing homes, and other services for elderly people. In addition, municipalities co-finance regional rehabilitation services and training facilities.

In general, the municipality organises and contributes to service delivery of the core Public Health functions, namely health protection, health promotion, and disease prevention. At the local level, much of the administrative responsibility for the Danish Veterinary and Food Administration (DVFA) is delegated to the municipalities.

[Local Government Denmark](#) (KL) is the association and interest organisation of the 98 Danish municipalities. It supports municipalities with consultancy services and information, supporting all members in delivering local service and developing local communities. It includes a Health and Elderly Committee.

Figure 2. Organisation of the Health System in Denmark (Image from [Commonwealth Fund](#)).

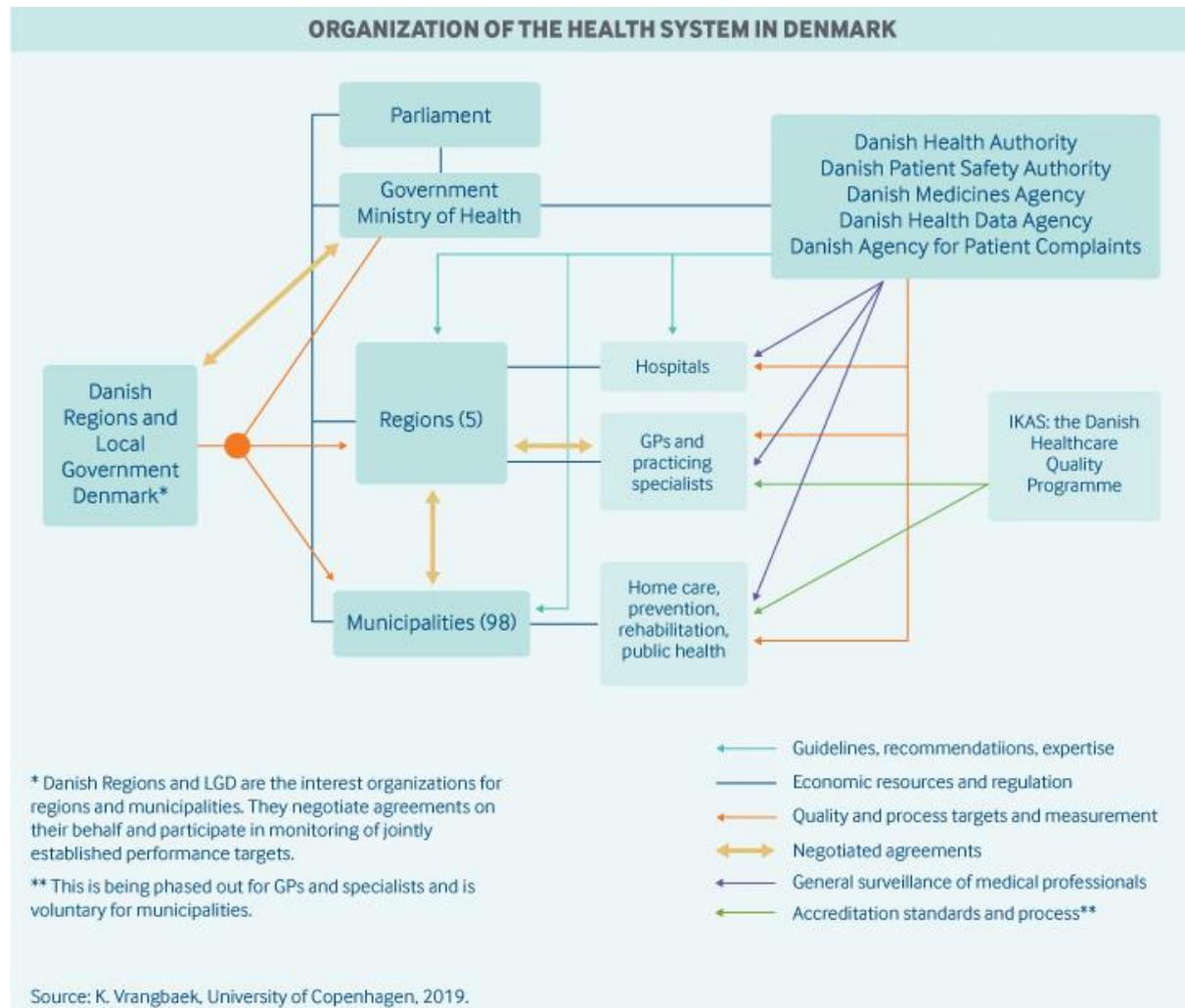


Table 3 Essential Public Health Functions and how they are delivered in Denmark

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Statens Serum Institut (SSI) is an institute under the Ministry of Health in Denmark responsible for surveillance, prevention and interventions in relation to infectious diseases and biological threats. It performs emergency support diagnostics in the biomedical field and is responsible for the National Biobank screening of all newborn babies for congenital diseases and conducting research on risk factors and prognostic factors of diseases. The Centre for Vaccine Research and the Biobank, Biomarkers and Test Centre sits within the SSI. The Danish Veterinary Consortium is a collaboration between the SSI and the Department of Veterinary and Animal Sciences. It works to strengthen both human and animal health through a One Health perspective. The SSI undertakes research and monitoring tasks within the human and veterinary area. The Data Ethics Council advises public and private sectors on all ethical matters related to data including health data. The Danish Clinical Registries designs new clinical registries, and facilitates re-use of available data in hospitals and general practice surgeries.
Public health emergency management (EPHF 2)	The Danish Health Authority has national responsibility for effective health emergency management. The SSI is an institute under the Ministry of Health, tasked with a number of key emergency preparedness tasks, including prevention and control of infections and biological threats. The Epidemics Committee undertakes parliamentary scrutiny of Ministers' application of the provisions in the Epidemics Act. In this respect, the Committee differs from the other standing committees of the Danish Parliament. Regional and local authorities (together with Chief Medical officers) are responsible for coordinating local policies, and recommendations with the state agencies.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	The Danish Health Authority has a national responsibility for health issues and works to ensure good Public Health and uniform healthcare services of high professional quality across Denmark. It is responsible for advising and supporting the general population, the Ministry of Health, the regions and the municipalities on health issues, and for ensuring the best possible quality of healthcare and elderly care across the country. The Danish Data Protection Agency oversees that the legal requirements concerning healthcare data are satisfied before data are used in research projects or clinical trials. The Danish Society for Patient Safety (PS!) supervises the activities carried out by healthcare professionals within the healthcare system through inspections and is responsible for making sure that knowledge gained from patient complaints and compensation claims is used preventively.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for	The Danish Health Authority defines and allocates specialist functions among hospitals in close cooperation with medical associations and the regions. The purpose of this centralised planning process is to improve and ensure quality and continuity of care, while at the same time ensuring efficient use of resources. The Authority monitors the use of the extraordinary funds in the area of health and elderly care. Danish Regions, the independent umbrella organisation which represents the five regional authorities, is responsible for negotiating the annual financial framework for the regions with the national government.

population health (EPHF 4)	
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Danish Health Authority works closely with the municipalities, regions, police and the Danish Emergency Management Agency (DEMA) on contingency planning and have a permanent seat on the National Operational Staff (NOST) and the International Operational Staff (IOS). Within their own areas, individual ministers must plan the retention and continuation of functions in society in the event of large accidents and disasters, including drawing up emergency plans. The Minister of Defence, delegated to the DEMA, coordinates the planning, advises the authorities, and lays down guidelines for the preparation of the plans by central government authorities, regions, municipalities and municipal fire and rescue companies. The plans must be revised at least once every four years and submitted to DEMA for review. The SSI, Danish Veterinary and Food Administration (DVFA) and local municipalities also work together with respect to infectious hazards, detection of outbreaks and outbreak investigation.
Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	The National Board of Health monitors and evaluates disease and assists and advises the Ministry of Health on policy for health prevention. The Danish Health Authority is responsible for advising and supporting the Ministry of Health, the regions and the municipalities. It disseminates knowledge to the population and to public authorities on health prevention knowledge and programmes and interventions to support healthy choices. This also includes rehabilitation, prevention and support for elderly people focusing on ensuring coherent efforts across the health and social sectors. The SSI is responsible for surveillance and detection of communicable diseases while the local municipalities are responsible for detection and investigation of outbreaks at the local level. Local municipalities deliver a range of services aimed at disease prevention which are selected and then targeted according to their local population.
Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)	The National Board of Health is responsible for addressing social inequality and the population's health and illness. This is supported by research from the National Institute of Public Health. The Danish Health Authority disseminates knowledge of how lifestyle choices affect health.
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	The National Board of Health is in charge of securing the patients' dignity, integrity and right to self-determination. Every year, 250,000 patients are invited to participate in the National Survey of Patient Experience. The survey is conducted on behalf of the five regions and gives hospitals the opportunity to receive systematic feedback from their patients. Danish Patients is an independent organisation not affiliated to the Ministry or government. It is an umbrella organisation for 102 patient and relatives associations in Denmark. All member organisations have a seat on the Board of Representatives, which is the highest authority of Danish Patients. It sets up working groups to deal with current and politically prioritised topics in the organisation, and has representatives on various national and regional steering groups, councils, boards and committees. These include the National

	Board of Health and the Ministry of Health, but also councils under the Danish Regions or in the Patient Compensation Association. The Knowledge Center for User Involvement in the Health Service (ViBIS) is part of the Danish Patients organisation and is the national centre for user involvement in the healthcare system. The centre collects and disseminates the latest knowledge in the field. Organised patient groups engage in policymaking at the national, regional, and municipal levels.
Ensuring adequate quantity and quality of public health workforce (EPHF 9)	The Danish Health Authority is responsible for the administration, content and quality of specialist educational programmes for doctors, dentists, nurses and other healthcare professionals.
Assuring quality of and access to health services (EPHF 10)	The Danish Health Authority formulates recommendations and issues guidance for each phase of the patient pathway – from the initial assessment of the patient through treatment and rehabilitation to ensure coherence and quality. The Danish Society for Patient Safety (PS!) is an independent organisation that serves as a single point of entry for all patients who wish to complain about healthcare professionals and or treatment provided in the healthcare system (public and private). It is funded by the Danish regions, Local Government Denmark, grants and to a lesser extent from membership organisations, individuals and companies. Patient organisations, healthcare staff, pharmacies, medical industries and local and regional governments are represented on the board. The PS! provides advice to legislators and stakeholders, arranges training programs and conferences, suggests standards for safe operation, creates consensus and initiates projects.
Advancing public health research (EPHF 11)	The Statens Serum Institut carries out research and development within its areas of activity. The overall responsibility for health research and funding lies with the Danish Ministry of Higher Education and Science. However, the Ministry of Health plays an important role in Danish health research and is responsible for legislation, for example, on clinical trials in human participants. In cooperation with other relevant authorities, universities and private organisations, the Ministry of Health participates actively in formulating strategic priorities for Danish health research. Furthermore, the Ministry of Health has resources to provide funding for smaller research projects in priority areas. National Committee on Health Research Ethics consists of a national committee and 12 regional committees. It coordinates activities in the regional committees and monitors the development of research within the health sector while also promoting the understanding of the ethical problems in relation to health services and biomedical research environments and considering recommendations to the Minister of Health. The National Institute of Public Health carries out research into the factors that most impact upon the population’s health, morbidity and mortality. The National Institute of Public Health has an advisory board that consists of research representatives and key national actors in the field of Public Health.
Ensuring equitable access to and rational use of essential	The Danish Medicines Agency is responsible for ensuring effective, safe and accessible medicines and medical devices for Denmark. The Danish Medicines Council is an independent council that evaluates the efficacy of pharmaceutical products and medical devices in comparison with costs. The Danish Regions established a Treatment Council at the beginning of 2021. The

medicines and other health technologies (EPHF 12)	purpose of the Treatment Council is to target the health service's resources to the technologies and initiatives that provide the most value for money. It must contribute to higher quality and to alleviate the expenditure pressure on the healthcare system. The Danish Health Technology Council ensures technologies and interventions are affordable and provided across both physical and mental health services. The Danish Health Technology Council carries out evaluations as well as more comprehensive analyses for Danish regional governments, along with recommendations concerning the use of specific health technologies.
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Finland

Finland consists of 19 provinces and 310 municipalities. The Finnish healthcare system is complex, with a highly decentralised administration and multiple funding sources. On a primary care level, services can be accessed through municipal health centres, occupational health services, or private services. Local authorities are responsible for providing care through municipal health centres, with service users paying a co-payment for accessing services. Additionally, primary care is organised through occupational health services, funded by the employers and employees, or people can choose to pay for services organised by the private sector.

Following the publication of the Strategic Programme (2015) for health and welfare, there was large-scale reform of health and social care services which included transferring responsibility for organising health services from municipal and local authorities to autonomous regions.

National

The [Ministry of Social Affairs and Health](#) is part of the [Finnish Government](#). The priorities for health promotion in the various arenas are laid out in a [Finnish Government Resolution](#), developed by the [Ministry of Social Affairs and Health](#). The Ministry is in charge of the planning, guidance and implementation of health and social policy. Its functions include:

- drafting harmonised principles together with the [National Institute for Health and Welfare](#)
- coordinating the observance of national harmonised principles of medical and dental care
- planning, guiding and supervising primary healthcare and specialised medical care.

The [National Institute for Health and Welfare](#) is an independent expert agency working under the [Ministry of Social Affairs and Health](#), it:

- monitors the welfare of the population
- conducts research and development work
- functions as a statistical authority
- engages in international co-operation.

[The National Supervisory Authority for Welfare and Health](#) (Valvira) is a centralised body operating under the Ministry of Social Affairs, it:

[Health Information and Quality Authority](#)

- guides the operations of the six Regional State Administrative Agencies, which act as the enforcement authority for regional health protection, in order to harmonise operations, procedures and decision practices
- is charged with the supervision of the social and healthcare, alcohol and environmental health sectors
- provides licensing for social and healthcare providers.

[The National Committee on Medical Research Ethics](#) (TUKIJA) operates in conjunction with Valvira.

The [Security Committee](#) monitors the implementation of the security strategy and develops cooperation together with the preparedness managers of the various ministries. This includes functions vital to society and threats such as a serious disturbance in public health and well-being. It consists of 20 members and four experts from different branches of government, officials and business. The security strategy was prepared jointly by the authorities, organisations and representatives of the business community. Citizens also had the opportunity to present their ideas and contribute to the strategy.

[The Finnish Institute of Health and Welfare](#) (THL) is an independent expert agency working under the Ministry of Social Affairs. Its focus areas include, reducing inequality and social exclusion, tackling the changing spectrum of disease, preparing for health threats and transitioning of the service system in response to any needs. Monitoring the development of diseases and risk factors in populations as well as developing preventive measures fall within this remit. The institute also monitors infectious diseases and maintains the national infectious diseases register. This register is used to prevent, monitor and control infectious diseases. THL also conducts research via the [Welfare State Research and Reform Unit](#) and [Health Economics and Equity in Health Care](#) team. The Welfare State Research and Reform Unit produces multidisciplinary research to support the development and coordination of the health and social service system and the social security system. It carries out research to identify the mechanisms underlying different social problems and searches for welfare policy solutions for them, and develops services and benefits to make them more effective. The Health Economics and Equity in Healthcare team undertake research in cost-effectiveness, effectiveness, productivity, and the equitable access to healthcare. This research feeds into evidence-based policy making and provides expert support to policy makers.

[The Advisory Board for Public Health](#) supports the implementation of measures to develop wellbeing, health and safety both with and outside the healthcare and social welfare sector. Currently, the [Promoting well-being, health and safety 2030](#) plan outlines measures aimed at reducing the inequality of wellbeing and health of Finns by 2030. The members of the Advisory Board come from various administrative

branches, representing different ministries, Regional State Administrative Agencies, towns and cities, organisations, universities and research and development institutes.

The tasks of the Advisory Board are to:

- monitor the development of wellbeing, health and safety and the implementation of health and social policy
- develop national health and social policy
- cooperate with different administrative branches, organisations and other parties in promoting wellbeing, health and safety.

The range of public health services in Finland is monitored, defined and assessed by the [Council for Choices in Health Care in Finland](#) (COHERE Finland). The Council defines the service choices at a general level. It does not assess the service needs of individual patients or make decisions on their treatment and examinations. The Council issues recommendations on including or excluding health technologies in the range of public health services. The Council's recommendations gradually complement and update the range of service choices. The Council for Choices in Health Care is chaired by the Permanent Secretary of the Ministry of Social Affairs and Health. The Council has a maximum of 15 members and includes expertise in medicine, odontology, nursing care, science of law, health economics and the Finnish healthcare and social security system. The Ministry of Social Affairs and Health, the National Institute for Health and Welfare, the National Supervisory Authority for Welfare and Health, the Social Insurance Institution and the Association of Finnish Local and Regional Authorities are represented in the Council.

[The Finnish Institute of Occupational Health](#) (TTL) support workplaces in preventing and eliminating health hazards and risks associated with work environments. [Finnish Institute of Occupational Health](#) conducts research and provides policy recommendations in the areas of laboratory analyses and testing, occupational medicine, quality of occupational healthcare functionality and wellbeing of the work community and risks and safety of the work environment.

[The Government Economic Research Institute](#) (VATT) and the [National Board of Education](#) (FNBE), develop forecasts on future workforce, including the health workforce and related educational needs.

[Radiation and Nuclear Safety Authority](#) (STUK) regulates the use of radiation used in healthcare, industry and research.

[Finnish Medicines Agency Fimea](#) is a central administrative agency operating under the Ministry of Social Affairs and Health and is responsible for regulating drugs including veterinary drug, medical devices, blood and tissue products and biobanks.

The Finnish Coordinating Center for Health Technology Assessment (FinCCHTA)

promotes evidence-based methods to increase the efficiency and cost effectiveness of health technologies.

Regional

Mainland Finland has six Regional State Administrative Agencies. The Åland Islands have the State Department of Åland as the comparable body.

The Regional State Administrative Agencies:

- provide direction and oversight of healthcare services
- grant licences to private healthcare service providers
- supervise healthcare professionals
- communicate on nationwide occupational safety and health
- addresses complaints on health and social care
- supervise environmental health issues including:
 - food safety
 - animal health and welfare
 - chemical control
- deal with issues of consumer safety
- have oversight of health protection
- ensure compliance with the Tobacco Act.

Local

Municipalities are responsible for organising primary healthcare for their residents. There are some 150 health centres providing primary healthcare. Primary healthcare is delivered in accordance with the national guidelines and includes:

- health promotion
- health counselling and health checks
- screening
- maternity and child health clinic services
- school-based healthcare
- student healthcare
- occupational healthcare
- mariner healthcare
- counselling for the elderly
- environmental healthcare
- medical certificates
- medical care
- home nursing

- oral healthcare
- mental health services
- substance abuse services
- medical rehabilitation.

Over the past decade, there has been a policy shift towards implementing more involvement opportunities in healthcare. This includes community councils who must be given the opportunity to influence the activities of the municipality's different areas of responsibility in matters of importance to health and well-being.

The [Local Government Act \(410/2015, 22§\)](#) requires that community councils, for example youth councils, older people's councils, disability councils, are given the opportunity to influence the planning, preparation, execution and monitoring of the activities of the municipality's different areas of responsibility in matters of importance to health and well-being.

Collective involvement opportunities for citizens and users exist in the form of municipal residents' forums. There is an [online consultation service](#) which provides citizens, organisations and authorities with a harmonised online service where requests for opinions can be published, opinions issued and opinions issued processed. The service, maintained by the Ministry of Justice, is intended to facilitate the consultation process, public involvement and access to information, as well as to increase the transparency and quality of the preparation and consultation process.

For example, citizens had the opportunity to present their ideas and contribute to the strategy on national preparedness: [Security Strategy for Society 2017](#).

Figure 3. Organisation of the administrative sector of the Ministry of Social Affairs and Health (Image from the [Ministry of Social Affairs and Health](#)).

Administrative branch of the Ministry of Social Affairs and Health

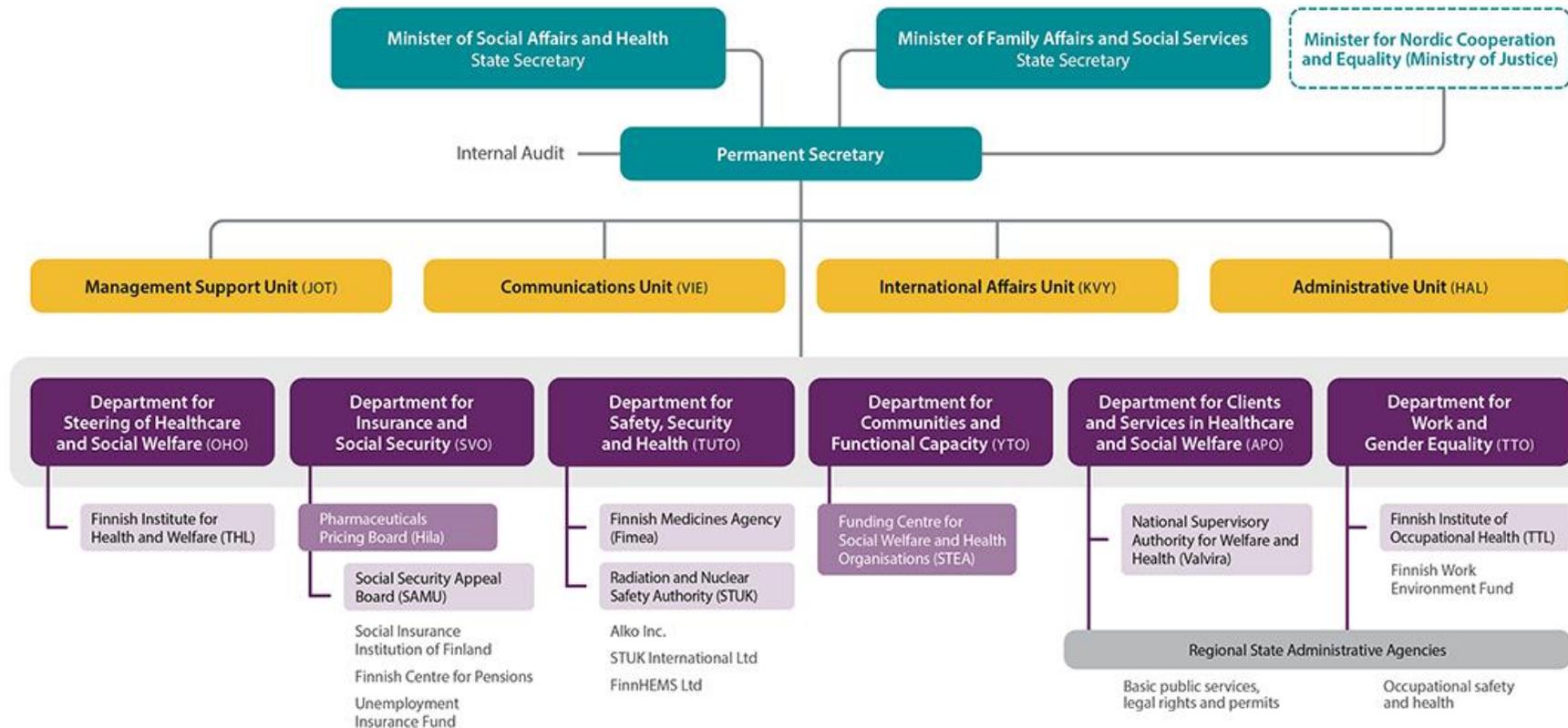


Table 4 Essential Public Health Functions and how they are delivered in Finland

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Ministry of Social Affairs and Health is responsible for guiding the Finnish Institute for Health and Welfare (THL). THL monitors the development of diseases and risk factors in populations and develops preventive strategies. It is responsible for defining the data content of the national data repository, the national electronic first aid report (EHK) and the social care customer information platform. In addition, THL is responsible for defining and coordinating the interfaces of electronic healthcare systems. Within THL, the Indicator Bank Sotkanet provides indicator data related to the social and health sector at different regional levels. THL serves as an expert institute of infectious disease control in Finland. It monitors the status of infectious diseases through its specialist laboratories and maintains the National Infectious Diseases Register using data submitted by healthcare providers and laboratories in accordance with the Communicable Diseases Decree. The THL also provides policy-makers and municipalities with information on key environmental health risks and on assessments of prevention alternatives. The health monitoring system in Finland is based on national surveys, national administrative registers, and local patient registers. Findata is a Health and Social Data Permit Authority that operates under the performance guidance of the Ministry of Social Affairs and Health. Findata provide guidance, grant permits for the secondary use of social and health data and ensure that data, subject to a permit, is combined and disclosed in a secure manner. This includes data maintained by numerous public social and health sector controllers, register data of one or numerous private social and health service provider and data saved in the Kanta Services. They combine and pre-process data such as the production of pseudo-anonymised and anonymised, statistical data. At a regional level, community authorities have access to administrative data sources, in the fields of their own public administrations, as necessary for the production of community statistics.
Public health emergency management (EPHF 2)	The Ministry of Social Affairs and Health and its Preparedness Unit oversee and coordinate preparedness for special situations and emergency conditions concerning social and healthcare. The Preparedness Unit supervises the preparedness planning and provision of agencies and institutes within the Ministry's sector. The Ministry of Social Affairs and Health if necessary, participates in national preparation and planning. The Advisory Board on Communicable Diseases, appointed by the Government, works under the Ministry of Social Affairs and Health. It monitors overall developments in infectious disease outbreaks and advises the Ministry's work in the prevention of infectious diseases. National high-level communication and information systems are shared between the authorities responsible for public security to ensure smooth cooperation and exchange of information between authorities in all circumstances. At a regional level, and in line with legislation, the social and health authorities, institutions, private sector operators and non-governmental

	<p>organisations are collectively responsible for ensuring that they can operate in emergency conditions. This involves prior preparations, training and standby planning, carried out in line with the Security Strategy for Society (the framework of general principles governing preparedness in Finnish society). The university hospital districts are responsible for the regional administrator functions of the systems and the maintenance of the systems used in emergency management in terms of social and healthcare. Regional working groups coordinated by hospital districts carry out overall evaluations of epidemic situations. Regional administrators actively cooperate within their own industry, as well as with authorities at different levels (regionally and nationally). The co-operation authorities include Police, Border Guard, Rescue, Emergency Response Center and Defence Forces. The Regional State Administrative Agencies coordinate and monitor the prevention of infectious diseases in their respective areas. They ensure that the hospital districts have sufficient healthcare preparedness for incidents in their respective regions.</p>
<p>Assuring effective public health governance, regulation, and legislation (EPHF 3)</p>	<p>The Ministry of Social Affairs and Health is responsible for preparing social and health related legislation in accordance with government programmes and other identified needs. The National Supervisory Authority for Welfare and Health (Valvira) is the central administrative department of the Ministry of Social Affairs and Health; it directs the implementation and supervision of health protection nationwide including licencing and guidance. At a regional level, the Regional State Administrative Agencies act as the enforcement authority for regional health protection and help local authorities to carry out the necessary controls.</p>
<p>Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)</p>	<p>The Ministry of Social Affairs and Health is responsible for preparing the financing and cost-sharing principles for the health system. The Ministry is also responsible for coordinating the cost-sharing principles of the systems between the Ministries. The Ministry directs the distribution of costs between special areas of responsibility, hospital districts and, if necessary, municipalities. The National Health Insurance scheme (Kela) is part of the Finnish social security system and provides benefit claims for family benefits, health insurance and rehabilitation. At a regional level, hospital districts are financed and managed by the member municipalities and they determine how they collect funds from municipalities. At a local level, municipalities levy a municipal income tax, the rate being decided independently by each municipality. Municipalities also receive some other tax revenues (real estate tax and part of the corporate tax) and subsidies paid by the state and other revenues (such as user-fees). Municipalities fund municipal healthcare services and prospectively fund health centre budgets, which are normally based on previous allocations. Municipalities have a significant degree of freedom to plan and steer the services they provide.</p>

<p>Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)</p>	<p>The Ministry of Social Affairs and Health supervises health protection and is responsible for the development of legislation. The National Supervisory Authority for Welfare and Health (Valvira) is a national agency operating under the Ministry of Social Affairs and Health, charged with implementation and supervision of health protection nationwide. Radiation and Nuclear Safety Authority (STUK) regulates the use of radiation in healthcare, industry and research. The Finnish Institute of Health and Welfare (THL), in close cooperation with the Finnish Food Agency (Ruokavirasto), operates under the Ministry of Agriculture and Forestry to ensure that food, drink and air do not pose a risk to health. THL also provides policy-makers and municipalities with information on key environmental health risks and on assessments of prevention alternatives. Finnish Institute of Occupational Health helps workplaces to prevent and eliminate health hazards in work environments. Regional State Administrative Agencies (State authorities) are in charge of regional guidance and act as the enforcement authority for regional health protection and help local authorities to carry out the necessary controls. The occupational safety and health authorities operate in each of the Regional State Administrative Agencies and enforce regional compliance with occupational safety and health laws.</p>
<p>Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)</p>	<p>The Finnish Institute of Health and Welfare (THL) monitors infectious diseases and maintains the infectious diseases register. This register is the main tool used for the surveillance of healthcare-associated infections and antimicrobial resistance. Infectious diseases are also reported to this register. THL issues guidance for prevention and control measures and assists in large-scale or international outbreak investigations. The institute is in charge of developing the National Immunisation program, tendering and procurement of vaccines and hosts the National Immunisation Technical Advisory Group (NITAG). THL maintains reference laboratory functions and has a central role in assessment of applications for licencing of clinical microbiological laboratories. THL also studies risk factors for chronic diseases. At a regional level, the Regional State Administrative Agencies coordinate and monitor the prevention of infectious diseases in their respective areas. At a local level, the primary contact point in matters concerning infections is the local health centre. Health centres give advice and guidance on infectious diseases. Additionally, health centres offer a wide variety of services, including preventive, maternity and child health services, general outpatient care, care on inpatient wards (in larger cities, these are often classified as GP-run hospitals), dental care, school healthcare, occupational healthcare, care of the elderly, family planning, physiotherapy, laboratory services, imaging, and some ambulatory emergency services. Municipalities are also responsible for providing immunisations and breast cancer and cervical cancer screenings.</p>

<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Ministry of Social Affairs and Health has a general responsibility for guiding and overseeing health promotion and reducing health inequalities in Finland. The priorities for health promotion in the various arenas are laid out in a Finnish Government Resolution, developed by the Ministry of Social Affairs and Health. At a regional level, the implementation of policy issued from the Ministry of Social Affairs and Health is the responsibility of all administrative sectors. Hospital districts draw up a regional programme for health promotion activities, which presents the central objectives and concrete measures. This serves as a tool for both municipal healthcare and the other municipal administrative sectors, in addition to representatives of the third and private sector, decision-makers and employees. At a local level, the Government Programme for 2011-2015 underlines that the promotion of the welfare of the nation should be taken into consideration in all local community decisions and incorporated into all administrative sector activities. Municipalities are also responsible for promoting the wellbeing and health of the residents and supporting their healthy choices, in addition to fostering sustainable development. Development and administration of municipal policy entails determining objectives for health and well-being promotion, defining the measures necessary to support these goals, assigning the responsible actors and generating collaborative efforts to make them a reality.</p>
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>Lausuntopalvelu.fi is an online platform intended to facilitate the consultation process, public involvement and access to information, as well as to increase the transparency and quality of the preparation and consultation process. The service is maintained by the Ministry of Justice. A Local Government Act provides community councils the opportunity to influence the planning, preparation, execution and monitoring of the activities of the municipality's different areas of responsibility in matters key to health and well-being.</p>
<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>The Government Economic Research Institute (VATT) develops forecasts on the future workforce including health workforce and related educational needs. They conduct research in local public finance and provision of public services, including health and education. The conditions of employment for municipal health centre physicians are largely determined at the national level by the Finnish Medical Association and the Association of Finnish Local and Regional Authorities. Municipal health centre staff are generally employed by the municipality and may also hire some physicians from private organisations. General practitioners are normally municipal employees.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The Ministry of Social Affairs and Health is in charge of the planning, guidance and implementation of health and social policy. The Health Economics and Equity in Healthcare team within the Finnish Institute for Health and Welfare undertakes research in cost-effectiveness, productivity, and the equitable access to healthcare.</p>

	<p>This research feeds into evidence-based policy making and provides expert support to policy makers. Local authorities and joint municipal authorities for hospital districts work together to monitor the observance of the harmonised principles of care.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The Finnish Institute for Health and Welfare (THL) conducts research on the transition of the service system. It also includes Sotkanet, an information service which provides indicator data related to the social and health sector at different regional levels. The National Committee on Medical Research Ethics (TUKIJA) operates in conjunction with the National Supervisory Authority for Welfare and Health (Valvira). The Research Programme on Challenges and Solutions to Population Health and Welfare (within THL) identifies the current major challenges in the field of Public Health and welfare and anticipates any coming changes, develops risk assessment and effective preventive and treatment solutions at the population, the subgroup and the individual level. In the research programme, multidisciplinary collaborative research with national and international partners makes extensive use of the data on population health and welfare maintained by THL and other institutions. The aim of the programme is to increase awareness of the population regarding environment and global phenomena-related health risks.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The Finnish Medicines Agency (Fimea) is a central administrative agency operating under the Ministry of Social Affairs and Health and is responsible for regulating drugs including veterinary drug, medical devices, blood and tissue products and biobanks. The Finnish Coordinating Center for Health Technology Assessment (FinCCHTA) promotes evidence-based methods to increase the efficiency and cost-effectiveness of health technologies. The Council for Choices in Health Care in Finland (COHERE Finland) monitors, defines and assesses Public Health services at a general level. The Council issues recommendations on including or excluding health technologies in the range of Public Health services. The Finnish Institute of Health and Welfare (THL) conducts research via the Welfare State Research and Reform Unit and Health Economics and Equity in Health Care team. The Welfare State Research and Reform Unit produces multidisciplinary research to support the development and coordination of the health and social service system and the social security system. It also carries out research to identify the mechanisms underlying different social problems, searches for welfare policy solutions for them, and develops services and benefits to make them more effective and mutually supportive. The Health Economics and Equity in Healthcare team undertakes research in cost-effectiveness, productivity, and the equitable access to healthcare. This research feeds into evidence-based policy making and provides expert support to policy makers.</p>

The Netherlands

Public health services in The Netherlands are [decentralised](#). The Netherlands is divided into 344 municipalities and 25 regional Public Health services.

National

The Public Health Act (2008) provides the institutional framework for shared responsibilities for Public Health between the national and local government. Several other pieces of legislation relevant for Public Health include:

- Population Screening Act
- Tobacco Act
- Drinking and Hospitality Act
- Security Regions Act
- Workplace Act
- Health Insurance Act
- Goods and Products Act
- Public Support Act.

For example, the [Population Screening Act](#) establishes the legal preconditions for screening which is intended to enable the EPHF of early disease detection followed by prompt treatment. This act provides protection from unnecessary or harmful screening programmes. It lays out requirements to ensure the quality of screening by ensuring that all screening is monitored. This legislation influences the work of The Centre for Population Screening which directs and coordinates national government-provided population screenings.

In The Netherlands the [Ministry of Health, Welfare and Sport](#) (*Ministerie van Volksgezondheid, Welzijn en Sport* – VWS) has responsibility for:

- developing Public Health policy, legislation and regulations
- health inspection
- providing fiscal resources for national government healthcare infrastructure
- determining the scope of the statutory health insurance package, available to all Dutch residents.

Almost all Dutch residents [have health coverage](#). The following institutions and services report to the Ministry of VWS:

- National Institute for Public Health and the Environment – RIVM
- Health and Youth Care Inspectorate

- Central Health Professions Centre (CIBG)
- Medicines Evaluation Board.

The National Institute for Public Health and the Environment – (*Rijksinstituut voor Volksgezondheid en Milieu*) RIVM, is an independent scientific organisation under the Ministry of VWS. It achieves its goal of a healthy population living in a healthy environment through research and advice and by collecting and applying knowledge. The institute is managed by a board of directors. The organisation's organogram can be [found here](#). The RIVM has 13 specialised knowledge centres, ranging across three domains of specific knowledge and expertise:

- Infectious Diseases and Vaccinology
 - National Coordination Centre for Communicable Diseases Control
 - Area of responsibility: Prevention and control of infectious disease, outbreaks, developing guidelines on infectious disease and prevention, strengthening the disease control network.
 - Centre for Infectious Diseases Epidemiology and Surveillance
 - Area of responsibility: National immunisation programme, antimicrobial resistance, hospital-acquired infections, gastroenteritis, zoonosis surveillance, respiratory infections, sexually transmitted diseases, mathematical modelling of infectious diseases, effectiveness and cost-effectiveness studies.
 - Centre for Research Infectious Diseases Diagnostics and Screening
 - Area of responsibility: Virology, bacteriology, parasitology.
 - Centre for Zoonosis and Environmental Biology
 - Area of responsibility: Food-borne infections, environmental borne infections, laboratory preparedness, zoonosis, microbiology.
 - Centre for Immunology of Infectious Diseases and Vaccines
 - Area of responsibility: Immune mechanisms, assessment of emerging diseases and vaccinations, and clinical immunology.
- Environment and Safety
 - Centre for Safety of Substances and Products
 - Area of responsibility: Risk assessment of chemical substances and products, biological safety, consumer and product safety, crop protection and biocides, gene technology, industrial chemicals, nanotechnology, product safety.
 - Centre for Sustainability, Environment and Health

Health Information and Quality Authority

- Area of responsibility: provides knowledge on the sustainable use and management of the living environment and the effects of environmental factors on the quality of the environment and health.
- [Centre for Environmental Quality](#)
 - Area of responsibility: Soil quality, emissions, emissions registration, sound/noise, groundwater quality, air quality, monitoring, modelling of soil, air, water quality and other environmental parameters.
- [Centre for Environmental Safety and Security](#)
 - Area of responsibility: Disasters and incidents, disaster response, radiation, environmental safety, occupational safety, medical environment science, aftercare, security, risk assessment.
- [Public Health and Health Services](#)
 - [Centre for Health and Society](#)
 - Area of responsibility: Public health, healthcare, health promotion, exploratory/scenario studies, costs of illness studies, process management.
 - [Centre for Health Protection](#)
 - Area of responsibility: Pharmaceuticals, medical products/technology, nanotoxicology/nanomedicines, reproduction and immune toxicology, carcinogenesis and mutagenesis, tobacco and drugs, determinants of chronic diseases, healthy ageing, alternatives to animal experiments, genomics.
 - [Centre for Nutrition, Prevention and Health Services](#)
 - Area of responsibility: Monitoring life style and health, exposure to chemical substances, food safety, food consumption, nutrition and health, epidemiology of chronic diseases, healthcare quality, disease prevention quality of healthcare, health economics.
 - [Centre for Population Screening](#)
 - Area of responsibility: Coordinating eight population screening programmes. Responsibility for the National Influenza Prevention Programme. The centre also has roles that include financing and quality assuring population screening programmes. The centre advises and informs policy makers.

The RIVM also has a [Department for Vaccine Supply and Prevention Programmes](#), whose responsibilities include: vaccine procurement, coordinating the implementation of prevention programmes and managing data for public prevention programmes.

In the [event of emergencies](#), RIVM has a direct role in infectious disease outbreaks. This includes coordinating and advising on efforts to control the disease, helping develop new diagnostics and epidemiologic maps. With accidents and disasters, RIVM plays an advisory role to national and local government and is responsible for providing accurate information.

The RIVM regularly produces and publishes the [Public Health Foresight Studies](#), which are used to inform national and local public health policy. These studies provide insight into important public health and healthcare challenges in The Netherlands.

[Employers and employees](#) have responsibility for occupational health and are required [to agree](#) on workplace conditions supported by trade unions and associations. [The Centre for Environmental Safety and Security](#), which is a part of the National Institute for Public Health and the Environment provides the legal framework for occupational health.

[The Health and Youth Care Inspectorate](#), in the public interest, supervises health and youth care services and enforces the [quality and safety of health](#). It is a government institution that is part of the Ministry of VWS. The organisation inspects healthcare providers, institutions and companies; it issues fines and penalties if quality and safety standards are not met. The organisation's mandate also involves ensuring legal and regulatory compliance of medicines and medical devices by monitoring the international market.

[The CIBG](#) is an executive organisation of the Ministry of Health, Welfare and Sport. It offers transparent and reliable data and information on care and welfare for example via the (Professions in Individual Health Care) *Beroepen in de Individuele Gezondheidszorg* (BIG) register. To assure the quality of personnel and protect the public from misconduct and errors, all healthcare professionals with a protected title must register in the [BIG register](#) which is [hosted by CIBG](#). This is a centralised official register of healthcare professionals. Those with a protected title include: clinical technologist, dentist, dental hygienist, doctor, health psychologist, medical caregiver, midwife, nurse, pharmacist, physiotherapist, physician assistant, psychotherapist and remedial educationalist.

[The National Healthcare Authority](#) ensures that the Health Insurance Act is put into effect in keeping with the rules and regulations thereby ensuring that everyone in The Netherlands has equitable access to good affordable care. It also acts as the market regulator in healthcare.

[The Medicines Evaluation Board](#) is an independent body that regulates the quality, safety and effectiveness of medicines.

[The Food and Consumer Product Safety Authority](#), is responsible for animal and plant health, and food and product safety. This includes keeping animals healthy, preventing plant diseases, supervising the production, preparation, transport and sale of food products and sale of tobacco products and ensuring personal care products are safe.

[The Authority for Nuclear Safety and Radiation Protection](#) is an independent body that monitors and promotes nuclear safety, radiation protection and security.

[The Amsterdam Centre for Health Communication](#) (ACHC) hosted by the University of Amsterdam optimises the use of media and other communication tools to empower and engage individuals to adopt healthy behaviours. They help put research findings into practice by disseminating them to citizens, patient organisations, journalists, policy makers and other professionals.

[The Netherlands Institute for Health Services Research](#) (Nivel) is an independent organisation which contributes to the quality and effectiveness of the Dutch healthcare system by conducting health services research which aims to continuously improve care and support for patients and citizens. Nivel's responsibility includes estimating the number of health professionals needed to meet future demand through its professions in healthcare and manpower planning programme.

Regional

There are currently 25 regional public health units. Regional authorities have a restricted role in setting their own Public Health policy priorities. Their role includes:

- managing the availability, distribution and planning of medical infrastructure (for example, hospitals)
- giving advice on priorities for Public Health planning
- making regional Public Health plans, involving the local healthcare institutions and municipalities
- monitoring and implementing national health policy
- implementing Public Health education, and related services.

Local

The municipal role in Public Health is closely linked to national policy-making. Local government authorities' role includes:

- providing social and preventive healthcare at the local level (municipal medical services)
- providing healthcare services for the elderly and chronically ill
- participating in regional overviews
- providing minor financial contribution to Public Health financing by the Municipal Fund
- licensing of ambulance service.

There are currently [344 municipalities](#). Regional and local entities collaborate to establish regional and local public health services ([GGD](#)) and medical emergency planning ([GHOR](#)), along with private partners. The GGD and GHOR implement infection control according to the RIVM guidelines to safeguard, improve and protect public health.

Figure 4. Overview of The Netherland's Public Health System (own abstraction).

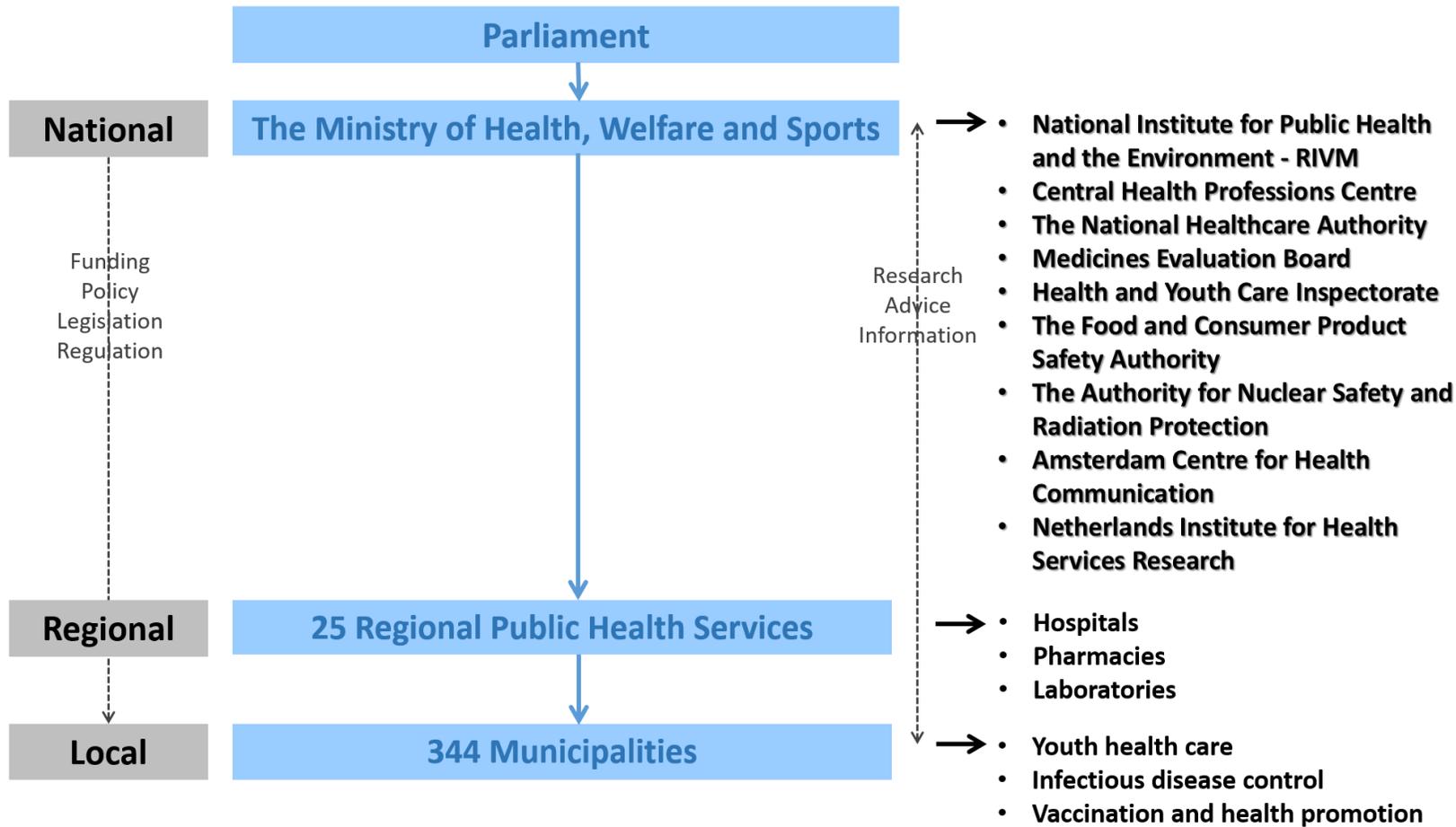


Table 5 Essential Public Health Functions and how they are delivered in The Netherlands

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The National Institute for Public Health and the Environment (RIVM) monitors and evaluates the population's health status and makes this information available. It systematically collects and collates information about disease risk factors. Each municipal health service has a department of epidemiology that collects data at a regional and local level.
Public health emergency management (EPHF 2)	During the COVID-19 pandemic, the Ministry of Health has been responsible for crisis coordination and management. It coordinates availability of large scale COVID-19 testing, contact tracing and vaccination capacity. The National Institute for Public Health and the Environment (RIVM) has a direct role in infectious disease outbreaks. This includes coordinating and advising on efforts to control the disease, helping develop new diagnostics and epidemiologic maps. For accidents and disasters, RIVM provides advice to national and local government. Contained within the RIVM are, Infectious Diseases and Vaccinology (Centre for Infectious Disease Control), Environment and Safety (including environmental incident service) and Public Health and Health Services (including food and food safety). The Centre for Infectious Disease Control is responsible for the efficient and rapid communication about outbreaks both nationally and regionally throughout the Netherlands. The Association for Public Health and Safety in the Netherlands is the regional medical emergency preparedness and planning group which sets out crisis management on a regional and local level.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	The Ministry of Health, Welfare and Sport has responsibility for developing Public Health policy, legislation and regulations. The National Healthcare Institute ensures that the Health Insurance Act is put into effect and in keeping with the rules and regulations to ensure that everyone in the Netherlands has equitable access to good affordable care.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	The Ministry of Health, Welfare and Sport has responsibility for planning and providing fiscal resources for national government healthcare infrastructure. Regional Public Health services are responsible for regional Public Health plans and involving the local healthcare institutions and municipalities.
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Centre for Zoonosis and Environmental Biology, the Centre for Nutrition, Prevention and Health Services (which are part of the National Institute for Public Health and the Environment [RIVM]), along with other centres are responsible for protecting populations from food-borne and environmental infections. RIVM's Centre for Safety of Substances and Products assesses the risk chemical substances pose to populations. The Authority for Nuclear Safety and Radiation Protection is an independent body that monitors and promotes nuclear safety, radiation protection and security. Employers and employees have a responsibility for occupational health and are required to agree on workplace conditions

	supported by trade unions and associations. The Centre for Environmental Safety and Security is responsible for providing the legal framework for occupational health.
Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	The Centre for Population Screening and Centre for Research Infectious Diseases Diagnostics and Screening promote prevention and early disease detection along with other centres in particular domains like the Infectious Diseases and Vaccinology domain. Regional and local Public Health services implement infection control according to the RIVM guidelines.
Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)	The National Institute for Public Health and the Environment (RIVM) is an independent scientific organisation under the Ministry of Health, Welfare and Sport and includes the Centre for Health and Society, with responsibility for research and advice on public health, healthcare, health promotion, exploratory/scenario studies, costs of illness studies and process management.
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	The Ministry of Health Welfare and Sport promotes social participation in health promotion activities; especially by those with a physical or mental impairment. The Netherlands government has also emphasised the importance of citizens taking responsibility for their own lives and environments. This concept is referred to as a 'participation society'. Regional Public Health services are involved in the implementation of Public Health education (for example, prenatal education to expectant parents).
Ensuring adequate quantity and quality of public health workforce (EPHF 9)	The Netherlands Institute for Health Services Research estimates the number of health professionals needed to meet future demand through its professions in healthcare and manpower planning programme. To assure the quality of personnel and protect the public from misconduct and errors, all healthcare professionals with a protected title must register in the BIG register which is hosted by the CIBG. This is a centralised official register of healthcare professionals kept on behalf of the Ministry of Health, Welfare and Sport.
Assuring quality of and access to health services (EPHF 10)	The Ministry of Health, Welfare and Sport has overall responsibility for the quality of healthcare services and ensuring access.
Advancing public health research (EPHF 11)	The National Institute for Public Health and the Environment (RIVM) conducts research, and publishes the Public Health Foresight Studies regularly. The Netherlands Institute for Health Services Research conducts health services research which aims to continuously improve care and support for patients and citizens.

Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)	The Medicines Evaluation Board regulates the quality, safety and effects of medicines. The Health and Youth Care Inspectorate ensures legal and regulatory compliance of medicines and medical devices by monitoring the international market. Regional Public Health services manage the availability, distribution and planning of medical infrastructure to the community.
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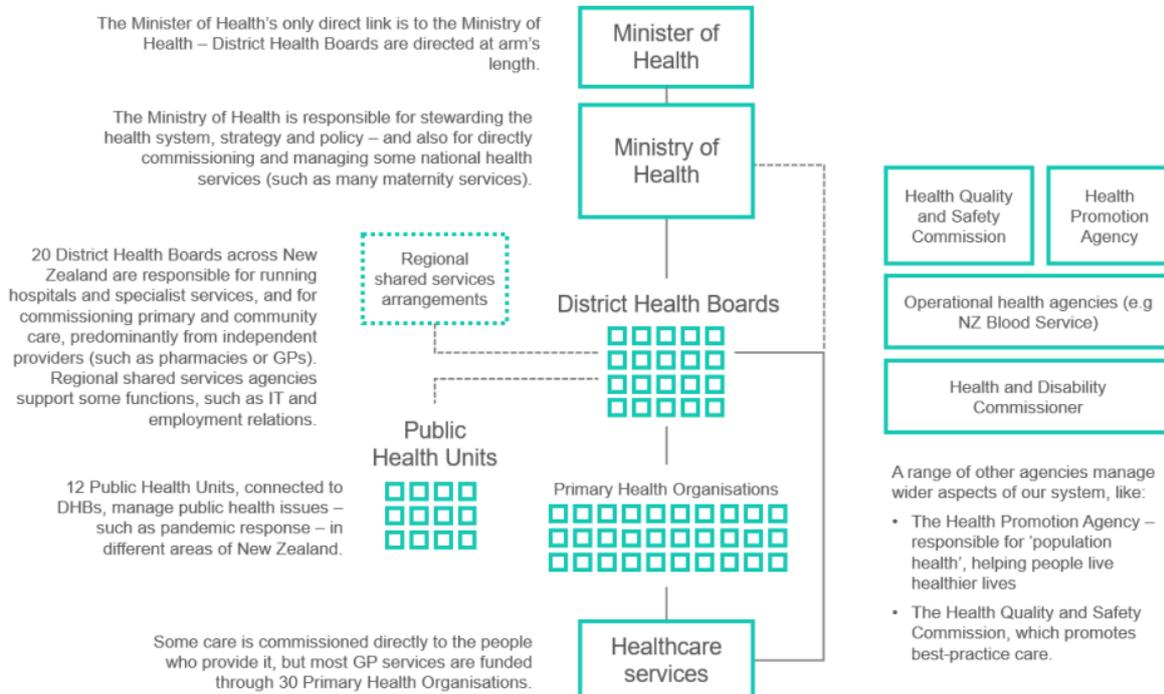
New Zealand

The Minister of Health (with the Cabinet and the government) develops policy for the health and disability sector and provides leadership. The Minister is supported by the [Ministry of Health](#) and its business units (District Health Boards [DHBs]). The Minister is advised by the Ministry, the strategic prioritisation function, Health Workforce New Zealand and other ministerial advisory committees.

Most of the day-to-day business of the system, and around three-quarters of the funding, is administered by DHBs. DHBs plan, manage, provide and purchase health services for the population of their district to ensure services are arranged effectively and efficiently for all of New Zealand. This includes funding for primary care, hospital services, public health services, aged care services, and services provided by other non-government health providers including Māori and Pacific providers.

An overview of the structure of Public Health in New Zealand is shown below:

Figure 5. Simplified overview of the health system in New Zealand (Image from [Our Health and Disability System, 2021](#)).



National

The [Ministry of Health](#) has a range of roles in the system in addition to being the principal advisor and support to the Minister. It funds a range of national services, including disability support and public health services, and has a number of regulatory functions. Important roles in providing services and ensuring efficiency and quality are undertaken by public health units, primary health organisations, Non-governmental organisations (NGOs), [Crown entities](#), health professionals, and professional and regulatory bodies for all health professionals – including all medical and surgical specialist areas, nurses and allied health groups. There is a range of educational and research institutions involved in the provision of services and training of the workforce. There are also many consumer bodies and non-government organisations that provide services and advocacy for the interests of different groups, and more formal advocacy and inquiry boards, committees and entities. This network of organisations is linked through a series of funding and accountability arrangements to ensure performance and service delivery across the health and disability system.

With respect to public health, the Ministry is 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 District Health Boards (DHBs). In addition, the 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.

Emergency management is governed by the Ministry of Health. It is required under the Act to develop a national emergency management plan. It has an Emergency Management team which works on emergency management projects that will either lead or support a national response. Health and disability providers are required under the Health and Disability Services Safety Act 2000 to have a major incident and emergency plans. In 2004, in response to the threat of the Severe Acute Respiratory Syndrome (SARS) virus, the Ministry of Health produced the original National Health Emergency Plan: Infectious Diseases. Since then the role of the health and disability sector in the event of an emergency, as both a lead and a supporting agency, has been more clearly defined through the publication of a series of emergency management-related documents to provide guidance in a health-related emergency. These mostly strategic documents are underpinned with specific action plans.

[Public Health programmes](#) and services are delivered by a wide range of organisations and staff. The Minister of Health has the ultimate responsibility for all health policy decisions and all expenditure from Vote Health. Vote Health is the main source of funding for New Zealand's health and disability system, while [Accident Compensation Corporation](#) (ACC) is the other major source of public funding. The Minister's functions, duties, responsibilities and powers are provided for in the New Zealand Public Health and Disability Act 2000 and other legislation.

The [Ministry's Equity Work Programme](#) aims to facilitate an equity focus across the health system's operational landscape while promoting the cultural shift needed to affect the system change that achieves equity in health outcomes.

[Primary health organisations](#) (PHOs) are funded by DHBs for the provision of a set of essential primary healthcare 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 to providing treatment services to individuals (for example, GP services, physiotherapy, midwifery), PHOs may also provide public health services that meet the needs of the population groups in their community (for example, immunisations, screening services and stop smoking services).

Other government ministries and departments such as the [Ministry of Social Development](#), [Te Puni Kokiri](#) (the Government's principal policy advisor on Māori wellbeing and development) and [New Zealand Food Safety](#) have responsibilities and concerns for issues of population health, wellbeing and safety. Inter-sectoral collaboration between the health sector and these other government areas is critical to the achievement of population health outcomes.

[Pharmac](#) is the New Zealand government agency that decides which medicines and related products are funded in New Zealand. They enable equitable access and use of medicines and related products through influencing availability, affordability, accessibility, acceptability, and appropriateness.

The Health Quality and Safety Commission are Under the New Zealand Public Health & Disability Amendment Act 2010, the [Health Quality and Safety Commission](#):

- provide advice to the Minister of Health on how quality and safety in health and disability support services may be improved
- lead and coordinate improvements in safety and quality in healthcare

Health Information and Quality Authority

- identify key health and safety indicators (such as events resulting in injury or death) to inform and monitor improvements in safety and quality
- report publicly on safety and quality, including performance against national indicators
- share knowledge about and advocating for safety and quality.

[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. ESR surveillance includes systematic collection, analysis, and interpretation of data on specific health events for use in the planning, implementation and evaluation of public health programmes; this includes communicable and non-communicable disease surveillance. The ESR are responsible for:

- notifiable disease surveillance
- outbreak surveillance
- sexually transmitted infections
- influenza viruses
- respiratory, enteric and herpes viruses.

ESR provides a range of training opportunities through the epidemiological skills development programme. The aim of this programme is to strengthen the capacity of the New Zealand public health workforce to identify, investigate and control outbreaks of infectious and aberrant diseases.

Non-governmental organisations (NGOs) provide public health services that ensure public health protection and prevention services work well in communities. They include:

- organisations that provide services for the general population
- organisations that provide for specific population groups
- Māori-governed and managed services that provide services specifically for Māori and for the general population

- Pacific-governed and managed services that provide services for Pacific peoples.

Public health NGOs may be funded through health or other government funding sources, or may receive funds from community grants, private industry or their memberships. Some NGOs provide services that address a wide range of issues. For example, regional iwi providers deliver Well Child, stop smoking, nutrition and physical activity, alcohol and drug, and mental health prevention programmes and services. Some special interest NGO services focus on one issue, for example, the National Heart Foundation and the Mental Health Foundation.

The range of health and disability services delivered by NGOs vary 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 the [Public Health Association of New Zealand](#), [Health Promotion Forum of New Zealand](#), [Cancer Society New Zealand](#), [Heart Foundation New Zealand](#), [Alcohol Advisory Council of New Zealand](#), [Problem Gambling Foundation](#). Community and Māori organisations make up a significant number of NGO health providers providing kaupapa (Māori term for principles or ideas) public health services. Pacific Primary Health Organisations (PHOs) and NGO providers are an important vehicle for any health programmes directed at improving health outcomes for Pacific peoples.

The [Health Research Council](#) (HRC) is the Crown agent responsible for the allocation of the government's investment in public-good health research. HRC funds health research in health and wellbeing in New Zealand, improving outcomes for acute and chronic conditions – better recovery for people suffering an illness or injury, improving health delivery and Rangahau Hauora Māori – supporting Māori health research.

[Te Hiringa Hauora – Health Promotion Agency](#) is a Crown agent responsible for leading and delivering innovative, high-quality and cost-effective programmes that promote health, well-being and healthy lifestyles, disease prevention, illness and injury prevention. This includes providing advice and recommendations to government, government agencies, industry, non-government bodies, communities, health professionals and others on the supply, consumption and misuse of alcohol. The [Te Hiringa Hauora – Health Promotion Agency](#) also monitor key health indicators, behaviours and attitudes, informs and evaluates programmes and initiatives, and identifies emerging health trends. This helps build an evidence base for promoting health and wellbeing.

The [Ministry of Civil Defence and Emergency Management](#), a semi-autonomous body within the [Department of Internal Affairs](#), is responsible for the administration of the Civil Defence Emergency Management Act 2002. The Ministry of Civil Defence and Emergency Management works with other agencies, such as the Ministry of Health, to facilitate and guide emergency planning activities.

The [Health Workforce Advisory Board](#) works in partnership with the Ministry of Health to provide strategic oversight and sector leadership for New Zealand's health workforce.

The [Health Workforce Directorate](#) is the team within the Ministry of Health responsible for national coordination and leadership on workforce issues. They provide advice on workforce development and regulation; gather workforce data and intelligence; and invest in health workforce training. Their support is designed to ensure the health system has the right people, in the right place with the right skills to provide the safest care and best outcomes for the population. The Health Workforce Directorate invests in training and development of the health and disability workforce.

Universities and other tertiary institutions are key players in training the public health workforce, along with some NGOs, for example the [Health Promotion Forum of NZ](#). Universities and public health associated academic departments also provide research to support evidence-based public health practice, and can play a role in public health advocacy.

Regional

Regional public health services are provided by the District Health Boards (DHBs). There are [20 DHBs](#) in New Zealand created by the New Zealand Public Health and Disability Act 2000. Each DHB is governed by a board of up to 11 members. DHB boards set the overall strategic direction for the DHB and monitor its performance. The Minister of Health appoints up to four members to each board, and the board's chair and deputy chair. Their objectives include:

- improving, promoting and protecting the health of people and communities
- promoting the integration of health services, especially primary and secondary care services
- seeking the optimum arrangement for the most effective and efficient delivery of health services in order to meet local, regional, and national needs
- promoting effective care or support of those in need of personal health services or disability support.

- promoting the inclusion and participation in society and the independence of people with disabilities
- reducing health disparities by improving health outcomes for Māori and other population groups
- reducing – with a view toward elimination – health outcome disparities between various population groups.

DHBs are required to plan and deliver services regionally, as well as in their own individual areas. DHBs are expected to show a sense of social responsibility, to foster community participation in health improvement, and to uphold the ethical and quality standards commonly expected of providers of services and public sector organisations. Public hospitals are owned and funded by DHBs. District health boards are required by law to be part of their regional Civil Defence Emergency Management (CDEM) Group.

Public health units (PHUs) cover all of New Zealand. These units are the responsibility of DHBs and their services are funded by the Ministry of Health. Some public health units cover more than one district health board area to provide the most effective coverage across an area. Each public health unit contract usually includes a component that requires the delivery of services to Māori and other specific ethnic populations. Public health units deliver both health protection and health promotion activities, such as monitoring food and safety and providing information to the public about nutrition and physical activity.

The diversity of the Public Health workforce reflects the diversity of Public Health services and providers. Those working in Public Health include health promoters, public health physicians, public health nurses, general practitioners, primary care nurses, analysts, researchers, managers, scientists, kaiāwhina (an over-arching term to describe non-regulated roles in the health and disability sector), 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.

Local

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 policymaking around such issues as gambling, smoke-free 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.

GP practices act in supporting community health. For example, GP practices play a role in the National Bowel Screening Programme by advising patients with the results and procedures at hand.

Figure 6. Organisation of the health system in New Zealand (Image from [The Commonwealth Fund](#)).

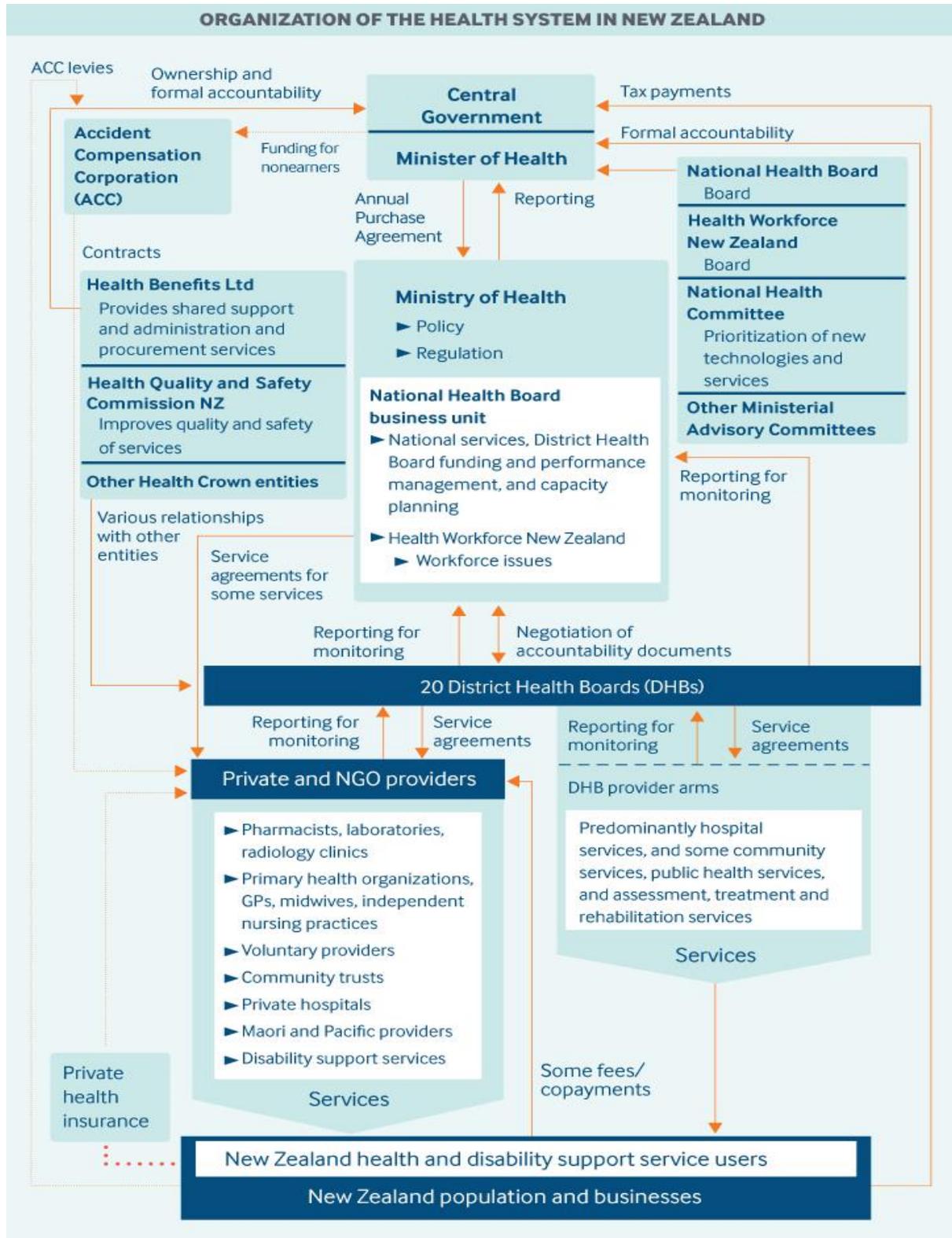


Table 6 Essential Public Health Functions and how they are delivered in New Zealand

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The 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.
Public health emergency management (EPHF 2)	The Ministry of Civil Defence and Emergency Management, a semi-autonomous body within the Department of Internal Affairs, is responsible for the administration of the Civil Defence Emergency Management Act 2002. It works with other agencies, such as the Ministry of Health, to facilitate and guide emergency planning activities. The Ministry of Health is also required under the Act to develop a national emergency management plan. Regionally, district health boards (DHBs) are required by law to be part of their regional Civil Defence Emergency Management (CDEM) Group.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	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, both directly to providers and also through DHBs.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	The Minister of Health (with Cabinet and the government) develops policy for the health and disability sector and provides leadership. With respect to Public Health, the Ministry are responsible for the funding Public Health services both directly to providers and also through District Health Boards (DHBs). The Minister is supported by the Ministry of Health and its DHBs, and advised by the Ministry, the strategic prioritisation function, Health Workforce New Zealand and other ministerial advisory committees. At a regional level, most of the day-to-day business of the system, and around three quarters of the funding, is administered by DHBs. DHBs plan, manage, provide and purchase health services for the population of their district. This includes funding for primary care, hospital services, Public Health services, aged care services, and services provided by other non-government health providers including Māori and Pacific providers.
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Ministry of Health is the key agent of the Minister in the health and disability system and maintains the core of the government's responsibilities for the health and participation of New Zealanders. Other government ministries and departments such as the Ministry of Social Development, Te Puni Kokiri (the Government's principal policy advisor on Māori wellbeing and development) and New Zealand Food Safety have responsibilities for issues of population health, wellbeing and safety. Inter-sectoral

	<p>collaboration between the health sector and these other government areas is critical to the achievement of population health outcomes. Additional government ministries and departments involved in protecting populations against health threats include the Ministry for the Environment, New Zealand Food Safety, and the Environmental Protection Authority.</p>
<p>Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)</p>	<p>The National Screening Unit (NSU) within the Ministry of Health is responsible for the safety, effectiveness and quality of organised screening programmes. It is responsible for national coordination of screening programmes such as National Bowel Screening Programme, Breast Screen Aotearoa, National Cervical Screening Programme, Newborn Metabolic Screening Programme and Universal Newborn Hearing Screening Programme. At a regional level, district health boards (DHBs) carry out screening on behalf of the National Bowel Screening Programme. DHBs are responsible for providing free follow-up investigations, and any treatment participants need. Four regional centres support the DHBs to develop screening and oversee clinical standards and other aspects of the programme once it is underway. At a local level, GP practices have a key role in the success of the National Bowel Screening Programme. They advise their patients of positive test results, refer them for a screening colonoscopy and support them through the process. They also raise awareness about bowel screening and encourage participation.</p>
<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Health Promotion Agency leads and supports initiatives to promote health and wellbeing and encourage healthy lifestyles, prevent disease, illness and injury, enable environments that support health, wellbeing and healthy lifestyles and reduce personal, social and economic harm. The Ministry of Health also work on a number of health promotion activities including smoking, hazardous drinking, obesity, mental health and addiction, access to healthcare, oral health, Māori health, Pacific health, disabled people's health and Rainbow (Lesbian, Gay, Bisexual, Transsexual, Transgender and Intersexual) community health.</p>
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>The Ministry of Health provide information for district health boards and other organisations on health literacy. Health literacy is supported by a health system focus on services being easy to access and navigate, effective health worker communication and clear and relevant health messages that empower everyone to make informed choices. The Ministry of Health also provide advice to help make it easier to engage people with disabilities.</p>

<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>The Health Workforce Directorate provides data and information to support effective workforce planning, maintain the supply of trained professionals and enable well-informed career decisions. The Health Workforce Advisory Board works in partnership with the Ministry of Health to provide strategic oversight and sector leadership for New Zealand’s health workforce.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The Ministry’s Equity Work Programme aims to facilitate an equity focus across the health system’s operational landscape while promoting the cultural shift needed to affect the system change that achieves equity in health outcomes. Primary health organisations (PHOs) are the means by which the Government ensures that everyone has access to a GP and a primary care practice.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>Through their research, the Te Hiringa Hauora – Health Promotion Agency is building an evidence base for promoting health and wellbeing. The Health Research Council of New Zealand funds health research in health and wellbeing in New Zealand for acute and chronic conditions. Universities and Public Health associated academic departments also provide research to support evidence-based Public Health practice.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>Pharmac is the New Zealand government agency that decides which medicines and related products are funded in New Zealand.</p>

Norway

The [Ministry of Health and Care Services](#) is responsible for the delivery of public health services in Norway. The Ministry is composed of several departments which are directly involved in public health. Norway's health system is semi-decentralised with municipalities being responsible for primary care services and planning emergency responses. There are four regional Health Authorities whose responsibilities include hospital, pharmacy and ambulance services.

The Department of Public Health is part of the Ministry of Health and Care Services and provides an essential role in Public Health work in Norway. The Norwegian Institute of Public Health is a division within the Department of Public Health. The Norwegian Institute of Public Health role includes surveillance, technology infrastructure and infection control.

Additional agencies for medicine, radiation, food safety and research support public health in Norway.

National

The Public Health Act was introduced in Norway on 1 January 2012. The Act contributes to societal development that promotes public health and reduces social inequities in health. Public health work involves promoting:

- the population's health
- well-being and good social and environmental conditions
- prevention of mental and physical illnesses, disorders or injuries.

This Act facilitates the coordination of public health work both horizontally and vertically across various sectors and actors and between authorities at national, regional and local levels respectively. All government organisations delivering public health functions are subject to this Act, facilitating a whole-of-government approach. The Act provides a foundation for strengthening systematic public health work in policy development and societal development planning based on regional and local needs and challenges.

The Act places responsibility for public health work as a whole-of-government and a whole-of-municipality responsibility. National government health authorities have a mandate to support the public health work of municipalities by for example, making information and data available to monitor public health and health determinants at local level.

This Act is designed to provide protection from communicable diseases by preventing both their occurrence and their spread in the population. The Act also provides for the prevention of such diseases from being imported into Norway or exported to other countries. For example, the Act tasks the Ministry of Health and Care Services with establishing a national programme for vaccination against communicable diseases, with the municipal health services offering vaccination public health services to the population.

In Norway, the [Ministry of Health and Care Services](#) (*Helse- og omsorgsdepartementet* – abbreviated HOD), is responsible for delivering high-quality and uniform health and care services for the people of Norway. The Ministry achieves this mandate by way of broad legislation, comprehensive policy, yearly budgetary allocation and via several governmental institutions. Governance is semi-decentralised with municipalities [taking on the provision of more](#) specialist healthcare services.

The Ministry of Health and Care Services has nine departments:

- administration
- budget and finance
- E-Health
- ownership
- Public Health
- health law
- municipal services
- specialist health services
- communication unit.

[The Ministry of Justice and Public Security](#) is responsible for civil protection and emergency planning.

[The Department of Public Health's](#) main responsibilities are related to:

- preventive and health-promoting work
- health monitoring / health registers
- nutrition and food safety
- cosmetics (chemical compounds designed for personal and skin care)
- alcohol and drug issues and tobacco.

The Department also has responsibility for including [mental health](#) as an integral aspect of public health work.

[The Norwegian Institute of Public Health](#) (NIPH) is Norway's national public health institute. It is a government agency and research institute that reports to the Ministry of Health and Care Services. The NIPH is a national competence institution in the following areas:

- infectious disease control
- physical and mental health
- environmental factors, substance abuse, tobacco, nutrition, physical activity and other factors that affects health status and inequality
- health-promoting and preventive measures in the population
- health technology assessments
- global health.

[NIPH has divisions:](#)

- [Division for Health Services](#) which provides information to health decision makers across the government.
- [Division of Health Data and Digitalisation](#) which has responsibility for health registry, population health study, biobank, and information technology.
- [Division of Infection Control and Environmental Health](#) which works to prevent infectious diseases and mitigate health challenges caused by environmental risk factors.
- [Division of Mental and Physical Health](#) has responsibility for the fields of substance use, mental health and physical health.

The NIPH monitors and evaluates the population's health status making the information available in the regularly updated [Public Health Report](#). Risk factors for disease and other threats to health are presented in this report.

[The Norwegian Directorate of Health](#) is an executive agency, regulatory, professional and implementing authority for health policy under the Ministry of Health and Care Services. By carrying out these responsibilities, it aims to improve the health of citizens through activities across services, sectors and administrative levels. Its role includes:

- monitoring conditions that affect Public Health and living conditions
- the development of health and care services
- giving advice and guidance on strategies and measures
- performing standardisation nationally.

National screening programmes are run by: the [Newborn Screening Programme](#) via heel prick blood spot based at Oslo University Hospital and breast and cervical public screening, and piloting bowel cancer public screening is run by [the Cancer Registry of Norway](#) which is an independent institution.

Health Information and Quality Authority

The Cancer Registry of Norway collects data and produces statistics on cancer in Norway. It also conducts research. The Cancer Registry has its own board, falls under the Oslo University Trust, is part of the Southern-Eastern Regional Health Authority and collaborates with NIPH and The Norwegian Directorate of Health.

[The National Institute of Occupational Health](#), *Statens arbeidsmiljøinstitutt* (STAMI) is funded by the Ministry of Labour and Social Affairs. Its roles include promoting knowledge, finding relations between work, illness and health, evaluating risk factors, offering preventive measures and promoting knowledge of the relationship between work and health.

[The Norwegian Food Safety Authority](#) is a national governmental body, which aims to ensure the safety of food and drinking water. It contributes to maintenance of plant, fish and animal health. It achieves its responsibilities by for example monitoring, inspection, drafting legislation, keeping abreast of developments in the field and advising government Ministries.

[The Norwegian Medicines Agency](#) is under the Ministry of Health and Care Services. It has a legislative and regulatory function to safeguard public and animal health by ensuring the efficacy, quality, safety and accessibility of medicines.

[The Norwegian Radiation and Nuclear Safety Authority](#) is the national expert body in nuclear security, radiation use, natural radiation and radioactive contamination in the environment. It works to protect the public from radiation on behalf of the Ministry of Health and Care Services and other Ministries.

[The Norwegian National Research Ethics Committees](#) is the advisory and coordinating body for the seven Regional Committees for Medical and Health Research Ethics (REK). It handles complaints under the Health Research Act on REK decisions.

[The Research Council of Norway](#) is a government organisation that funds research in the public sector, in companies within all industries and in registered research organisations. By making these investments, the Research Council has the goal of achieving good public health and health services and fostering competitive health industries. Both basic and applied research ranging from health promotion, prevention, diagnosis, treatment, rehabilitation to streamlining of health and care services is funded. The Research Council has national responsibility for the dissemination of research results to the population through forums like research days, projects and competitions for children designed to foster interest in research.

[The Norwegian Strategy for Skills](#) to improve retention and recruitment of personnel is a cross-Ministerial endeavour which involves the Ministries of Labour and Social Affairs, Justice and Public Security, Local Government and Modernisation, Education and Research, and of Trade, Industry and Fisheries.

[The Norwegian Public Health Association](#) (NOPHA) aims to advance understanding and interest in research, education, management and practice in public health. This is achieved among other activities by [disseminating knowledge](#) to public health workers, bureaucrats, politicians, the media, and students including hosting regular scientific Public Health conferences.

[The Norwegian Women's Public Health Association](#) (*Norske Kvinners Sanitetsforening* – N.K.S) N.K.S. views women's living conditions as a multifaceted concept – thus their commitment covers a wide range of issues, including contributing to research on women's health as to working on behalf of women who have been exposed to violence and minority women and more generally, to improving women's rights in society. N.K.S works for women in all stages of life.

Regional

There are four regional health authorities in Norway

- Central Norway Regional Health Authority
- Northern Norway Regional Health Authority
- Southern and Eastern Norway Regional Health Authority
- Western Norway Regional Health Authority.

These regional health authorities are responsible for hospitals and their pharmacies, laboratories, psychiatry, ambulance services, emergency telephone operations which are important for:

- public health emergency management
- early detection of diseases
- assuring quality of health services
- advancing research.

[Regional Committees for Medical and Health Research Ethics](#) assess whether research projects involving humans, human biological material or health data is ethically justifiable. To conduct such research, REKs must provide approval.

Local

Municipalities are responsible for primary care and Public Health which includes:

- general practitioners (GPs)
- maternity and child health centres
- school health services
- immunisation centres
- long-term care and social services
- [implementing](#) infection control.

The municipalities implement measures to address public health challenges like addressing:

- childhood environments and living conditions
- housing, education, employment and income
- physical and social environments
- physical activity, nutrition
- injuries and accidents, tobacco use, alcohol use and use of other psychoactive substances.

Implementation of [disaster risk reduction](#) is the remit of municipalities. Municipalities are responsible for planning critical infrastructure, coordinating disaster preparedness and local preparedness planning.

The role of counties' is limited to providing dental care Public Health for children and some vulnerable populations.

Figure 7. Overview of Norway's Public Health System (own abstraction).

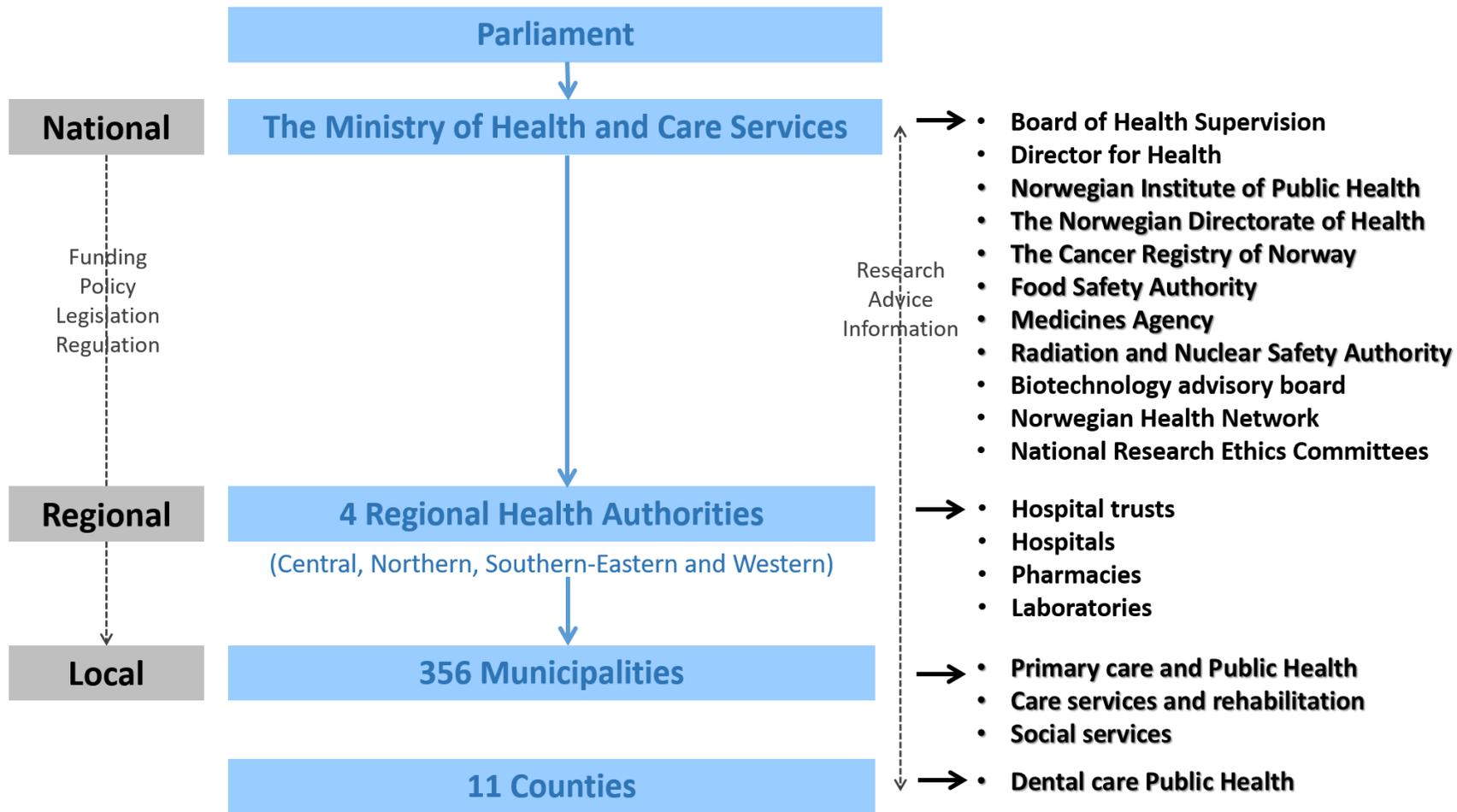


Table 7 Essential Public Health Functions and how they are delivered in Norway

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Norwegian Institute of Public Health monitors and evaluates the population's health status making the information available in the regularly updated Public Health Report. Risk factors for disease and other threats to health are presented in this report.
Public health emergency management (EPHF 2)	The Ministry of Justice and Public Security is responsible for civil protection and emergency planning. Implementation of disaster risk reduction is the remit of municipalities. Municipalities are responsible for planning critical infrastructure, coordinating disaster preparedness and local preparedness planning.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	The Ministry of Health and Care Services is responsible for delivering high-quality and uniform health and care services for the people of Norway. The Ministry achieves this mandate by way of broad legislation, comprehensive policy; governance is semi-decentralised.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	The Ministry of Health and Care Services provides yearly budgetary allocation to government institutions within its portfolio. The Norwegian Directorate of Health is an executive agency; it is a regulatory, professional and implementing authority for health policy under the Ministry of Health and Care Services. Its role includes monitoring conditions that affect Public Health and living conditions, the development of health and care services, giving advice and guidance on strategies and measures, and performing standardisation nationally.
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Norwegian Food Safety Authority is a national governmental body, which aims to ensure the safety of food and drinking water. It achieves its responsibilities by monitoring and inspection, drafting legislation, keeping abreast of developments in the field and advising government Ministries. The Norwegian Radiation and Nuclear Safety Authority is the national expert body in nuclear security, radiation use, natural radiation and radioactive contamination in the environment. The National Institute of Occupational Health, Statens arbeidsmiljøinstitutt (STAMI) is funded by the Ministry of Labour and Social Affairs. Its roles include promoting knowledge, finding relations between work, illness and health, evaluating risk factors, offering preventive measures and promoting knowledge of the relationship between work and health.
Promoting prevention and early detection of diseases including non-	The Norwegian Institute of Public Health's Division of Infection Control and Environmental Health works to prevent infectious diseases. The Cancer Registry of Norway collects data, produces statistics and undertakes cancer

<p>communicable and communicable diseases (EPHF 6)</p>	<p>screening for breast and cervical cancer. The Cancer Registry is part of the Southern-Eastern Regional Health Authority and collaborates with the Norwegian Institute of Public Health and Norwegian Directorate of Health. The Newborn Screening Programme is based at Oslo University Hospital. At a local level, municipalities implement infection control measures.</p>
<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Norwegian Institute of Public Health also works to improve general health by focusing on health promotion and the prevention of disease.</p>
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>The Research Council has national responsibility for the dissemination of research results to the population through forums like research days, projects and competitions for children designed to foster interest in research.</p>
<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>The Norwegian Strategy for Skills is a cross-ministerial endeavour to improve retention and recruitment of an adequate and skilled workforce which involves the Ministry of Labour and Social Affairs, the Ministry of Justice and Public Security, the Ministry of Local Government and Modernisation, the Ministry of Education and Research, and the Ministry of Trade, Industry and Fisheries.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The Ministry of Health and Care Services has overall responsibility for ensuring quality and access to healthcare.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The Norwegian National Research Ethics Committee is the advisory and coordinating body for the seven Regional Committees for Medical and Health Research Ethics. It manages complaints under the Health Research Act on regional committee decisions. The Research Council of Norway is a government organisation that funds research in the public sector, in companies within all industries and in registered research organisations. The Research Council has the goal of achieving good Public Health and health services and fostering competitive health industries. Both basic and applied research ranging from health promotion, prevention, diagnosis, treatment, rehabilitation to streamlining of health and care services is funded. For example, the University of Oslo, hosts the Cancer Registry of Norway which conducts research. Regional Committees for Medical and Health Research Ethics assess whether research projects involving humans, human biological material or health data are ethically justifiable.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The Norwegian Medicines Agency is under the Ministry of Health and Care Services. It aims to safeguard public and animal health by ensuring the efficacy, quality, safety and accessibility of medicines. The Norwegian Institute of Public Health contributes to health technology assessments.</p>

Sweden

Healthcare in Sweden is decentralised – responsibility lies with the regional councils and, in some cases, local councils or municipal governments.

Sweden is divided into 290 municipalities and 21 regional councils. The decentralisation of healthcare is regulated by the [Health and Medical Service Act](#). The role of the central government is to establish principles and guidelines, and to set the political agenda for health and medical care.

The [National Board of Health and Welfare](#) (*Socialstyrelsen*) is a government agency under the [Ministry of Health and Social Affairs](#) that compiles information and develops standards to ensure good health, social welfare and high-quality health and social care for the whole population.

Other ministries can also be directly or indirectly involved in matters related to public health. At the national level, there are also a number of agencies that are relevant to public health, with the Public Health Agency of Sweden being the leading one. Other relevant national agencies include the National Board of Health and Welfare, the National Food Agency, the Medical Products Agency, and agencies that do not fall under the Ministry of Health and Social Affairs, such as the Swedish Agency for Youth and Civil Society, Family Law and Parental Support Authority and the Swedish National Agency for Education.

The county administrative board that represents the national government in each county plays a particularly important role with regards to policies concerning alcohol, narcotics and tobacco. County councils and municipalities are represented at the national level by the Swedish Association of Local Authorities and Regions (SALAR), which participates on behalf of its members in discussions on policies regarding public health matters. In addition to these public authorities, there are a number of non-governmental organisations (NGOs) that are involved in specific public health issues, for example, promoting physical activity (such as the Swedish Sports Confederation).

National

The Ministry of Health and Social Affairs is responsible for issues concerning social welfare. This means promoting people's health and ensuring that sick people receive the care they need. The Ministry's area of responsibility includes insurance schemes that give people financial security when they are sick or elderly, or when their children are young. Issues such as individual and family care, support for people

with disabilities and care of the elderly are also included. The Ministry also works on rights for people with disabilities. Areas in which they work:

- children's rights
- disabilities
- Public Health and medical care
- social insurance
- social services including care for older people.

The [Public Health Agency of Sweden](#) is the key agency with responsibility for public health issues at the national level. The agency develops and supports activities to promote health, prevent illness and improve preparedness for health threats, with most of its activities being focused outside the health sector. This includes, environmental health and communicable diseases.

The Public Health Agency of Sweden is responsible for collecting and analysing data on the health status of the population. It disseminates scientifically-based knowledge to promote health and prevent disease and injury (with its website becoming an increasingly important dissemination channel). This constitutes a knowledge base that regions, county councils and municipalities use in their preventive work. However, the Agency does not assist in the actual implementation at local and regional levels.

The Agency is also responsible for:

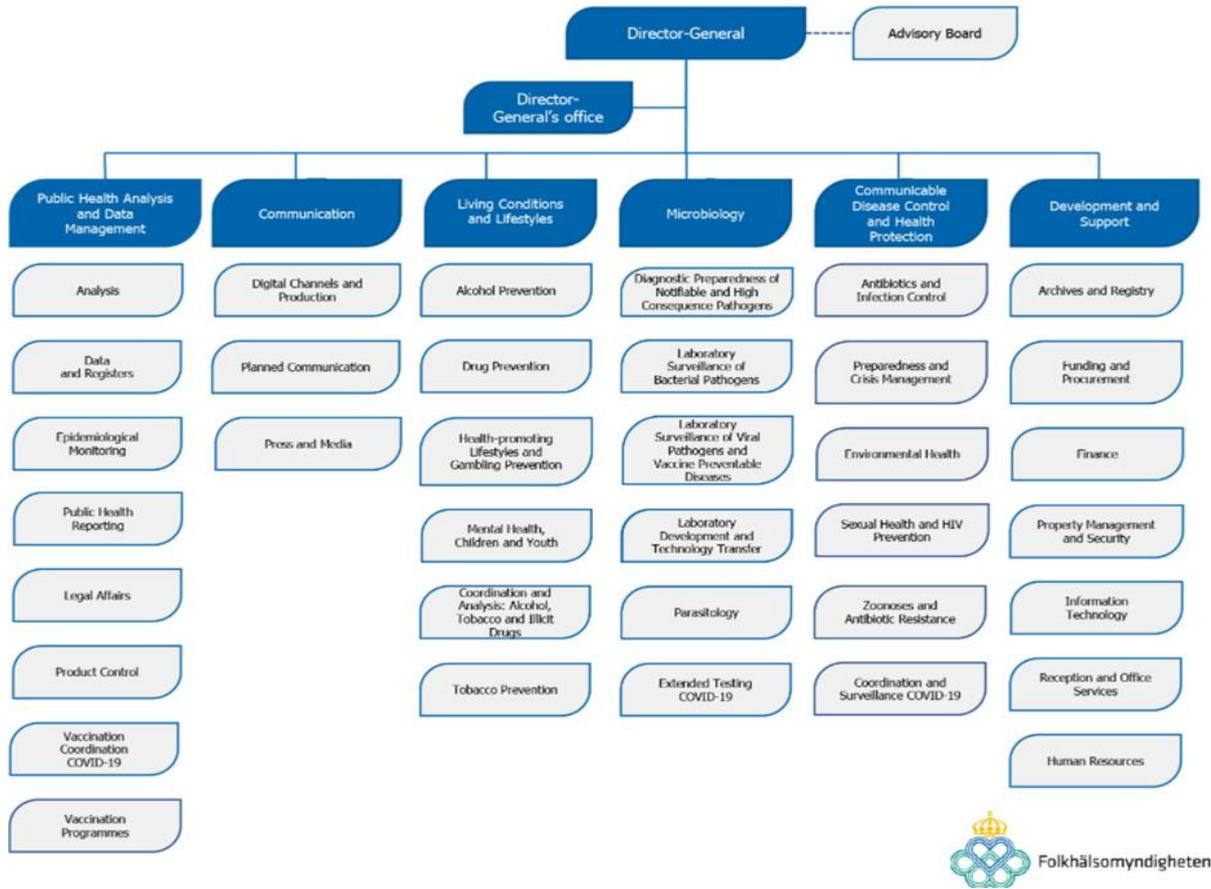
- health promotion in mental health, lifestyle and the physical environment
- coordinated monitoring of alcohol, narcotics and tobacco
- compiling analyses and disseminating knowledge to prevent illness
- the country's overall communicable disease control
- microbiological laboratory analysis, preparedness and outbreak support.

It is also engaged in public health work within organisations including the EU and the World Health Organization (WHO).

The Public Health Agency works on instruction from the [Ministry of Health and Social Affairs](#). The agency is accountable to the [government](#) through the Ministry.

The prioritised target groups for the agency are the Riksdag and government, governmental agencies, regions, municipalities, county administrative boards and various organisations.

Figure 8. Organisation chart for the Public Health Agency of Sweden.



The Public Health Agency of Sweden monitors the health status of the population continuously to ensure the early detection of changes. The work includes receiving reports of communicable diseases and monitoring the occurrence of diseases in general. They also develop systems to monitor public health and the factors that affect the health of the population and monitor the impact of the vaccination programme.

The Public Health Agency compiles, analyses and disseminates knowledge to support health promotion and preventive health work, in areas such as mental health, sexual health and lifestyle. They are also the national coordinating agency for suicide prevention. With regards to environmental health, their aim is to detect, prevent and eliminate health hazards in the physical environment and to promote positive environmental impacts on human health.

The agency is responsible for coordinated monitoring within alcohol, narcotics and tobacco and compiles, analyses and disseminates knowledge in order to prevent related illnesses. The agency also has responsibility for gambling. This includes overall supervision under the Alcohol and Tobacco Acts. In addition, the agency is responsible for establishing the basis for the classification of drugs and hazardous goods.

The Public Health Agency of Sweden has the overall national responsibility for protecting the population against communicable diseases and coordinates communicable disease control on a national level. They develop regulations, recommendations and guidance for healthcare professionals to ensure effective communicable disease control. The agency's responsibilities include vaccination programmes, emergency preparedness for health threats and national stockpiles of communicable disease medications. In addition, they coordinate national efforts concerning antibiotic resistance, infection control and healthcare-associated infections. Another field of work is their work to prevent HIV and sexually transmitted infections, where the agency is also responsible for national coordination.

The Public Health Agency of Sweden performs microbiological laboratory analysis including diagnostics and supports quality and method development at laboratories engaged in diagnostics of communicable disease pathogens. They also provide expert support to investigations of suspected or confirmed outbreaks of communicable diseases and maintain laboratory preparedness needed for effective communicable disease control in the country. They also provide operational support to the regions and municipalities during outbreaks.

The Public Health Agency of Sweden is actively engaged in Public Health work within organisations including the EU and the WHO. They are a national focal point for these organisations, in areas such as the protection and management of international health threats.

The [National Board of Health and Welfare](#) is a large government agency, engaged in a wide range of activities in the areas of social services, healthcare services and environmental health. The Board produces and develops statistics (on medicines, causes of death and financial support), regulations and a knowledge base for the government, for those working in health and medical care and social care, and for different groups in society, such as children, elderly people, and people with mental illnesses and disabilities. The Board monitors how health and social care functions where matters such as access to personnel, waiting times and accessibility are concerned. It also evaluates and issues licences for personnel in 21 occupational groups, including pharmacists, doctors, psychologists and dentists. They have national guidelines on how healthcare services should work to address individual health-related behaviours by supporting patients to change unhealthy lifestyles, for example through smoking cessation, increasing physical activity, reducing hazardous use of alcohol and changing unhealthy eating habits.

The emergency preparedness work at the National Board of Health and Welfare is part of the national system of emergency management in Sweden. The Board is responsible for strengthening preparedness in the health system and the social services in order for them to be able to respond to adverse events and to contribute to reducing the consequences of adverse events.

The Board also coordinates and monitors planning of civil preparedness in the health system and the social services. In the event of an emergency, the Board must inform the Government Offices and the [Swedish Civil Contingencies Agency](#) (Myndigheten för samhällsskydd och beredskap, MSB).

The National Board of Health and Welfare has the responsibility for the development and maintenance of expertise and for disseminating knowledge about disaster medicine and emergency preparedness in order to provide the Swedish health system and social services with assistance in times of emergency and disaster management. The Government has commissioned the Board to coordinate and prepare for availability of drugs and medical supplies as needed in a state of reinforced alert.

The [Dental and Pharmaceutical Benefits Agency](#) (TLV) is a central government agency whose remit is to determine whether a pharmaceutical product or dental care procedure shall be subsidised by the state. It also contributes to ensuring quality service and accessibility of pharmacies.

Health Information and Quality Authority

The [National Food Agency](#) is responsible for environmental issues in the food sector. It is an autonomous government agency reporting to the Ministry of Enterprise and Innovation. Its tasks include guiding consumers towards healthy dietary habits (through recommendations and communication); ensuring food safety, including controlling the quality of drinking water (carried out by the National Food Agency at the national level, the county administrations at the regional level and the municipal Environment and Health Protection Committees at the local level).

The [Swedish Work Environment Authority](#) is responsible for monitoring implementation of laws concerning the work environment (the Work Environment Act SFS 1977:1160). It is accountable to the Ministry of Employment. It carries out inspections that are aimed, among other things, at strengthening workplaces' own ability to prevent risks. It may impose penalties for breaching regulations.

The [Swedish Agency for Health Technology Assessment and Assessment of Social Services](#) (SBU) founded in 1987, is an independent national authority, tasked by the government with assessing healthcare interventions, covering medical, economic, ethical and social aspects. SBU assessments are based on systematic literature reviews of published research.

The implementation of public health policy is coordinated at the national level, but much of the responsibility for implementation lies with regions and county councils (with regard to health services) and municipalities (with regard, for instance, to environmental issues, physical planning, school education and other social services).

According to the 1982 Health and Medical Services Act, health promotion and disease prevention at the population level is the responsibility of county councils. County councils and regions (and not the healthcare providers) are ultimately responsible for health promotion and disease prevention. For that reason, each county council has some organisational structure for community-oriented health promotion and disease prevention.

County councils also have clinics for occupational and environmental medicine, with some outpatient services for referred patients with work or environment-related ill-health. County councils are also responsible for monitoring public health and the health of the population in general. Each county council or region has a medical officer for infectious diseases responsible for reporting the incidence of infectious diseases to the Public Health Agency of Sweden, which coordinates infectious disease control.

Municipalities have statutory responsibility for many important determinants of health such as child care, preschool activities, schools, care for older people, social services, planning and building issues, water and sewerage, and waste

management, and can additionally provide other services such as housing, energy, recreational activities, cultural activities and other services.

Health promotion and disease prevention are to a large degree integrated into the primary healthcare services provided by county councils. Primary healthcare services are offered to all free of charge for children, pregnant women and mothers. Preventive and health promotion services provided within curative care are usually directed at individual patients. They mainly comprise maternal and child health services.

The child health programme includes a series of scheduled visits for children aged 0–6 during which growth and development are monitored and childhood immunisations administered. Some vaccinations are delivered within school health services, which are operated by the municipalities and are available to primary and secondary school children.

Youth clinics, run jointly by the county councils and municipal social services, provide services to adolescents and young adults up to 24 years of age. The services are particularly focused on sexual health and contraceptive use. Youth clinics employ medical doctors, social workers, psychologists, and, in addition to health services, also provide social services.

Hospitals and specialist outpatient clinics mainly focus on curative treatment, but follow national guidelines regarding preventive measures for specific diseases.

Contact tracing is done by different levels of the health system, including primary care, and reported to the Public Health Agency. The overall responsibility for the control of infectious diseases lies with the county councils and regions.

Within healthcare services, the law on the free establishment of primary care clinics and the introduction of patient choice in primary care in 2010 made primary care doctors only responsible for the individuals on their lists and not for the population living in their vicinity, which had been the case previously.

While there is no permanent organisational structure for intersectoral cooperation in the area of Public Health, the Public Health Agency of Sweden has some responsibility for this at the national level, although it is not the only agency with such responsibilities. The Public Health Agency is the national coordinating agency for suicide prevention; is responsible for coordinated monitoring in the area of alcohol, narcotics and tobacco; is responsible for overall supervision under the Alcohol and Tobacco Acts; has overall national responsibility for protecting the population against communicable diseases and coordinates communicable disease control on a national level; coordinates national efforts concerning antibiotic

resistance, infection control and healthcare-associated infections; and is responsible for national coordination regarding prevention of HIV infections and STI (sexually transmitted infections).

General government grants are designed to reallocate some resources among poorer and richer municipalities and county councils. Targeted government grants finance specific initiatives, such as HIV/AIDS prevention. Otherwise, the county councils are responsible for financing and providing health services within their region, funded by their local taxes. As the responsibility for organising and financing healthcare rests with the county councils and municipalities, services vary throughout the country. County councils regulate the establishment of new private primary care practices that are eligible for public funding through conditions for accreditation. A private healthcare provider must have an agreement with the county council in order to be publicly reimbursed. It is up to each county council to decide on the mechanisms for paying providers. Therefore, provider payment varies across the country.

Every year, certain indicators are compared across different county councils in the so-called "Open Comparisons". These indicators can include both determinants of health as well as health outcomes. They also contain information on quality, results and costs within several areas that municipalities, county councils and regions are responsible for, including public health, healthcare, social care, safety, compulsory and upper secondary school. The open comparisons are published by the National Board of Health and Welfare, the Swedish Association of Local Authorities and Regions and the Public Health Agency of Sweden.

The implementation of Public Health policy is coordinated at the national level by the Public Health Agency of Sweden, but much of the responsibility for implementation lies with regions, county councils and municipalities. Health promotion and disease prevention are to a large degree integrated into the primary healthcare services provided by county councils.

Regional

Swedish policy states that every regional council must provide residents with good-quality health and medical care, and work to promote good health for the entire population. Regional councils are political bodies whose representatives are elected by region residents.

Sweden's municipalities are responsible for care for the elderly in the home or in special accommodation. Their duties also include caring for people with physical disabilities or psychological disorders and providing support and services for people released from hospital care and school healthcare.

Most healthcare is decentralised to County councils. Regions enjoy considerable freedom of action. Healthcare is the primary responsibility for the County Administrative board, over other policy areas.

Regional authorities are responsible for:

- provision of good-quality health and medical care (medical centres, doctors' surgeries, district nursing clinics, hospitals, university hospitals)
- promotion of good health
- dental care for local residents up to the age of 23.

Local

Some aspects of healthcare are decentralised to the municipal level. Local authorities enjoy a considerable freedom of action.

Municipal authorities are responsible for:

- elderly care
- care for the disabled
- support and services for people released from hospital care
- school healthcare
- emergency and rescue services.

Table 8 Essential Public Health Functions and how they are delivered in Sweden

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Public Health Agency of Sweden monitors the health status of the population continuously to ensure the early detection of changes. The National Board of Health and Welfare (Socialstyrelsen) is a government agency under the Ministry of Health and Social Affairs that compiles information and develops standards for health and social care for the whole population.
Public health emergency management (EPHF 2)	The Public Health Agency of Sweden has the overall national responsibility for protecting the population against communicable diseases and coordinates communicable disease control on a national level. The National Board of Health and Welfare is responsible for strengthening preparedness in the health system and the social services in order for them to be able to respond to adverse events. They also disseminate knowledge about disaster medicine and emergency preparedness.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	The decentralisation of healthcare is regulated by the Health and Medical Service Act. The role of the central government is to establish principles and guidelines, and to set the political agenda for health and medical care.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	National government grants are designed to reallocate some resources among poorer and richer municipalities and county councils. Targeted government grants finance specific initiatives, such as HIV/AIDS prevention. The Ministry of Health and Social Affairs is responsible for insurance schemes that give people financial security when they are sick or elderly, or when their children are young. The responsibility for organising and financing healthcare rests with the county councils (21 regional level councils) and municipalities (290 local municipalities).
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Swedish Food Agency is tasked with guiding consumers towards healthy dietary habits (through recommendations and communication), ensuring food safety and controlling the quality of drinking water (carried out by the National Food Agency at the national level). The Swedish Work Environment Authority is responsible for monitoring implementation of laws concerning the work environment. The Public Health Agency of Sweden also have a role in detecting, preventing and eliminating health hazards in the physical environment, to promote positive environmental impacts on human health. At a regional level, the county administrations are responsible for guiding healthy dietary habits, food safety and clean drinking water (21 regional councils). At a local level, the municipal Environment and Health Protection Committees are responsible for guiding healthy dietary habits, food safety and clean drinking water (290 local municipalities).

Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	The National Board of Health and Welfare develops national guidelines on how healthcare services should work to address individual health-related behaviours by supporting patients to change unhealthy lifestyles. These guidelines are implemented by the Public Health Agency of Sweden at a national level.
Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)	The Public Health Agency of Sweden compiles, analyses and disseminates knowledge to support health promotion and preventive health work, in areas such as mental health, sexual health and lifestyle. This includes outdoor life, food and physical activity and health in different groups (for example, children and young people, disability, healthy aging, migration health and minority groups).
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	The Public Health Agency of Sweden develops and supports activities to promote health, prevent illness and improve preparedness for health threats. They also actively engage in public health work within organisations including the WHO and the EU.
Ensuring adequate quantity and quality of public health workforce (EPHF 9)	The governmental agency of the Swedish Agency for Health and Care Services Analysis has a mandate to assess current and future supply of different staff categories and issue recommendations to the Ministry of Health regarding training admissions and to the municipalities about the specialist distribution of physicians and dentists.
Assuring quality of and access to health services (EPHF 10)	Quality assurance and performance management indicators are published by the National Board of Health and Welfare, the Swedish Association of Local Authorities and Regions and the Public Health Agency of Sweden and compared across different county councils. The National Board of Health and Welfare also monitors how health and social care functions with respect to issues such as access to personnel, waiting times and accessibility.
Advancing public health research (EPHF 11)	The Public Health Agency of Sweden conducts research aimed at strengthening national and European preparedness for outbreaks of severe communicable diseases. Additionally, the Agency leads or participates in several international research projects concerning haemorrhagic fevers, and is a member of several national and European networks. The Agency can also offer external researchers the opportunity to conduct projects in the high-containment laboratories.
Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)	The Dental and Pharmaceutical Benefits Agency (TLV) is a central government agency that determines whether a pharmaceutical product or dental care procedure should be subsidised by the state. The Medical Products Agency is the Swedish national authority responsible for the regulation and surveillance of the development, manufacture and sale of drugs and other medicinal products. The Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) is tasked by the government with assessing healthcare interventions, covering medical, economic, ethical and social aspects.

England

Responsibility for publicly funded healthcare rests with the Secretary of State for Health, who is accountable to the United Kingdom Parliament. The Department of Health and Social Care (DHSC) is the central government body responsible for setting policy on the NHS, public health, adult social care and other related areas. In relation to the NHS in England, the Department of Health retains its responsibility for overall stewardship of the system, but manages the NHS using Arm's Length Bodies (ALBs). This means that the Department of Health is not directly involved in operational matters and relies on ALBs who commission and regulate care.

National

[Public Health England](#) (PHE) was set up as an executive agency of the [Department of Health and Social Care](#) (DHSC) which is the expert national public health agency which fulfils the Secretary of State for Health and Social Care's statutory duty to protect health and address inequalities, and promote the health and wellbeing of the nation. PHE had operational autonomy from DHSC and had an Advisory Board with a non-executive Chair and non-executive members. PHE was responsible for health protection and ensuring there were effective arrangements in place nationally and locally for preparing, planning and responding to health protection concerns and emergencies, including the future impact of climate change. PHE provided specialist health protection, epidemiology and microbiology services across England. PHE was responsible for health prevention, population health and reducing health inequality by advising government and supporting action by local government, the NHS and the public. PHE supported local authorities and the NHS to plan and provide health and social care services such as immunisation and screening programmes and to develop the public health system and its specialist workforce. PHE was also responsible for researching, collecting and analysing population health data to improve the understanding of public health challenges and to answer public health problems.

In October 2021 there was a [re-organisation from Public Health England](#) to UK Health Security Agency (UKHSA) and Office for Health Improvement and Disparities (OHID). The Government [has said](#) that responsibility for non-health protection functions, like health improvement, remain under consideration. In the DHSC's February 2021 paper on [legislative proposals for a Health and Care Bill](#), it was noted

that proposals for the future design of the public health system would be published “in due course”.

The [UK Health Security Agency](#) (UKHSA), previously the National Institute for Health Protection, is responsible for monitoring infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. UKHSA provides intellectual, scientific and operational leadership at the national and local level. UKHSA is an executive agency, sponsored by the Department of Health and Social Care. The health protection capabilities of PHE and NHS Test and Trace have been combined into the UKHSA. UKHSA will play a key role in preparedness of the wider health protection system for future public health emergencies, including pandemics. UKHSA will deliver UK-wide functions in line with its remit, and those that are carried out under collaborative arrangements.

UKHSA has a leadership role in protecting the public’s health, supporting the public health system to be ready for threats through working constructively with the department, including the Office for Health Improvement and Disparities, Transformation Directorate (lead on health and social care data policy), central government departments, local government, devolved administrations, the wider NHS and health and social care partners.

The Secretary of State and junior minister with lead responsibility for UKHSA have ministerial responsibility for, and oversight of, UKHSA delivery and performance as an integral part of the public health system. This includes being accountable to Parliament in relation to the functions and performance of UKHSA. The Permanent Secretary of the department is the principal accounting officer (PAO) and is appointed the UKHSA’s chief executive.

The UKHSA will build on the ‘local first’ approach and experience of the existing system, working closely with councils and local directors of public health to ensure the service is responsive to the health needs of local communities. This will include:

- supporting all four CMOs with scientific and analytical advice and insights
- PHE local health protection teams to deal with infections and other threats
- support and resources for local authorities to manage local outbreaks
- COVID-19 testing programme
- contact tracing
- the Joint Biosecurity Centre
- emergency response and preparedness to deal with the most severe incidents at national and local level

Health Information and Quality Authority

- the National Infections Services, for example field services and scientific campuses at Colindale and Porton Down
- the regional and specialist public health microbiology laboratory network
- the Centre for Radiation, Chemical and Environmental Hazards
- global health security capability
- the UK public health rapid support team (joint with the London School of Hygiene and Tropical Medicine)
- research and knowledge management, and working with academic partners through Health Protection Research Units
- providing specialist scientific advice on immunisation and countermeasures.

[NHS Digital](#) and NHSX which lead digital transformation of health and social care were incorporated into NHS England and NHS Improvement. NHS Digital designs, develops and operates the national IT and data services that support clinicians at work and uses data to improve health and care.

The [Office for Health Improvement and Disparities](#) (OHID) became fully operational on 1 October 2021. It is situated in the Department of Health and Inequality and is the main driver in coordination with local and central government, the NHS and wider society – using expert advice, analysis, and evidence – focused on reducing the burden of preventable illness and disease on society and the healthcare system, and that of health inequalities across the UK. The new unit for national health improvement and promotion is [said](#) to use Singapore-style incentive schemes involving the private sector to encourage people to eat healthily and exercise more. Key responsibilities are national health improvement, prevention of poor health, and tackling health disparities:

- building the scientific evidence, leading and developing the policy, and delivering core services around:
 - healthy weight, healthy diet and physical activity
 - improving the health of children and families
 - smoking, addiction and the health of vulnerable groups
- leading the policy development and supporting the effective delivery of prevention services, helping individuals to better understand and manage their health
- building the scientific evidence on public mental health.

Through a Work and Health joint unit with the Department for Work and Pensions, OHID leads on driving improvements in health and work outcomes. OHID is responsible for public health analysis in the following areas:

[Health Information and Quality Authority](#)

- leading public health data management and analysis, publishing official statistics, statistical reports and analytical products
- delivering system-wide leadership, skills and knowledge transfer in public health analysis, epidemiology and data science
- leading surveillance of non-communicable disease.

The majority of public health service providers commissioned by OHID or local authorities are required to register with the Care Quality Commission (CQC), the independent regulator of health and social care in England.

Health Education England is the body responsible for planning and implementing NHS training and workforce development. It funds specialist training posts in public health and public health training within clinical specialties.

The [Health Research Authority](#) ensure health and social care research is high-quality and improves people's health and wellbeing. The Authority protects and promotes the interests of patients and the public in health and social care research.

The [National Institute for Health and Care Excellence](#) (NICE) produces evidence-based guidance and advice for health, public health and social care practitioners, develops quality standards and performance metrics for those providing and commissioning health, public health and social care services and provides a range of information services for commissioners, practitioners and managers across health and social care.

The UK Faculty of Public Health of the Royal Colleges of Physicians of London, Glasgow and Edinburgh is the standard-setter for public health specialists. It is responsible for recruitment to specialist grades, examinations, recruitment advice to public health employing authorities and setting the curriculum for specialist public health. It also plays a public policy advocacy role.

Regional

There are four NHS regions in England (North, South, London and, Midlands and East). OHID supports the delivery of national and regional priorities for prevention and health inequalities and ensures a joined-up approach to public health, building strong interfaces with different teams and areas of public health across the regional system. According to proposals, the NHS and local authorities will be given a duty to collaborate with each other. They will also bring forward measures for statutory [Integrated Care Systems](#) (ICSs). ICSs are partnerships between the organisations that meet health and care needs across an area, to coordinate services and to plan in a way that improves population health and reduces inequalities between different

groups. Population health is one of the core strategic aims for ICSs; to improve physical and mental health outcomes, promote wellbeing and reduce health inequalities across an entire population, with a specific focus on the wider determinants of health (e.g. housing, employment, education). These will comprise an ICS Health and Care Partnership, bringing together the NHS, local government and partners, and an ICS NHS Body. A key responsibility for these systems will be to support place-based joint working between the NHS, local government, community health services, and other partners such as the voluntary and community sector. Frequently, place level commissioning within an integrated care system will align geographically to a local authority boundary, and the Better Care Fund (BCF) plan will provide a tool for agreeing priorities. This will be further supported by other measures including improvements in data sharing and enshrining a 'triple aim' for NHS organisations to support better health and wellbeing for everyone, better quality of health services for all, and sustainable use of NHS resources. For public health, alongside the population health element of the "triple aim", it is intended to bring forward measures to: make it easier to secure rapid change updates in NHS England public health functions; help tackle obesity by introducing further restrictions on the advertising of high fat, salt and sugar foods; as well as a new power for Ministers to alter certain food labelling requirements.

Local

Local authority departments have been responsible for delivery and enforcement of public health powers relating to housing, trading standards and environmental health issues since the Public Health Act 1936. However, the Health and Social Care Act 2012 additionally transferred powers for planning, commissioning and delivery of local public health priorities to local authorities. Upper tier and unitary local authorities are now responsible for health improvement and are mandated to define and provide services to achieve locally determined public health priorities.

Local health policy is coordinated through local Health and Wellbeing Boards. These are led by local authorities, but with a prescribed minimum membership to include council cabinet members for health and social care, GPs, directors of social care, the local Director of Public Health, and a local representative of Healthwatch. Local authorities can also include other relevant health contributors such as police and fire service representatives, and NGOs. Local authorities are expected to produce a health and wellbeing strategy agreed and adopted through the Health and Wellbeing Board and to produce joint strategic needs assessments, which form the basis for their priority setting.

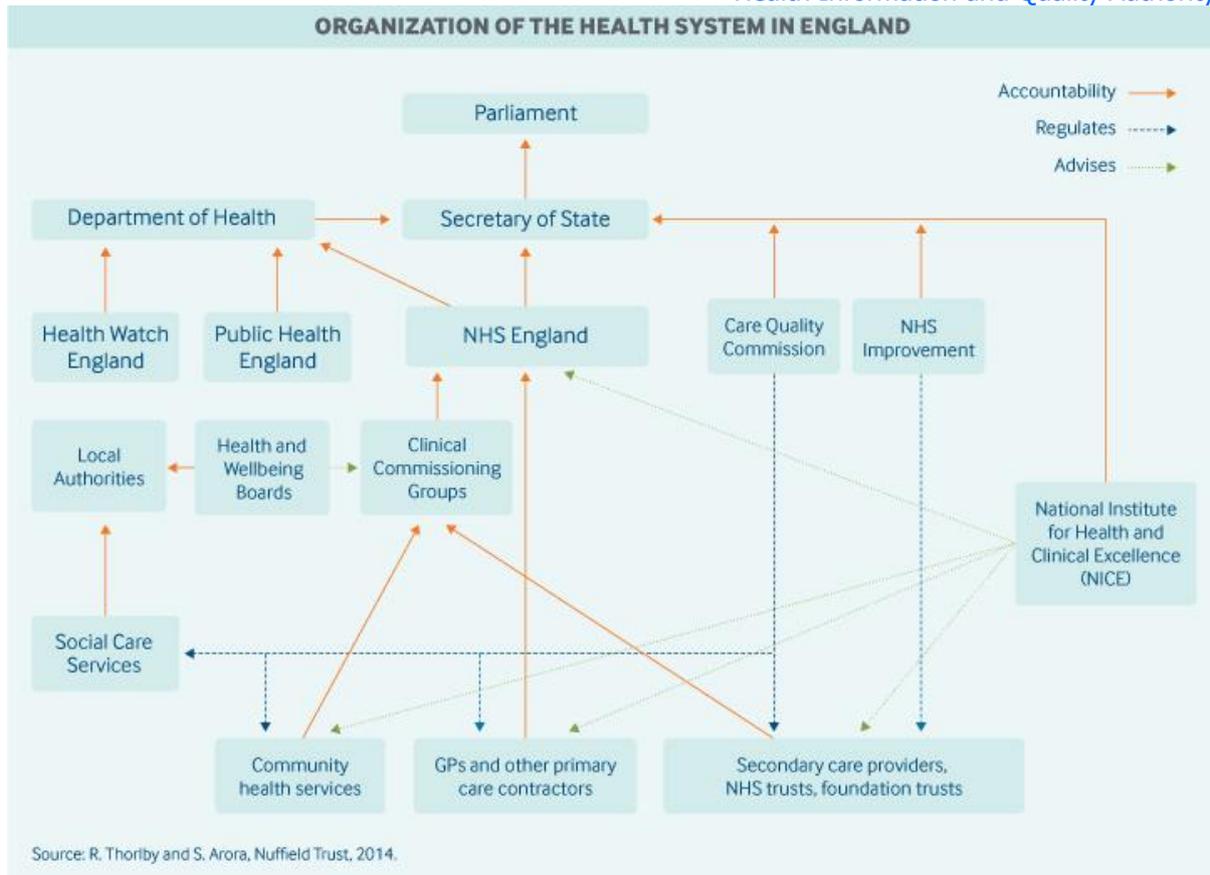
Healthwatch committees are patient and public involvement bodies. These were established in 2012 at the local level and supported under service agreements by local authorities. A national Healthwatch England has a clear mandate to be involved with and contribute to preventive and public health measures in its areas, although the major part of its agenda is related to clinical care.

Local authority Directors of Public Health must be assured of the local capacity and arrangements for responding to emergencies and play a key role in local emergency planning and local infection control.

Upper tier and unitary local authority have a legal duty to improve the public's health and local Health and Wellbeing Boards bring together key local partners (including [Clinical Commissioning Groups](#) (CCGs) who have a duty to address health inequalities) to agree local priorities. UKHSA supports local authorities, and through them, CCGs by providing evidence and knowledge on local health needs, alongside practical and professional advice on what to do to improve health, and by taking action nationally where it makes sense to do so. UKHSA in turn is the public health adviser to NHS England.

CCGs are groups of general practices (GPs) which come together in each area to commission services for their patients and population. This includes buying services for their local community from any service provider that meets NHS standards and costs – these could be NHS hospitals, social enterprises, voluntary organisations or private sector providers. CCGs commission a wide range of services including mental health services, urgent and emergency care, elective hospital services, and community care. CCGs are responsible for about 60% of the NHS budget, they commission most secondary care services, and play a part in the commissioning of GP services.

Figure 9. Organisation of the Health System in England (Image from [Commonwealth Fund](#)).*



*This figure was developed prior to the establishment of UKHSA, which replaced Public Health England.

Table 9 Essential Public Health Functions and how they are delivered in England

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Office for Health Improvement and Disparities (OHID) is situated in the Department of Health and Inequality. Together with local and central government, the NHS and wider society, OHID uses expert advice, analysis, and evidence to reduce the burden of preventable illness and disease on society and the healthcare system, and that of health inequalities. The OHID leads on Public Health data management and analysis, publishing official statistics, statistical reports and analytical products. NHS Digital designs, develops and operates the national information technology and data services that support clinicians at work and uses data to improve health and care.
Public health emergency management (EPHF 2)	The UKHSA includes the Joint Biosecurity Centre, COVID-19 response, Emergency Preparedness and Response (EPR) functions and the NHS Test and Trace service. The UKHSA and the Department of Health and Social Care have specific responsibilities for planning for and managing the response to emergencies and health protection incidents and outbreaks in an extended team that works across government. At a local level, Local Resilience Forums (LRFs) are multi-agency partnerships made up of representatives from local public services, including the emergency services, local authorities, the NHS, the Environment Agency and others. These agencies are known as Category 1 Responders, as defined by the Civil Contingencies Act. LRFs are supported by organisations, known as Category 2 responders, such as the Highways Agency and public utility companies. They have a responsibility to co-operate with the Category 1 organisations and to share relevant information with the LRFs. The geographical area the forums cover is based on police areas. LRFs also work with other partners in the military and voluntary sectors who provide a valuable contribution to the work of LRFs in emergency preparedness.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	The Care Quality Commission (CQC) monitors, inspects and regulates services to make sure they meet fundamental standards of quality and safety. It publishes findings, including performance ratings to help people choose care. It aims to achieve equality of access, experiences and outcomes from health and social care services.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF4)	NHS England and NHS Improvement operate as a single organisation to better support the NHS to deliver improved care for patients. NHS Business Services Authority is an Arm's Length Body of the Department of Health and Social Care. The NHS Business Services Authority manages over £35 billion of NHS spend annually delivering a range of national services to NHS organisations, NHS contractors, patients and the public.
Protecting populations against health threats, including environment and occupational	The UKHSA includes the Joint Biosecurity Centre, Science hub, National Infection Service, National Disease Registration, Global Public Health (Health Protection) and other health protection functions of the former Public Health England. It is overseen by the Chief Medical Officer. The UKHSA is responsible for protecting communities

<p>hazards, food safety, chemical and radiation hazards (EPHF 5)</p>	<p>from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. At a local level, UKHSA (formally NIHP) supports local health protection teams to deal with infections and other threats and provides support and resources for local authorities to manage local outbreaks.</p>
<p>Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)</p>	<p>The Office for Health Improvement and Disparities (OHID) focuses on national health improvement, health prevention and tackling health disparities. It brings together expert advice, analysis and evidence with policy development and implementation to shape and drive health improvement and equalities priorities for government. At a regional level, OHID supports the delivery of national and regional priorities for prevention and health inequalities and ensuring a joined-up approach to Public Health, building strong interfaces with different teams and areas of Public Health across the regional system. At a local level, an integrated, place based model of prevention has been adopted whereby multiple actors interface to decide the appropriate focus for Public Health in a particular Trust. Integrated Care Systems (ICSs) are partnerships between the organisations that meet health and care needs across an area.</p>
<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>The Office for Health Improvement and Disparities (OHID) is responsible for tackling health inequalities across England. It is situated under the department, co-lead by the Deputy Chief Medical Officer and a Director General. With leadership coming from the CMO. The Office for Health Promotion operates under the Department of Health and Social Care (DHSC) and works across both national and local government as well as with the NHS, academia, the third sector, scientists, researchers and industry to develop evidence informed policies aimed at improving the nation's health by tackling obesity, improving mental health and promoting physical activity. At a regional level, the OHID supports the delivery of national and regional priorities for prevention and health inequalities and ensuring a cohesive approach to Public Health, building strong interfaces with different teams and areas of Public Health across the regional system. At a local level, the OHID provide evidence and support for local government on policy decisions for health improvement. Upper tier and unitary local authority have a legal duty to improve the public's health and local Health and Wellbeing Boards bring together key local partners (including Clinical Commissioning Groups (CCGs) who have a duty to address health inequalities) to agree local priorities. At regional and local levels, Integrated Care Systems coordinate services to improve population health and reduce inequalities between different groups across specific areas. Population health is one of the core strategic aims for Integrated Care Systems. That is, to improve physical and mental health outcomes, promote wellbeing and reduce health inequalities across an entire population, with a specific focus on the wider determinants of health (for example, housing, employment and education).</p>

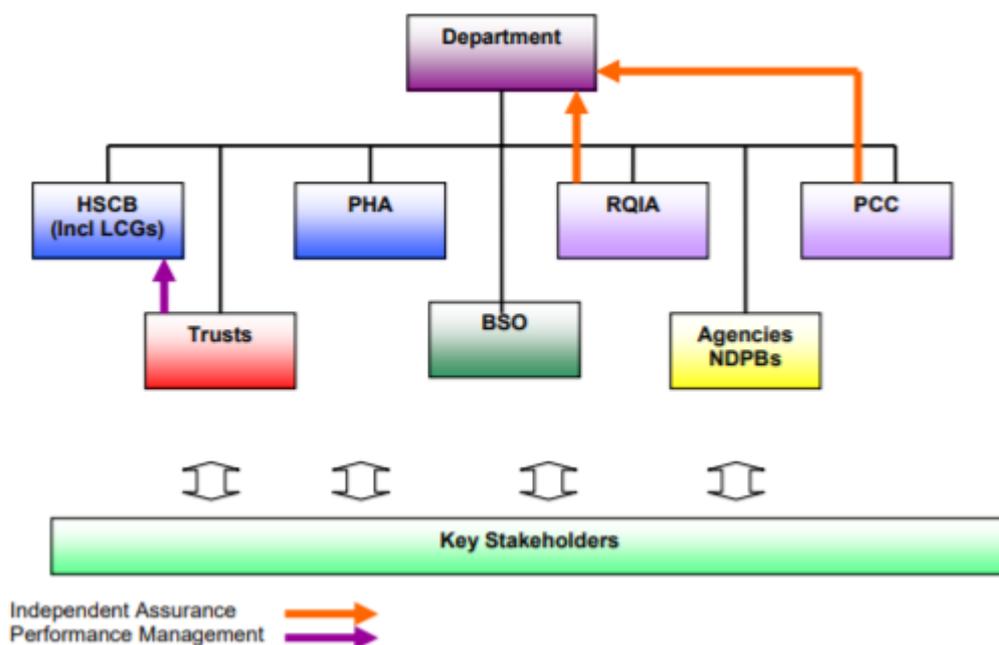
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>Public and community engagement happens across the Public Health system and involves various levels of engagement. For example, the NHS Assembly brings together a range of individuals from across the health and care sectors at regular intervals to advise the joint boards of NHS England and NHS Improvement on delivery of the NHS Long Term Plan (LTP). The National Institute for Health Research (NIHR) involves the public in suggesting research questions, providing an opinion on potential research, and by joining one of their decision-making committees. NHS England involves patients and the public in Public Health commissioning to design and deliver services that meet the needs of people in contact with these services. The National Institute for Health and Care Excellence (NICE) involves patients, users and voluntary and community sector organisations in the development of guidelines and standards, producing supporting material, topic identification; these groups are also invited to share their experiences to inform guidance and standards. The Care Quality Commission (CQC) involves patients and users via an online portal to improve care, produce and promote simple, clear and concise information for the public, engaging at an early stage in the co-production of policies, plans and processes. At a local level, Healthwatch committees are patient and public involvement bodies. These are supported under service agreements by local authorities. Their mandate is to be involved with, and contribute to, preventive and Public Health measures in their areas.</p>
<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>Health Education England is the body responsible for planning and implementing NHS training and workforce development. It funds specialist training posts in Public Health and Public Health training within clinical specialties.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The National Quality Board (NQB) provides advice, recommendations and endorsement on matters relating to quality, and acts as a collective to influence, drive and ensure system alignment of quality programmes and initiatives. The Care Quality Commission (CQC) monitors, inspects and regulates services to make sure they meet fundamental standards of quality and safety. It publishes findings, including performance ratings to help people choose care. It also works to tackle inequalities in health and care and aims to achieve equality of access, experiences and outcomes from health and social care services. The National Institute for Health and Care Excellence (NICE) provides national guidance and advice to improve health and social care.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The National Institute for Health Research (NIHR) (working in partnership with the NHS, universities, local government, other research funders, patients and the public) funds, enables and delivers health and social care research to improve people's health and wellbeing. They are centred in England but collaborate closely with the devolved administrations in Scotland, Wales and Northern Ireland. The Clinical Practice Research Datalink (CPRD) is a real-world research service supporting retrospective and prospective Public Health and clinical studies. CPRD is jointly sponsored by the Medicines and Healthcare products Regulatory Agency and the NIHR, as part of the Department of Health and Social Care. The Health Research Authority ensures health and social care research is</p>

	<p>high-quality and improves people’s health and wellbeing. They protect and promote the interests of patients and the public in health and social care research through ensuring research is ethically reviewed and approved, promoting transparency in research and overseeing a range of committees and services. They also coordinate and standardise research regulatory practice and provide independent recommendations on the processing of identifiable patient information where it is not always practical to obtain consent, for research and non-research projects.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The role of the National Institute for Health and Care Excellence (NICE) is to improve outcomes for people using the NHS and other Public Health and social care services. They produce evidence-based guidance and advice for health, Public Health and social care practitioners, develop quality standards and performance metrics for those providing and commissioning health, Public Health and social care services, provide a range of information services for commissioners, practitioners and managers across health and social care. The National Institute for Biological Standards and Control (NIBSC) plays a major national role in assuring the quality of biological medicines through developing standards and reference materials, product control testing and carrying out applied research.</p> <p>Medicines and Healthcare products Regulatory Agency (MHRA) ensures that medicines, medical devices and blood components for transfusion meet applicable standards of safety, quality and efficacy. They ensure that the supply chain for medicines, medical devices and blood components is safe and secure. They help educate the public and healthcare professionals about the risks and benefits of medicines, medical devices and blood components, leading to safer and more effective use. They support innovation and research and development that’s beneficial to public health. They influence UK and EU regulatory frameworks so that they’re risk-proportionate and effective at protecting public health.</p>

Northern Ireland

The Health and Social Care (Reform) Act (Northern Ireland [NI]) 2009 (“[the Reform Act](#)”) provides the legislative framework within which the health and social care (HSC) structures operates. It sets out the high level functions of the various health and social care bodies. It also provides the parameters within which each body must operate, and describes the necessary governance and accountability arrangements to support the effective delivery of health and social care in NI.

Figure 10. Health and Social Care structure in Northern Ireland (Image from [DHSSPS Framework Document - September 2011](#)).



Key: BSO, Business Services Organisation; HSCB, Health and Social Care Board; LCGs, Local Commissioning Groups; PCC, Patient and Client Council; PHA, Public Health Agency; RQIA, Regulation and Quality Improvement Authority; Agencies, Special Agencies (Northern Ireland Blood Transfusion Service, Northern Ireland Medical and Dental Training Agency and Northern Ireland Guardian ad Litem Agency).

National

In terms of service commissioning and provision, the Department of Health discharges this duty primarily by delegating the exercise of its statutory functions to

the Health and Social Care Board (HSCB) and the Public Health Agency (PHA) and to a number of other health and social care (HSC) bodies created to exercise specific functions on its behalf. All these HSC bodies are accountable to the Department of Health which in turn is accountable, through the Minister, to the Assembly.

The HSCB is responsible and accountable for the commissioning of services, resource allocation and performance management, while the primary objective of the PHA is to protect and improve the health and social well-being of the Northern Ireland population.

The following principles apply in relation to the funding arrangements for the HSCB and the PHA:

- Each body receives the bulk of its funding directly from the Department of Health and each organisation remains separately accountable for all of the funds allocated to it
- In accordance with the detailed commissioning arrangements, the funds allocated to the HSCB are:
 - committed to secure the provision of health and social care services for local populations from the six HSC Trusts (five HSC Trusts provide integrated health and social care services across Northern Ireland and the sixth Trust is the Northern Ireland Ambulance Service, which operates a single Northern Ireland wide service), Family Health Services and other providers, consistent with the approved Commissioning Plan
 - used for staffing, goods and services associated with the discharge of its functions
- The PHA directly funds initiatives related to its core roles of health improvement, screening or health protection activity, partnership working with local government, staffing and goods and services. Plans for use of the PHA's funding are incorporated within the Commissioning Plan, developed by the HSCB in consultation with and the agreement of the PHA. Similarly, services commissioned by the PHA from HSC Trusts and independent practitioners are reflected in the Commissioning Plan as appropriate.

Commissioning includes the following activities:

- assessing the health and social well-being needs of groups, populations and communities of interest
- prioritising needs within available resources

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- building the capacity of the population to improve their own health and social well-being by partnership working on the determinants of health and social well-being in local areas
- engaging with patients/clients/carers/families and other key stakeholders and service providers at local level in planning health and social care services to meet current and emerging needs
- securing, through service and budget agreements, the delivery of value for money services that meet standards and service frameworks for safe, effective, high quality care
- safeguarding the vulnerable
- using investment, performance management and other initiatives to develop and reform services.

In the context of the integrated health and social care system in Northern Ireland, commissioning should be seen as a cycle. Throughout this cycle, the HSCB and its local commissioning groups (LCGs) engage with stakeholders, including service providers, at a regional and local level.

The PHA is the lead agency for regional implementation of the [Making Life Better 2012–2023](#) public health strategic framework. The framework provides direction for policies and actions to improve the health and wellbeing of people in Northern Ireland.

Working across sectors, implementation focuses on strengthening collaboration and coordination to deliver on shared strategic priorities across sectors at a regional level, and on supporting implementation at a local level.

To do this, the PHA launched the Making Life Better Regional Network on 4 June 2019. The aim of the network is to:

- further develop and enable a connected whole-system approach
- share learning and inform each other's efforts
- create new connections and strengthen existing ones
- work closer together in pursuit of the goal of a healthier Northern Ireland
- showcase, expand and spread good practice across the region in line with the needs of local communities.

The [Health Protection Service](#) has a lead role in protecting the population from infection and environmental hazards through a range of core functions including surveillance and monitoring, operational support and advice, education, training and research. The Health Protection Service is delivered by a multi-disciplinary team of

doctors, nurses, emergency planners, and scientific, surveillance and administrative staff. Multi-disciplinary, consultant-led health protection teams have been developed around key work areas. Surge capacity for major incident response is provided by a range of staff from across the PHA. Essential public health functions delivered include:

- monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health
- Public health emergency management
- protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards
- promoting prevention and early detection of diseases including non-communicable and communicable diseases.

Key areas include:

- [Sexual health promotion](#)
- [Five-year action plan for tackling antimicrobial resistance](#)
- [COVID-19 pandemic surge planning strategic framework 6 October 2020](#)
- [COVID-19 response strategy update April 2021](#)
- [Making Life Better - a whole system framework for public health \(2013-23\)](#)
- Immunisation/vaccine preventable diseases. Key areas of ongoing work include:
 - maintaining and improving vaccine uptake rates
 - training of health professionals and students in vaccination programmes
 - introducing new vaccine programme updates
 - screening healthcare workers and vaccinating those not immune
 - responding to cases of vaccine preventable diseases

At a regional level, PHA staff provide particular expertise on service evaluation and review, assessment of the health and wellbeing needs of the population, and evidence-based practice.

They also have a key role in supporting the development, implementation and evaluation of regional service frameworks. For example:

- screening
- eye health and safety
- Group B Streptococcus and pregnancy

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- NIMACH (Northern Ireland Maternal and Child Health) collects and analyses data in support of Clinical Outcome Review Programmes
- NICORE
- commissioning teams
- Northern Ireland Cerebral Palsy Register
- Northern Ireland Cancer Registry.

The [Regulation and Quality Improvement Authority](#) (RQIA) is the independent health and social care regulatory body for Northern Ireland. RQIA encourages continuous improvement in the quality of these services through a programme of inspections and reviews. This is also provided regionally across Northern Ireland.

HSC R&D Division is part of the Public Health Directorate. The DPH and HSC R&D Division are also supported by the Director of R&D for the HSC and Chief Scientific Advisor to the DOH. An [R&D Strategic Advisory Group](#) is in place to advise the Director of R&D.

The work of HSC R&D is based on the principle that the best health and social care must be underpinned by knowledge, based on well conducted research, which can then be applied in the delivery of care.

HSC R&D does not 'do' research, but works to support research that provides high quality evidence to improve care for patients, clients and the general population, and adds to the understanding of health, disease, treatment and care. This involves supporting researchers based in Northern Ireland as well as those in Health and Social Care Trusts or other bodies who use the outputs from research findings.

For example HSC R&D Division:

- funds essential infrastructure for research such as information databanks, tissue banks, clinical research facilities clinical trials units and research networks
- builds research capacity in Northern Ireland through research training opportunities
- enables research governance processes to be as efficient as possible
- creates opportunities for researchers to compete for research funding on a wider UK or international basis
- supports innovation as a means of transferring HSC R&D findings into practice
- ensures personal and public involvement (PPI) in HSC R&D.

They work closely with:

- clinical and academic researchers based in Health and Social Care Trusts (HSCTs) and universities
- policy-makers in the DOH
- practitioners throughout HSCTs
- staff in other HSC bodies
- members of the public, including patients and clients.

HSC R&D Division works in partnership with other public sector organisations, charities and businesses that are involved in health and social care research across Northern Ireland. HSC R&D also forms effective partnerships and close working relationships with their counterparts in the other UK administrations and internationally, in particular in Ireland, the rest of the EU and the US

Local

The commissioning plan direction sets the framework within which the HSCB (including its LCGs) and the PHA commission health and social care. The status of LCGs as committees of the HSCB is established in primary legislation. There are five LCGs within the HSCB – Southern, South Eastern, Western, Northern and Belfast. Each LCG covers the same geographical area as the corresponding HCS Trust. LCGs are responsible for the commissioning of health and social care by addressing the care needs of the local population. They also have responsibility for assessing health and social care needs, planning health and social care to meet current and emerging needs, and securing the delivery of health and social care to meet assessed needs. Their membership is made up of a range of professional interests such as, GPs, nurses, dentists, allied health professions, social workers, pharmacists, Public Health Agency Representatives, local government representatives and voluntary and community representatives.

LCGs have a lead role in the strategic commissioning process, in particular, to apply it locally on behalf of their populations. They have full delegated authority to discharge these responsibilities, including a significant ability to direct resources. LCGs identify local priorities taking account of the views of patients, clients, carers, wider communities and service providers. The resources for each LCG population may be used to secure services for that population from any appropriate provider.

To ensure a joint approach to commissioning, LCGs are supported by fully integrated, locally based, multi-disciplinary commissioning support teams made up of staff from the PHA and HSCB.

Local staffing arrangements are the responsibility of individual HSC employers, taking into account factors such as service needs and available resources. The department has a role in ensuring that sufficient suitably qualified staff are available to meet the needs of the service overall.

The commissioning of health and social care services is a crucial function within the wider health and social care economy. The Health and Social Care Board, through Local Commissioning Groups, and the Public Health Agency have a duty to ensure, through the commissioning process, that they are able to:

- meet the current and future health and social care needs of the population of Northern Ireland
- secure value for money and ensure the appropriate quality of service provision
- use appropriate processes to develop and reform services.

In relation to workforce, the commissioners' role is to:

- agree the models of service delivery
- be assured that HSC Trusts and independent practitioners have considered and identified the workforce needed for service delivery, through for example demand/capacity analysis
- exercise a challenge function where appropriate
- identify to the Department of Health areas where intervention is required
- lead or contribute to workforce reviews as required.

The Public Health Agency has an additional specific role in providing professional advice across the HSC and to the Department of Health

In Northern Ireland, the Government (Department of Health) decides on what vaccination programmes should be offered to the population-based on advice from a national independent scientific committee. Then many organisations from Health and Social Care and beyond (such as government departments, public health experts, academic researchers, commissioners, pharmacists, school health teams, health visitors and GPs), deliver the vaccination programmes.

Key areas of the PHA Health Protection Immunisation Team work

- leadership and coordination of vaccine programmes
- planning and introduction of new vaccine programmes
- providing training resources for those delivering vaccine programmes

- providing expert immunisation advice
- monitoring uptake and vaccine preventable disease surveillance
- working with the public to understand their views on vaccines
- working closely with organisations to maintain and improve high uptake particularly targeting groups who may have lower uptake
- responding to cases of vaccine preventable diseases.

Essential public health functions delivered at a regional and local level include:

- promoting health and wellbeing and actions to address the wider determinants of health and inequity
- ensuring community engagement, participation and social mobilization for health and wellbeing
- assuring quality of and access to health services
- ensuring equitable access to and rational use of essential medicines and other health technologies.

Examples of services delivered include:

- [Healthy start scheme](#)
- [Breastfeeding strategy for Northern Ireland \(2013-23\)](#)
- [Mental health promotion and suicide awareness and prevention](#)
- [Prevention of obesity](#)
- [Smoking cessation](#)
- [Reducing drug and alcohol misuse](#)
- Reducing teenage pregnancy and [Family Nurse Partnership](#)
- [Skin cancer prevention](#)

Table 10 Essential Public Health Functions and how they are delivered in Northern Ireland

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Health Protection Service sits within the Public Health directorate in the Public Health Agency (PHA) in Northern Ireland. It has a lead role in protecting the population from infection and environmental hazards through a range of core functions including surveillance and monitoring.
Public health emergency management (EPHF 2)	The Department of Health has the responsibility for developing guidance, advice and policies on planning and response to emergencies. Multi-disciplinary, consultant-led health protection teams within the Health Protection Service have also been developed around key work areas. Surge capacity for major incident responses is provided by a range of staff from across the Public Health Agency (PHA). For example, with respect to COVID-19, the PHA provided the Northern Ireland Contact Tracing Service; it supported schools and further education colleges in providing test kits and seven-day phone service for queries; and it developed guidance for service users, families and carers to improve awareness on COVID-19 and better enable families to cope during strict lockdown restrictions.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	Planning and Corporate Services within the PHA are responsible for development of corporate performance management systems to enable the organisation to effectively monitor progress in meeting Ministerial and corporate targets and objectives. They also secure support services from the HSC's Business Services Organisation and oversee governance issues including implementation of controls assurance standards, risk management processes and standing orders. The Regulation and Quality Improvement Authority is the independent health and social care regulatory body for Northern Ireland.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	The Public Health Agency and Health and Social Care Board is responsible for commissioning services, resource management and performance management and service improvement at a local level. Five Local Commissioning Groups, which cover the same geographical areas as the HSC Trusts, work with the Health and Social Care Board to help identify and meet the needs of the Northern Ireland population.
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	The Health Protection Service has a lead role in protecting the population from infection and environmental hazards through a range of core functions including surveillance and monitoring, operational support and advice, education, training and research.

Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	The Immunisation and Vaccine Preventable Diseases programme is the responsibility of Public Health Agency of Northern Ireland. The Government (Department of Health) decides on what vaccination programmes should be offered to the population-based on advice from a national independent scientific committee.
Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)	The Health and Social Wellbeing Improvement works to ensure a decent standard of living for all and promote health and wellbeing.
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	The Health and Social Wellbeing Improvement works to engage people in decision-making to shape their lives and social networks.
Ensuring adequate quantity and quality of public health workforce (EPHF 9)	The Department of Health (DOH) is responsible for medical workforce planning, and the DOH regional workforce planning group oversees the preparation of workforce plans for Health and Social Care.
Assuring quality of and access to health services (EPHF 10)	The Regulation and Quality Improvement Authority (RQIA) is the independent health and social care regulatory body for Northern Ireland. RQIA encourages continuous improvement in the quality of these services through a programme of inspections and reviews.
Advancing public health research (EPHF 11)	The HSC Research and Development works to support research that provides high quality evidence to improve care for patients, clients and the general population, and adds to the understanding of health, disease, treatment and care.
Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)	Officials from the Department of Health (NI) work closely with the Department of Health and Social Care, the MHRA, other NI and UK Departments and devolved administrations to mitigate any risk to the supply chain. Under the Northern Ireland Protocol, medicinal products authorised via the MHRA are directly authorised for use in Northern Ireland. Any variations to these marketing authorisations are centrally managed by the EMA in accordance with relevant procedures.

Scotland

[Public Health Scotland](#) controls public health services in Scotland is the national public health body and is Scotland's lead national agency for improving and protecting health and wellbeing.

Public Health Scotland manages health evidence and data, in addition to health protection and improvement. Public Health Scotland is part of the wider NHS Scotland and makes up one of seven special NHS boards. NHS Scotland has fourteen regional NHS boards which are responsible for the health and wellbeing of the population within their delegated regions.

Additionally, the public health system in Scotland collaborates with other services in areas such as in food safety and standards and immunisation policies.

National

[Public Health Scotland](#) comprises [NHS Health Scotland](#), [Health Protection Scotland and the Information Services Division](#). It is jointly sponsored by the Scottish Government and the [Convention of Scottish Local Authorities](#) (COSLA); the Scottish Government and collaborates across the public sector. The functions of Public Health Scotland include sharing data and intelligence, protecting health, improving health and wellbeing and improving services. A short description of each of these functions are provided below.

[Sharing data and intelligence](#): Public Health Scotland provides and uses high-quality intelligence, data and evidence as part of their evidence base for effective action to protect and improve health and wellbeing. They collaborate with other groups in order to link up different sorts of data and build a more effective understanding of trends, drivers and outcomes in public health. These groups include:

- [The Public Health Evidence Network](#): a collaboration between five organisations focusing on public health evidence in Scotland
- [The Scottish Public Health Observatory](#) (ScotPHO): contributes to the improved collection and use of routine data on health, risk factors, behaviours and wider health determinants and aims to provide a clear picture of the health of the Scottish population and the factors that either affect or contribute to it. They lead in determining Scotland's future public health information needs, develop innovations in public health information and provide a focus for new routine public health information development where gaps exist. It is led by Public Health Scotland and includes the Glasgow Centre for Population Health, the National Records of Scotland, the MRC/CSO

Social and Public Health Sciences Unit and the Scottish Learning Disabilities Observatory.

- [The electronic Data Research and Innovation Service](#) (eDRIS): works in partnership with "Health Data Research UK National Core Studies" (HDR UK NCS) programme to enable UK wide data provision and a secure, trusted environment for research. HDR UK NCS was established in the summer of 2020 in response to the COVID-19 pandemic.

Protecting health: Public Health Scotland plans and delivers effective and specialist national services to protect the people of Scotland from infections and environmental hazards. In 2020, Health Protection Scotland (HPS) was succeeded by Public Health Scotland. However, HPS continues to function within Public Health Scotland to provide general and specialist national services to protect the people of Scotland from infectious and environmental hazards, including COVID-19. Public Health Scotland provides advice, support and information to national and local government, the general public and other bodies that play a part in protecting health. Within health protection, Public Health Scotland collaborates with the Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) centre of excellence within NHS National Services Scotland and also collaborates with academia.

Improve health and well-being: Public Health Scotland is focussed on meeting Scotland's Public Health Priorities.

Improving services: support local and national clinical, social and community planning structures in order to help ensure that services meet the health needs of their populations in a sustainable way.

[Food Standards Scotland](#) (FSS) is an independent public body with responsibility for food policy in Scotland. FSS works in [collaboration](#) with the UK Food Standards Agency in a UK-wide approach to policy making. FSS develops policies, provides consumer and business guidance, advises stakeholders, and enforces food regulations.

[Immunisation policy](#) in Scotland is set by the Scottish Government Health Directorates on the advice of the JCVI and other appropriate bodies, and the programme is delivered by [NHS Scotland](#). NHS Scotland work with national health protection specialists and local NHS Board Immunisation coordinators to support the public with information about vaccines offered in the Scottish Immunisation Programme.

[NHS Health Scotland](#) is one component of Public Health Scotland. It is a national Health Board that works to reduce health inequalities and improve health. Its main roles include: providing evidence of what works to reduce health inequalities,

working across all sectors in Scotland to put this evidence into action and supporting national and local policy makers to design and evaluate interventions.

NHS Scotland also consists of seven [Special NHS Boards and one public health body \(Healthcare Improvement Scotland\)](#) who support the regional NHS Boards by providing a range of important specialist and national services. A brief description of the seven Special NHS Boards is provided below.

Special NHS Boards

1. Public Health Scotland
Public Health Scotland is Scotland's lead national agency for improving and protecting the health and wellbeing of all of Scotland's people.
2. NHS Education for Scotland
Quality Education for a Healthier Scotland.
3. NHS National Waiting Times Centre
Ensuring prompt access to treatment.
4. NHS24
Providing health advice and information.
5. Scottish Ambulance Service
Responding to accident and emergency calls and taking patients to and from hospital.
6. The State Hospitals Board for Scotland
Providing assessment, treatment and care in conditions of special security for individuals with a mental disorder whom because of their dangerous, violent or criminal propensities, cannot be cared for in any other setting.
7. NHS National Services Scotland
Supplying essential services including health protection, blood transfusion and information.

The [Information Services Division](#) (ISD) is a division of National Services Scotland, part of NHS Scotland. [ISD](#) provides health information, health intelligence, statistical services and advice that support the NHS in progressing quality improvement in health and care and facilitates planning and decision making.

Regional

NHS Scotland consists of [14 regional NHS Boards](#) (NHS Ayrshire & Arran, NHS Borders, NHS Dumfries & Galloway, NHS Fife, NHS Forth Valley, NHS Grampian, NHS Greater Glasgow and Clyde, NHS Highland, NHS Lanarkshire, NHS Lothian, NHS Orkney, NHS Shetland, NHS Tayside and NHS Eileanan Siar Western Isles) which are

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responsible for the protection and the improvement of their population's health and for the delivery of frontline healthcare services. Each regional health board provides a comprehensive range of health services to their area.

Local

Public Health services are offered in a coordinated manner at both the regional and local levels.

Table 11 Essential Public Health Functions and how they are delivered in Scotland

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	The Scottish Public Health Observatory (ScotPHO) contributes to improved collection and use of routine data in Scotland on health and risk factors. The electronic Data Research and Innovation Service (eDRIS) works in partnership with the National Core Studies programme to enable UK wide data provision and a secure, trusted environment for research. Data and Intelligence provides health information, health intelligence, statistical services and advice that support Public Health Scotland in progressing quality improvement in health and care and facilitates planning and decision making.
Public health emergency management (EPHF 2)	At a national level, the Scottish Government has a key role in managing the response to any emergency in, or affecting, Scotland. The Scottish Government Health Directorates (SGHD) provide advice, assistance and guidance to NHS Boards and others as may be needed on health matters. Health Protection Scotland functions within Public Health Scotland to protect the Scottish population from infectious and environmental hazards, including COVID-19. Within NHS National Services Scotland, the head of each Division is responsible for ensuring that both routine and emergency demands from the Scottish Government and individual NHS Boards for its services are met. Some essential support services are managed centrally by NHS National Services Scotland or other Special Health Boards, to meet the collective needs of NHS Scotland as a whole. Certain Divisions of NHS National Services Scotland are crucial to effective NHS emergency response; these include the Scottish National Blood Transfusion Service and Health Protection Scotland. At a local level, the NHS Boards are accountable to the Scottish Government for the effective functioning of the NHS within their respective areas, both normally and in response to any emergency.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	Public Health Scotland (PHS) is responsible for, setting strategic direction for the organisation and defining annual plans, ensuring that plans and performance take account of and are responsive to stakeholder needs, monitoring performance against objectives to check that PHS is delivering the right outcomes, ensuring effective financial stewardship and ensuring high standards of governance and conduct throughout the organisation. The Care Inspectorate regulate and inspect care services to ensure they meet the right standards.
Supporting efficient and effective health systems and multisectoral planning, financing, and	Data and intelligence, is a department within Public Health Scotland. They are responsible for health intelligence, statistical services and providing advice to support NHS Scotland in planning and decision making.

management for population health (EPHF 4)	
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	Health Protection Scotland is a Department within Public Health Scotland. It plans and delivers effective specialist national services to protect the people of Scotland from infections (including COVID-19) and environmental hazards (including radiation). Collaboration is central to the work of health protection. This includes working closely with the Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) centre of excellence within NHS National Services Scotland, working with academia and hosting the Scottish Health Protection Network (SHPN). Food Standards Scotland is an independent public body, with responsibility for food policy in Scotland. Convention of Scottish Local Authorities (COSLA) and the Scottish Government work to protect the health of the population from serious risks and infectious diseases.
Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	Public Health Scotland and the Scottish Government take actions to prevent both non-communicable and communicable diseases. They also aim to promote the prevention and early detection of diseases. Immunisation policy in Scotland is set by the Scottish Government Health Directorates on the advice of the JCVI and other appropriate bodies.
Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)	A number of organisations have responsibility for health promotion through their work in improving underlying determinants of health. These include the Scottish Public Health Observatory, Public Health Scotland and its component organisation NHS Health Scotland. The Scottish Public Health Observatory (ScotPHO) contributes to improved collection and use of routine data on wider health determinants. Public Health Scotland is responsible for improving the health and wellbeing of Scotland's people while NHS Health Scotland works to reduce health inequalities and improve health.
Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)	The COSLA have developed guidance to support greater collaboration between those making decisions about care services in Scotland, those delivering services, and people in communities who are affected. This guidance supports public service planners, commissioners and providers to consider how to continually improve the ways in which people and communities can become involved in developing services that meet their needs and to ensure that they are involved in decision-making that affects them. This guidance aims to improve general understanding of what 'effective community engagement' means in relation to the development of care services. NHS Boards, Local Authorities and Integration Joint Boards engage with the communities they serve following the principles set out in the National Standards for Community Engagement.

<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>NHS Education for Scotland is an education and training body and a national health board within NHS Scotland. They are responsible for developing and delivering healthcare education and training for the NHS, health and social care sector and other public bodies.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The Care Inspectorate is responsible for inspecting standards of care in Scotland. They work with providers to help them improve their service. Public Health Scotland is responsible for healthcare, Public Health and health service quality improvement, which looks at healthcare systems and service quality, practice, effectiveness and economics.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The Scottish Collaboration for Public Health Research and Policy (SCPHRP) was established to encourage and facilitate collaborations between all sectors of the Public Health community in Scotland. One of their core objectives is to identify key areas of opportunity for developing novel Public Health interventions that equitably address major health problems in Scotland.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The Scottish Government and health boards are responsible for making sure there is a supply of medicines in the NHS.</p>

Wales

The aim of the [Welsh Government](#) is to help improve the lives of people in Wales. The public health system in Wales is composed of three trusts and seven local health boards. [Public Health Wales](#) (PHW) provides specialist support for the seven local health boards and local health authorities.

A collection of organisations are involved in the public health system in Wales. These organisations are associated with food safety, healthcare workforce health and safety, injury surveillance, independent regulators and medical strategy.

Other external groups support public health by educating and training of the public health workforce, and provide digital services and technologies which assist in the implemented systems.

Community-based public health is present in Wales in the form of primary care services, community mental and physical health services and hospital inpatient and outpatient services. Public Health in Wales is underpinned by the Public Health Act Wales (2017).

National

In Wales, the three NHS trusts that are responsible for delivering different functions throughout all of Wales are [Public Health Wales](#), [Velindre University NHS Trust](#) and [Welsh Ambulance Services NHS Trust](#).

The [Welsh government](#) is responsible for making decisions on matters regarding health, developing and implementing health related policies throughout Wales as a whole and for proposing health related Welsh laws.

The [Welsh Government](#) is responsible for the public health response to the coronavirus pandemic in Wales. It does this by exercising its legal powers to impose restrictions that prevent or slow the spread of coronavirus and by overseeing the Welsh NHS, which treats those who become ill. The Welsh Government is worked in collaboration with the other governments in the UK to take an aligned, “four nations” approach to the pandemic where it was beneficial and appropriate.

[Public Health Wales \(PHW\)](#) is the national public health agency. It provides specialist public health support to each of the seven regional health boards ([Aneurin Bevan Health Board](#), [Betsi Cadwaladr University Health Board](#), [Cardiff and Vale University Health Board](#), [Cwm Taf Morgannwg University Health Board](#), [Hywel Dda University](#)

Health Information and Quality Authority [Health Board](#), [Powys Teaching Health Board](#), [Swansea Bay University Health Board](#)) and its Director of Public Health. They also provide specialist public health support to each of the 22 local authorities in Wales. The [Vaccine Preventable Disease Programme](#) (VPDP) is delivered under the responsibility of PHW. PHW provides specific support to health boards in order to fulfil its [four statutory functions](#) with respect to public health, specifically, to:

- provide, manage, monitor, evaluate and conduct research into the screening of health conditions and screening of health-related matters
- provide and manage a range of public health, health protection, healthcare improvement, health advisory, child protection and microbiological laboratory services and services relating to the surveillance, prevention and control of communicable diseases
- undertake the systematic collection, analysis and dissemination of information about the health of the people of Wales in particular including cancer incidence, mortality and survival; and prevalence of congenital anomalies
- develop and maintain arrangements to make information about matters related to the protection and improvement of health in Wales available to the public; undertake and commission research into such matters and to contribute to the provision and development of training in such matters.

Other functions of [PHW](#) include:

- investigation and management of communicable diseases
- surveillance of communicable diseases
- developing immunisation strategy, supporting and monitoring immunisation programmes
- providing advice on community infection control
- preparation and communication of information on communicable diseases to community
- providing advice on environmental health issues
- dealing with health protection queries from professionals, public and media on a daily basis
- providing specialist dental public health advice to improve oral health, support planning of dental services and ensure patient safety for dental patients.
- ensuring [community engagement](#).

The Welsh Ambulance Services NHS Trust have their own [National Training College](#) to ensure their staff receive regular professional development. They provide access to high quality, on-going training, regular continuous professional development opportunities and personal annual development reviews.

There are also a number of related organisations that [support NHS Wales](#). These include:

- [Health Education and Improvement Wales](#) (HEIW) have a leading role in providing the healthcare workforce in Wales with education, training and development.
- [Digital Health and Care Wales](#) is a special health authority, building and designing digital services for health and care in Wales.
- [NHS Wales Shared Services Partnership](#) (NWSSP) provides a range customer focused support functions and services to NHS Wales. They provide internal audit, specialist audit and consultancy services to the whole of the NHS in Wales and electronic workforce and learning solutions to NHS Wales and the wider Welsh public sector, accessible through internet and mobile technologies.

Other public health organisations that work across wales include:

- the [Food standards agency \(FSA\)](#) was established in 2000 following several high-profile outbreaks of foodborne illness. It is an independent government department that works to protect public health and consumers' wider interests in relation to food in England, Wales and Northern Ireland.
- [Health and Safety Executive \(HSE\) Wales](#) is the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, and for research into occupational risks.
- [All Wales Injury Surveillance System](#) (AWISS) is a population-based, multi-source injury surveillance system, which collects and analyses data on injury risk factors, severity, outcomes and costs, to empower injury prevention practitioners and policy makers, to make evidence-based informed decisions.
- [NHS Wales Governance e-Manual](#) is designed to assist NHS organisations in Wales develop robust governance and assurance arrangements that meet the standards of good governance set for all public services in Wales.
- [Healthcare Inspectorate Wales](#) (HIW) is an [independent inspectorate](#) and regulator of all healthcare in Wales and monitors Welsh NHS bodies in their performance against the *Healthcare Standards for Wales*.

- [All Wales Medicines Strategy Group](#) (AWMSG) are responsible for ensuring that patients in Wales can equitably access appropriate clinically effective and cost-effective new medicines at the appropriate time leading to improved patient health outcomes.

The following groups listed below are specifically responsible for the contributing the advancement of public health research in Wales:

- [Research & Evaluation Division in Public Health Wales](#) undertake a wide range of public health research and evaluation programmes generating insights and evidence to inform policy and practice.
- [Health and Care Research Wales](#) work to promote research into diseases, treatments, services and outcomes.
- [Centre for Population Health & Wellbeing Research](#) is funded by the Welsh Government through [Health and Care Research Wales](#). They work to evaluate and inform population health Improvements.
- [National Institute for Health Research](#) working with the NHS, universities, local government, other research funders, patients and the public, they fund, enable and deliver health and social care research to people's health and wellbeing. They are funded by the Department of Health and Social Care and their work focuses on early translational research, clinical research and applied health and social care research. They are centered on England but collaborate closely with the devolved administrations in Scotland, Wales and Northern Ireland.
- [Cardiff University School of Medicine](#) is a major international centre for teaching and research, and committed to the pursuit of improved human health.
- [Cedar Health Technology Research Centre](#) is a healthcare technology research centre which is part of the NHS (Cardiff and Vale University Health Board) and Cardiff University. Cedar focuses on evidence, research and evaluation involving mainly medical devices, diagnostics, and interventional procedures.
- [DECIPHer: Centre for the Development and Evaluation of Complex Interventions for Public Health ImpROvement](#) focus on a broad range of life-course public health issues, including mental health and health-related behaviours.
- [Health and Care Research Wales](#) is a networked organisation, supported by Welsh Government, which brings together a wide range of partners across the NHS in Wales, local authorities, universities, research institutions. They work in close partnership with other government agencies and research funders (both in Wales and across the UK); industry partners; patients;

service users; public and other stakeholders to promote research into diseases, treatments, services and outcomes.

Regional

Public Health services are offered in a coordinated manner at both the regional and local levels.

Local

In total, there are seven Local health boards; [Aneurin Bevan Health Board](#), [Betsi Cadwaladr University Health Board](#), [Cardiff and Vale University Health Board](#), [Cwm Taf Morgannwg University Health Board](#), [Hywel Dda University Health Board](#), [Powys Teaching Health Board](#), [Swansea Bay University Health Board](#). Each local health board is responsible for NHS services within their specified geographical area. They are responsible for promoting wellbeing, improving physical and mental health outcomes, reducing health inequalities across their population and commissioning services from other organisations to meet the needs of their residents. [Health Boards](#), within their area, are also responsible for the planning, delivery and funding of:

- primary care services – for example, GPs, pharmacies
- community services, including those provided through community health centres and mental health services.
- hospital services for inpatients and outpatients

Within Velindre University NHS Trust is the [Velindre Cancer Centre](#) which is a specialist treatment, teaching, research and development centre for nonsurgical tertiary oncology services for patients across south-east Wales.

[Environmental Health Officers](#) are employed by all local authorities to ensure that all businesses that produce or prepare food for the public adhere to food safety and hygiene legislation.

Table 12 Essential Public Health Functions and how they are delivered in Wales

Essential Public Health functions	
Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health (EPHF 1)	Public Health Wales has a statutory function to provide and manage a range of services relating to the surveillance, prevention and control of communicable diseases.
Public health emergency management (EPHF 2)	The Welsh Government is responsible for the response to large scale Public Health emergencies including the Public Health response to the COVID-19 pandemic in Wales. Public Health Wales (PHW) is responsible for providing emergency preparedness (in conjunction with the Welsh Government), leadership and scientific and technical advice at all organisational levels, in partnership with other organisations to protect the health of the public within Wales.
Assuring effective public health governance, regulation, and legislation (EPHF 3)	Healthcare services in Wales are inspected and regulated by Healthcare Inspectorate Wales.
Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health (EPHF 4)	The Welsh government is responsible for making legislation, policy and investment decisions on matters regarding health, which is a fully devolved function. Local Health Boards within their area are responsible for the planning, delivery and funding of Primary care services, for example, GPs, pharmacies, community services (including those provided through community health centres and mental health services), and hospital services for inpatients and outpatients.
Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards (EPHF 5)	Public Health Wales has a priority to protect the public from infection and environmental threats to health. Health and Safety Executive (HSE) Wales is the body responsible for research into occupational risks. At a local level, Environmental Health Officers are employed by all local authorities to ensure that all businesses that produce or prepare food for the public adhere to food safety and hygiene legislation. The Food Standards Agency is responsible for protecting public health in relation to food in England, Wales and Northern Ireland.
Promoting prevention and early detection of diseases including non-communicable and communicable diseases (EPHF 6)	A statutory function of Public Health Wales includes the prevention and control of communicable and non-communicable diseases. The Vaccine Preventable Disease Programme (VPDP) is delivered under the responsibility of Public Health Wales.

<p>Promoting health and wellbeing and actions to address the wider determinants of health and inequity (EPHF 7)</p>	<p>Public Health Wales has responsibility for improving health and wellbeing and to influence the wider determinants of health across Wales. The Centre for Population Health & Wellbeing Research is funded by the Welsh Government to evaluate and inform population health improvements. At a local level, Local Health Boards also have a role in health promotion and reducing health inequalities.</p>
<p>Ensuring community engagement, participation and social mobilization for health and wellbeing (EPHF 8)</p>	<p>Public Health Wales is responsible for ensuring community engagement. A guidance document has been produced for staff working in Public Health Wales. The purpose of this guidance is to support reflective practice about community engagement activity.</p>
<p>Ensuring adequate quantity and quality of public health workforce (EPHF 9)</p>	<p>Health Education and Improvement Wales (HEIW) provides the healthcare workforce in Wales with education, training and development. The Welsh Ambulance Services NHS Trust has its own National Training College to provide training and ensure its staff receives regular professional development opportunities. The NHS Wales Shared Services Partnership (NWSSP) provides electronic workforce and learning solutions to NHS Wales and the wider Welsh public sector, accessible through internet and mobile technologies.</p>
<p>Assuring quality of and access to health services (EPHF 10)</p>	<p>The Healthcare Inspectorate Wales (HIW) inspects NHS services, and regulates independent healthcare providers against a range of standards, policies, guidance and regulations to highlight areas requiring improvement. Its purpose is to check that people in Wales receive good quality healthcare.</p>
<p>Advancing public health research (EPHF 11)</p>	<p>The Research and Evaluation Division in Public Health Wales undertakes a wide range of Public Health research and evaluation programmes generating insights and evidence to inform policy and practice. Health and Care Research Wales works to promote research into diseases, treatments, services and outcomes. The Centre for Population Health and Wellbeing Research is funded by the Welsh Government through Health and Care Research Wales. They work to evaluate and inform population health improvements. The Cedar Health Technology Research Centre is a healthcare technology research centre which is part of the NHS (Cardiff and Vale University Health Board) and Cardiff University. Cedar focuses on evidence, research and evaluation involving medical devices, diagnostics and interventional procedures. DECIPHer (the Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement) focuses on a broad range of Public Health issues, including mental health and</p>

	<p>health-related behaviours, with a particular emphasis on the development, evaluation and implementation of policies and interventions to improve the lives of children and young people. Health and Care Research Wales is a networked organisation, supported by Welsh Government, which brings together a wide range of partners across the NHS in Wales, local authorities, universities, research institutions. They work in close partnership with other government agencies and research funders (both in Wales and across the UK), industry partners, patients, service users and other stakeholders.</p>
<p>Ensuring equitable access to and rational use of essential medicines and other health technologies (EPHF 12)</p>	<p>The All Wales Medicines Strategy Group (AWMSG) aims to ensure that patients in Wales can equitably access appropriate clinically effective and cost-effective new medicines at the appropriate time leading to improved patient health outcomes.</p>

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