

Protecting Health Commission

Deliverable 2: An outline of current Health Protection functions and how they support service delivery

Table of Contents

Introduction & Purpose.....	3
Public Health Reform in Scotland.....	3
Whole system overview – protecting health	4
Scottish Government.....	6
NHS Boards.....	7
Local authorities.....	8
Health Protection Scotland	12
Other partner organisations.....	14
Third sector organisations.....	18
Annex 1 Historical context of Health Protection Services in Scotland.....	19
Annex 2 Joint Public Health Protection Plans	20
Annex 3 Overview of Scottish Health Protection Network.....	26
Annex 4 Structure of HPS	27
Annex 5 HPS Services	28

Introduction & Purpose

The Public Health Reform Programme Protecting Health Commission is being undertaken by National Services Scotland (NSS) and the Scottish Directors of Public Health Group.

The purpose of this paper is to answer to deliverable 2 in the commission: to provide 'documentation outlining current Health Protection functions and how those functions support service delivery.'

The recent background for this paper is the establishment of Health Protection Scotland (HPS) in 2005, with continuity of local health protection services in local NHS Boards and local authorities. The main legislation underpinning health protection is set out in the Public Health Act (2008). The paper describes the current state of health protection services in Scotland. The historical context leading to the present system is given in annex 1.

This paper describes the wider 'whole system' of health protection, in this paper taken as comprising existing (statutory) functions and agencies, the wider network of organisations that contribute to the overall health protection function in Scotland and the position of Health Protection Scotland (HPS) in this context.

Joint Public Health Protection Plans are referenced to show the collaboration between health boards and local authorities.

The Scottish Health Protection Network (SHPN), established in 2015, is referenced to illustrate local and national coordination of health protection services and how joint health protection priorities are established across Scotland.

Particular detail is provided regarding Health Protection Scotland given the intent for it to become a founding element of Public Health Scotland (PHS). This is with the view of providing the information needed by the Public Health Reform Programme when establishing PHS: it should not be taken as implying that HPS do most of the work of health protection.

Public Health Reform in Scotland

The public health reform programme is about the whole system, with the establishment of Public Health Scotland sitting within this context.

This and related commissions are about the functionality of specific domains and functions of public health in Scotland, with the aim of strengthening and improving public health for the future.

Within the public health system, PHS will need to lead and influence as a national body, to support local and national action and to understand the needs of the whole system.

The challenge is how to implement a new approach to Public Health within the current well populated landscape and respecting what should be national in collaboration, regional and local, community led within a cohesive framework.

Protecting Health is one of the key domains of public health. The aim of the Commission is to undertake work to describe and produce options for delivering a strong, effective, forward looking Health Protection domain at national level within the new public health body; and in turn, describe how this will support and enable activities at the regional and local level across the wider Scottish public health system.

Whole system overview – protecting health

Definition of Health Protection

"To protect the Scottish public¹ from being exposed to hazards which damage their health and to limit any impact on health when such exposures cannot be avoided."²

Whilst the term Protecting Health may encompass a wider set of interests including vulnerable groups for which statutory authorities have important responsibilities, the health protection definition will be the focus of the paper and Commission. However, it is acknowledged that some of the harms that are described in this paper may be wider than what has, traditionally, been considered "health protection" and that there are likely to be overlaps with the other commissions, for example in relation to alcohol and drugs; early years/child protection."

Public health has the characteristics of dealing with preventative rather than curative aspects of health and dealing with population level health interventions. The Faculty of Public Health defines public health as the "science and art of promoting and protecting health and wellbeing, preventing ill health and prolonging life through the organised efforts of society". The approach is population based though at times may involve assessment, treatment and care of individuals and small groups such as families; emphasises collective responsibility for protecting health; recognises the key role of the state; and emphasises partnership with all of those who contribute to protecting public health.

There are various definitions of "health protection" which broadly agree that the subject is focused on a hazards based approach to threats to public health, recognising close overlapping interest with environmental health, Healthcare Associated Infection (HAI) and links to health improvement, and healthcare service public health. The assessment and management of health protection incidents and situations often requires an integrated response involving health protection, local authorities, primary and secondary healthcare and health improvement approaches.

Hazards can be biological, chemical, physical or from radiation and result in exposures - through food, water, air, from animals, the environment and person to person. Exposure to such hazards is normally involuntary. Hazards are often capable of affecting large groups of the population in a short period of time. The route of exposure to a health protection hazard may be unclear and health protection as a clinical discipline therefore requires a capacity to handle risk and uncertainty as well as a capacity to respond urgently when required.

The key components of health protection that underpin clinical practice at all levels, local, national and international, therefore include health hazard and risk assessment, risk management and risk communication.

Health protection as a branch of public health contributes towards the realisation of the Scottish Government's policies for improving health, especially by reducing risks in early years (e.g. through immunisation), adolescence (e.g. limiting unintended consequences from sexual behaviour and drug use) and later years (e.g. hygiene and infection control in care settings). Specific Scottish policies on infectious and environmental hazards are usually set within a UK and European context. Because protecting the community's health can impact on individuals, the parameters for action in this sphere of public health are underpinned by legislation, principally the Public Health (Scotland) Act 2008.

The Public Health (Scotland) Act 2008

Statutory functions for Scottish Ministers, NHS Boards and Local Authorities are set out in the Public Health (Scotland) Act 2008. Under section 7 of the Act, NHS Boards must prepare plans relating to the protection of public health (Joint Health Protection Plans) as the Board considers appropriate and must consult the relevant Local Authority in preparing that plan. See annex 2 for a summary of JHPPs.

Duties on NHS Boards and Local Authorities under the Public Health (Scotland) Act 2008 are:

¹ Includes those living in, working in and visiting Scotland

² Definition taken from the 2014 Health Protection Stocktake

- each Health Board to protect public health in its area and to designate competent persons to carry out health protection functions under the Act
- local authorities to make provision or secure that provision to protect public health in their area and to designate competent persons to carry out functions under the Act
- completion of Joint Public Health Protection Plans
- registered medical practitioners, Health Boards and diagnostic laboratories to report notifiable diseases and health risk states
- powers and functions in relation to public health incidents:
 - NHS Boards – include detention, quarantine, exclusion and restriction powers
 - Local authorities – include provision of facilities and powers relating to disinfection and decontamination of premises or things
- provision of mortuary facilities by NHS Boards and local authorities.

In addition, there are a number of international obligations set out in EC Directives and WHO Regulations.

This report should be seen in the context of the draft public health priorities for Scotland <https://publichealthreform.scot/>

The Scottish Government provides overall strategic authority and control and links to the UK Government and the other devolved administrations. This includes Ministerial advice and briefings; policy decisions; strategic co-ordination of national health programmes; strategic co-ordination of the response to national level incidents and outbreaks and national communication. This is delivered at a number of levels led by the Chief Medical Officer's (CMO) Public Health Directorate. The Policy Unit within the Directorate of the Chief Nursing Officer (CNO), Patients, Public and Health Professions provides the same function for Healthcare Associated Infection (HAI), Antimicrobial Resistance (AMR) and Infection, Prevention and Control (IP&C).

Health protection is a multi-agency endeavour involving over 50 organisations in Scotland. There are two basic tiers:

- local activity delivered by local authorities and NHS Boards;
- national activity through Government, NHS national Health Boards, the Scottish Environment Protection Agency (SEPA), Scottish Water, Drinking Water Quality Regulator for Scotland, Public Health England (PHE), the Food Standards Scotland (FSS) and the Health and Safety Executive (HSE).

The two main tiers of specialist health protection function are:

- NHS Boards' Public Health Departments, with local authority Environmental Health departments;
- Health Protection Scotland.

Although the functions undertaken by Health Boards and HPS may overlap, they are undertaken at different levels. The two tiers provide input into the different types of health protection management at strategic and operational levels. Most strategic work set by Scottish Government is carried out by HPS, most operational work by NHS Boards' Public Health Departments. See Table 1 for details.

Table 1 Health Protection Functions at HPS, Health Board (HB) and local authority (LAs) level

Function	HPS	HBs ³	LAs
Surveillance	x	x	
Co-ordination of national health protection programmes (e.g. Immunisation and Anti-Microbial resistance)	x	x	
Expert advice and horizon scanning;	x	x	
Effective preparation and response to outbreaks and incidents;	x	x	x
Enabling good professional practice;	x	x	x
Supporting the ongoing development of a confident and competent health protection workforce	x	x	x
Support commissioning specialist services	x	x	x
Support commissioning reference lab services	x		
Research and innovation to provide evidence for action.	x	x	
HPS, HB & LA priority topics			
Immunisations	x	x	x
Gastrointestinal and Zoonotic Infections	x	x	x
Respiratory Infections	x	x	x
Blood Borne Viruses (BBVs)	x	x	x
Sexually Transmitted Infections (STIs)	x	x	x
Healthcare Associated Infection (HAI) and Anti-Microbial Resistance (AMR)	x	x	x
Travel Health and Emerging Infections	x	x	x ⁴
Environmental Public Health	x	x	x
Public Health Microbiology.	x	x	x
Radiation (ionising and non-ionising RF radiation)	x ⁵	x	x
Violence reduction		x	x
Screening	x	x	x
Resilience response	x	x	x
Protection from accidental injury and death			x ⁶

Scottish Government

The Health Protection Division sits within the Population Health Directorate. The Division has policy responsibility for the most health protection issues including vaccination, infectious diseases, sexual health, environmental public health and screening. A number of senior medical officers with responsibilities for public health and health protection also work within Government, within the Chief Medical Officer Directorate. These Senior Medical Officers work closely with the Health Protection Division. The CNO Directorate policy unity covers HAI, AMR and IP&C.

³ topics vary by HB according to local circumstances and remits

⁴ Delivered via an SLA between SGHSC and Public Health England

⁵ In liaison with Public Health England

⁶ Jointly with Fire & Rescue, police, third sector

NHS Boards

Under the NHS (Scotland) Act 1978, NHS Boards are tasked with protecting the health of their local communities. NHS Boards' health protection teams are part of Departments of Public Health and are accountable to the Director of Public Health (DPH), who is in turn accountable to the Board Chief Executive. The DPH has a strategic leadership role for health and the reduction of inequalities in health and also leads a multidisciplinary team of health professionals which may include consultants in public health medicine (CPHMs), specialists on the UK Register for Public Health and nursing staff, scientists and staff of several disciplines.

A typical Department of Public Health has a wide span of responsibilities, ranging from the response to individual notifications of infectious disease, to working at community level to promote a healthy and equal community, healthy, safe places and environments, implementing population screening programmes, and assessing the evidence for health service interventions.

A CMO letter issued in February 2007 sets out the **role of NHS Boards in Health Protection:**

Through co-operation with its partners (especially local authorities), to protect the local population from hazards which endanger their health by preventing, controlling or reducing exposure to these and limiting damage when such exposures occur.

- To monitor, detect and respond to infectious and environmental hazards
- To collaborate with local and national agencies
- To ensure activities contribute to improving public health especially by working with partners to prevent and manage risks to local communities
- To respond to public anxiety and meet expectations by informing them about risk and maintaining effective dialogue and communication
- Together with local agencies, to play a full part in Scottish, UK and international health protection arrangements especially when managing incidents and outbreaks
- To strive to continuously improve the efficiency and effectiveness of policy, service delivery and professional practice involved in health protection
- To meet the statutory duties imposed by the Civil Contingencies legislation and to comply with the provisions for emergency planning and emergency response contained in "Responding to emergencies – guidance for the NHS in Scotland".

Other health protection functions covered by health board include:

- Providing a 24/7 health protection function including out of hours
- Surveillance of cases, clusters and outbreaks of communicable diseases and environmental health incidents
- Case management & contact tracing to prevent onward transmission
- Effective preparation and response to prevent and control outbreaks and incidents
- Co-ordination of childhood and adult immunisation programmes and expert advice
- Training and Research
- Liaison with clinicians, EHOs, Microbiology, Virology, Scottish Water, SEPA, reference laboratories

NHS Boards' health protection teams vary in size. Generally there is a team of a medical consultant or consultants in public health (health protection), health protection nurse specialists and practitioners and administrative staff with on call and surge support from the broader public health team and the

NHS Board. The exact make up and number of staff varies from Board to Board depending on the population and geography of the area, local workforce planning and the health protection priorities of each Board. All NHS Boards have designated specialists for health protection, with day to day calls usually handled by Health Protection Nurses. Most of the larger NHS boards have at least one whole time individual who is solely concerned with health protection duties. In smaller boards, consultants cover both health protection and other responsibilities.

All boards are required by the Public Health Act to produce joint public health protection plans (JPHPPs) with their relevant local authorities. A summary of NHS Boards JPHPPs is provided in annex 2. The plans cover national and local health protection priorities and reflect the different structures and resources within and across boards and local authorities.

Primary Care in NHS Scotland plays a front-line role in the diagnosis and notification of communicable disease, identification of hazards, counselling of patients as trusted advisers, and delivery of population programmes such as vaccination and screening. Primary care also plays a key role in the response to outbreaks and incidents, and tackling inequalities in uptake of opportunities for disease prevention. The recent primary care and GP changes with contract reform and integration with social care brings in a new era of practice, changes in approach and links to front-line services.

Local authorities

Local Authority Environmental Health Services are mainly regulatory services as required by statute. Services tend to be whole area rather than locality, age or gender specific and provide protection through reactive activities i.e. investigation and resolution of sporadic public health enquiries and preventative activities such as planned interventions, monitoring of food, air, water and workplace safety.

Role of local authorities in Health Protection:

Through the application of statute and the provision of advice and guidance, to protect and enhance the health, welfare, environment, and workplace safety of Scotland's communities and workforce.

There is a duty to:

- comply with the framework agreement on food law enforcement in Scotland and to ensure food safety through planned interventions such as sampling, monitoring and risk-based inspections including imported food control as a port health authority
- enforce the Environmental Protection Act in relation to the investigation and abatement of statutory nuisances such as noise, waste accumulations etc
- enforce workplace safety through planned interventions and risk-based inspections and to investigate accidents to prevent recurrence
- monitor air quality within Scotland, and ensure compliance with the Scottish Government's targets relating to specific pollutants with known negative health impacts
- enforce specific legislation in respect of known health risks such as smoking, tattooing and sun bed use
- enforce legislation relating to the compliance of the housing stock with Tolerable Standards and fitness for habitation
- provide an effective response to incidents and outbreaks
- monitor, and improve where needed, private water supplies
- enforce pest control, dog behaviour and animal health related activities
- support the development of good professional practice

- give advice on local issues likely to have a health impact on the community, such as noise and pollution impacts of major planned developments.

Many other local authority services, such as Social Services, Housing, Planning etc, make a contribution to public health protection but have not been included within this response.

Local authorities are partnership organisations in the delivery of a number of Scottish Government population health strategies such as the core outcomes for Alcohol and Drug Partnerships and “Equally Safe”, Scotland's strategy for preventing and eradicating violence against women and girls.

Health Board Departments of Public Health and Local Authority Environmental Health Services work closely with many partner agencies (some described below), such as FSS, SEPA, HSE, Police, DWQRS, Scottish Water, Animal Health, Emergency Planning, COPFS as well as HPS and the wider NHS. Many Local Authority Environmental Health Services are also involved in regulating contaminated land, waste services, animal health and welfare, licensing, and antisocial behaviour.

Role of local authorities in Environmental Health

The Royal Environmental Health Institute Scotland defines environmental health as

"that area of public health activity which strives to improve, protect and maintain health and wellbeing through action on the physical environment and life circumstances"⁷

In Scotland, the seven principal subjects within Environmental Health are:

- Food Safety
- Food Standards
- Occupational Health and Safety
- Public Health
- Waste Management
- Built Environment, and
- Pollution Control.

⁷ Dr David Old, Old Report, 2006

Specific local authority functions

Asbestos control	Councils carry out survey, sampling and analysis of asbestos containing materials, and undertake air tests to ensure harmful fibre levels are not present.
Food testing & advice	Tests on foods and raw materials, provision of certification to food manufacturers and exporters. Investigate food complaints. Provision of a public analyst service as defined in the Food Safety Act 1990 which tests food for the presence of additives (eg sweeteners and colours) contaminants (eg heavy metals, mycotoxins and polyaromatic hydrocarbons) and to advise, interpret and check whether the presence of these additives or contaminants in a food meets legal food safety standards.
Allergen testing	Tests foods, their ingredients and raw materials for the presence of allergens Provides advice on labelling legislation
Food & animal feeding stuffs	Tests to ensure free from pathogenic bacteria and to assess hygiene standards. Tests are for routine quality control purposes, including shelf life testing, or to check that the product meets legal standards.
Drinking water	Routine monitoring tests and investigation of complaints or to check compliance with legal standards.
Environmental materials	Checks for the presence of micro-organisms in, for example, air conditioning systems, cooling towers and shower heads for legionella and sewage contamination in recreational water, soil and vegetation.
Radiation testing & advice	Radioactivity monitoring service, including sampling, on-site and laboratory monitoring.
Domestic & industrial waste water testing	Domestic and industrial waste water testing, effluents and tip leachates for a range of parameters for process control, disposal and to assess compliance with legislation and regulatory requirements.

Role of local authorities in Trading Standards

Trading standards is the local government service that works to protect consumers and support legitimate business. Local authorities have a statutory obligation to:

- enforce fair trading
- combat illegal trading
- **monitor product safety**
- **address under-age sales**
- verify weights and measures.

From a public health perspective, most local authorities work actively to stop consumers suffering detriment through education, advice and debt counselling.

It is illegal for age restricted goods, such as alcohol, cigarettes and fireworks, to be sold to those who are below the specified age limit. Traders face prosecution for illegal sales and trading standards investigate complaints about the illegal sale of age restricted products and carry out test purchasing.

The [Licensing \(Scotland\) Act 2005](#) balances the rights of the majority of people who drink responsibly against the need to protect local communities from nuisance and crime associated with misuse of

alcohol. It is intended to provide a clear and consistent underpinning for the alcohol licensing regime in Scotland based upon the five licensing objectives:

- preventing crime and disorder
- securing public safety
- preventing public nuisance
- **protecting and improving public health, and**
- **protecting children and young persons from harm.**

Role of local authorities in EQUALLY SAFE – Reducing violence against women and girls

Equally safe is Scotland's strategy for preventing and eradicating violence against women and girls which was developed by Scottish Government and COSLA, with input from key justice agencies (Police Scotland and COPFS) and from third sector agencies which support women. <http://www.gov.scot/Publications/2014/06/7483>

The overall aim of the strategy is to prevent and eradicate violence against women and girls, creating a strong and flourishing Scotland where all individuals are equally safe and respected, and where women and girls live free from such abuse - and the attitudes that help perpetuate it.

At a local level, Violence against Women Partnerships (VAWPs) are recognised as the multi-agency mechanism with responsibility for delivering Equally Safe within their localities. These Partnerships are responsible for bringing together all the key public sector and third sector organisations working to prevent and eradicate violence against women and girls within each local authority area, and ensuring that an effective and strategic approach is taken to progressing the priorities set out in Equally Safe.

Role of local authorities in protecting children

Child Protection Committees (CPCs) are responsible for child protection policy, procedure, guidance and practice at the local authority level. CPCs make sure that all the different local agencies, such as children's social work, health services and the police, work together to protect children.

The key guidance for anyone working in Scotland is [Scottish Government \(2014\) National Guidance for child protection in Scotland](#).

All children and young people (including unborn babies) have the right to be cared for and protected from harm and abuse and to grow up in a safe environment in which their rights are respected and their needs met.

Child protection should be seen in the context of the wider Getting it right for every child (GIRFEC) approach¹, the Early Years Framework and the UN Convention on the Rights of the Child. GIRFEC promotes action to improve the wellbeing of all children and young people in eight areas. These wellbeing indicators state that children and young people must be: healthy, achieving, nurtured, active, respected, responsible, included and, above all in this context, safe.

Role of local authorities in supporting Alcohol & Drug Partnerships (ADPs)

ADPs operate with a mixture of Scottish Government, Council, and NHS funding and have the following objectives:

1. Health: People are healthier and experience fewer risks as a result of alcohol and drug use
2. Prevalence: Fewer adults and children are drinking or using drugs at levels or patterns that are damaging to themselves or others
3. Recovery: Individuals are improving their health, well-being and life-chances by recovering from problematic drug and alcohol use
4. Families: Children and family members of people misusing alcohol and drugs are safe, well-supported and have improved life-chances
5. Community safety: Communities and individuals are safe from alcohol and drug related offending and anti-social behaviour

6. Local Environment: People live in positive, health-promoting local environments where alcohol and drugs are less readily available
7. Services: Alcohol and drugs prevention, treatment and support services are high quality, continually improving, efficient, evidence-based and responsive, ensuring people move through treatment into sustained recovery.

It is clear that Local Authorities apply laws and regulations, and working many other agencies to protect health within the scope of communicable disease and environmental hazards, and also a wider role including the protection of wellbeing of vulnerable groups.

Health Protection Scotland

Health Protection Scotland (HPS) was established in 2005 as the national health protection body. It was created as a division within National Service Scotland (NSS) and is now part of the Public Health and Intelligence (PHI) Strategic Business Unit of NHS National Services Scotland (NSS).

In the 2007 [‘Memorandum of Understanding Between SEHD and HPS’](#), HPS’ role was clarified as being responsible for the implementation of health protection programmes and policies, for the provision of expert advice on policy development, for the development and implementation of a quality assurance framework for health protection at a local, regional and national level, for public communication and advice on health protection issues and to lead the coordination of the national health protection operation response to incidents requiring Scotland wide action.

HPS has delivered this leadership role in partnership with the multiple agencies involved in the whole health protection system. In this, HPS plans and delivers effective and specialist national services which co-ordinate, strengthen and support activities aimed at protecting the people of Scotland from infectious and environmental hazards. HPS does this by:

- Assessing the risks to public health associated with exposure to environmental hazards and working to minimise the adverse health impacts of these and other environmental factors.
- Evaluating and characterising the epidemiology of communicable diseases in Scotland; and strategies to reduce their incidence; using surveillance data and evidence based intelligence to develop good practice guidance on the control and prevention of transmissible infection in the general community and health and care settings.
- Investigating and managing outbreaks of communicable disease and environmental incidents to limit the impact on public health.

HPS functions include:

- Surveillance
- Co-ordination of national health protection programmes (e.g. Immunisation and Anti-Microbial resistance)
- Expert advice and horizon scanning;
- Effective preparation and response to outbreaks and incidents;
- Enabling good professional practice;
- Supporting the ongoing development of a confident and competent health protection workforce;
- Support commissioning specialist/reference lab services;
- Research and innovation to provide evidence for action.

HPS priority topics/programmes include:

- Immunisations
- Gastrointestinal and Zoonotic Infections

- Respiratory Infections
- Blood Borne Viruses (BBVs)
- Sexually Transmitted Infections (STIs)
- Healthcare Associated Infection (HAI) and Anti-Microbial Resistance (AMR)
- Travel Health and Emerging Infections
- Environmental Public Health

National and local cooperation on the national AMR, HAI and IP&C agenda through national delivery plans has had governance and engagement arrangements in place through several delivery plans. Current collaboration is through the HPS Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) programme board and its sub-structures, with reporting line to the Scottish Antimicrobial Resistance and Healthcare Associated Infection Strategy Group (SARHAI).

Underpinning the Scottish Health Protection Network (SHPN, further details below) and the HPS ARHAI programme board is the drive to share good practise, promote consistency, learn lessons, translate learning into improvement action, quality assurance and progressing both 'once for Scotland' and one health approaches where appropriate. The ARHAI board will shortly join the SHPN as a new topic area recognising the need to join up collaborative efforts across the Scottish health protection system.

HPS programmes/ priority topics are mirrored in the structures adopted for the Scottish Health SHPN, where joint priority topics groups have been established to coordinate services for these clinical priority areas across Scotland.

Scottish Health Protection Network

In 2014, following the last major review of the health protection function in Scotland (the Health Protection Stocktake) Scottish Government tasked HPS to set up a health protection obligate network including all stakeholders involved in delivering health protection services in Scotland. The Scottish Health Protection Network (SHPN) was set up to improve the coordination of health protection services at local and national level, to break down perceived barriers to cooperation and to foster a more collaborative and jointly owned approach to deciding health protection priorities for action. SHPN was successfully established in 2015 with a key supporting and leadership role provided by HPS.

The SHPN structure, governance and operational management arrangements have been designed to enable national and local health protection organisations across sectors and disciplines to work together cooperatively, as a cohesive health protection service for Scotland.

The SHPN is viewed by many stakeholders as affording a cooperative approach founded on such comprehensive engagement, consensus and pragmatism at this national scale across sectors. Decisions once made through member consensus are intended to be implemented across Scotland (with pragmatic adaptation/acknowledgement for local context) in line with the obligate and joint ownership foundations of the SHPN.

The network organises health protection into a series of 5 topic and 5 functional areas overseen by a national group referred to as an SHPN-Topic or Functional group. The groups are usually jointly chaired by a national (HPS) and a local NHS/ local authority representative and have multi-agency and multi-disciplinary public health workforce representation from across Scotland. Underpinning the SHPN is the drive to share good practise, promote consistency, learn lessons, translate learning into improvement action, quality assurance and progressing both 'once for Scotland' and one health approaches where appropriate.

The ARHAI board will shortly join the SHPN recognising the need to join up collaborative efforts across the Scottish health protection system.

The SHPN-Coordination Group oversees the operational management and coordination of the network portfolio comprising of the co-chairs of each SHPN-topic/functional group. It reports to the SHPN-Oversight Group which provides policy and strategy recommendations to the Scottish Government.

The SHPN arrangements are adaptable in affording NHS Boards and local authorities the flexibility to contribute locally or regionally as Boards, councils or partnerships. SHPN was designed to be sufficiently robust to be able to adapt to future reorganisations of the main participating organisations.

Table 2: SHPN Topic and Functional Groups (and see annex 3)

Health Protection Topic Area	SHPN-Topic Group
Immunisations and travel health	SHPN-Scottish Immunisations Programme Group
Gastrointestinal infections & zoonoses	SHPN-Gastrointestinal Infections & Zoonoses Group
Environmental public health	SHPN-Environmental Public Health Group
Respiratory infections	SHPN-Respiratory Infections Group
Sexual health and blood borne viruses	SHPN-Sexual Health and Blood Borne Viruses Executive leads Network
Functional Area (operates across HP)	SHPN-Functional Group
Health protection guidance development	SHPN-Guidance Group
Workforce education development	SHPN-Workforce Education Development Group
HPZone service board	SHPN-HPZone Service Board
Health protection preparedness for public health incidents with potential to cause high consequences	SHPN-Health Protection Preparedness Group
Public health microbiology	SHPN- Public Health Microbiology Group

Other partner organisations

Public Health England

Scotland currently accesses and pays for additional services from the Public Health England. The necessary powers are conferred by the Health and Social Care Act 2012. Additional functions can be given to PHE to provide services in Scotland under the Act by agreement with the relevant Ministers and subject to Parliamentary procedures. Services covered are:

- Advisory services for chemicals (commissioned by HPS);
- Advisory services for poisons (commissioned by HPS);
- Planning for public health emergencies (commissioned by SG);
- Radiation advice (commissioned by SG);
- Specialist laboratory services (commissioned by HPS).

PHE acts as the focal point for the UK for the International Health Regulations (IHR) and is the competent body for the UK for the European Centre for Disease Control (ECDC).

PHE Centre for Radiation, Chemical and Environmental Hazards (CRCE)

CRCE provides a wide range of radiological protection services for health protection in Scotland. PHE also provides support to the Scottish Government on incidents involving radiation and chemical hazards and advice to NHS Boards. PHE also commissions the **National Poisons Information Service**, a national service which provides expert advice on all aspects of acute and chronic poisoning. The NPIS Scottish base at the Edinburgh Royal Infirmary manages the UK TOXBASE, a clinical toxicology database.

NHS Health Scotland

Health Scotland (HS) is Scotland's national health improvement agency, with focus on tackling health inequalities. Health Scotland's work in relation to health protection includes production of information materials to support immunisation programmes. Health Scotland has also led on work to develop educational interventions for vulnerable young people at risk of being infected with blood borne viruses. It promotes knowledge into action on a range of topics that influence the fundamental determinants of health including health protection, and collaborates on intersectional topics such as environment and place, sustainability and climate change, drugs and addictions, sexual health and relationships, basic life skills such as hygiene. Campaigning work is an important function e.g. support of norovirus, flu and recently AMR.

NHS Education for Scotland (NES)

NES is NHS Scotland's education and training body and is responsible for developing education, training and workforce development for those who work in NHS Scotland. NES works in partnership with HPS and stakeholders such as Local Authorities to promote the development of a competent and confident workforce in health protection by:

- assessing the skills and knowledge needs of key disciplines
- identifying the most appropriate education and training methods for meeting these
- working to ensure this is provided on a local and national basis.

NES, HPS and their partners have produced a national framework for workforce education development in health protection in Scotland. Expert advice for this work is provided by the joint NES/HPS National Health Protection Education Advisory Group (HPEAG).

Healthcare Improvement Scotland

Healthcare Improvement Scotland's aim is to support better quality health and social care for everyone in Scotland.

Its resources are focused on five key areas to maximise impact:

- Enabling people to make informed decisions about their care and treatment.
- Helping health and social care organisations to redesign and continuously improve services.
- Provide evidence and share knowledge that enables people to get the best out of the services they use and helps services improve.
- Provide quality assurance that gives people confidence in the services and supports providers to improve.
- Making the best use of resources, to ensure every pound invested in our work adds value to the care people receive.

HPS works in partnership with HIS in a selection of its services in order to deliver on the ARHAI agenda for Scotland. The Scottish Medicines Consortium in HIS hosts the Scottish Antimicrobial Prescribing group to work with NHS boards across health and care settings in Scotland to improve antibiotic use, to optimise patient outcomes and to minimise harm to individuals and to wider society. HPS provides expert infection prevention and control advice to the Healthcare Environment Inspectorate (HEI) within HIS. HEI carry out safety and cleanliness inspections across NHSScotland hospitals and services. HPS is a technical partner to the Scottish Patient Safety Programme (SPSP) within HIS providing expert advice and evidence for the bundles and content of the interventions used to improve HAI. HPS also works in partnership with the evidence group in HIS, collaborating on infection related HTAs and SIGN guideline development.

The Care Inspectorate

The Care Inspectorate is a scrutiny body which supports improvement. It looks at the quality of care in Scotland to ensure it meets high standards. Where improvement is needed, it supports services to make positive changes.

Its vision is that everyone experiences safe, high-quality care that meets their needs, rights and choices.

HPS works with the Care Inspectorate, providing expert advice on interpretation and application of existing evidence based guidance, providing an enquiry service to the inspection team and in development of new guidance where needs are identified. HPS works in partnership on the Healthcare Associated Infection in Long term Care (HAL)T survey (under an EU directive) which identifies the key priorities for infection prevention and prescribing strategically for care homes in Scotland.

Food Standards Scotland

Food Standards Scotland (FSS) is the public sector food body for Scotland. FSS ensures that information and advice on food safety and standards, nutrition and labelling is independent, consistent, evidence-based and consumer-focused.

FSS's primary concern is consumer protection – making sure that food is safe to eat, ensuring consumers know what they are eating and improving nutrition. The vision of FSS is to deliver a food and drink environment in Scotland that benefits, protects and is trusted by consumers.

FSS develops policies, provides policy advice to others and is a trusted source of advice for consumers and protects consumers through delivery of a robust regulatory and enforcement strategy.

FSS was established by the Food (Scotland) Act 2015 as a non-ministerial office, part of the Scottish Administration, alongside, but separate from, the Scottish Government. FSS is mainly funded by government but charges fees to recover costs for regulatory functions.

Animal and Plant Health Agency

The Animal and Plant Health Agency covers England, Wales and Scotland but not Northern Ireland. It is the lead agency responsible for animal health matters and implements the policies of the Chief Veterinary Officers in Defra and the Devolved Administrations. It exercises the Scottish Government's statutory responsibilities for responding to notifiable diseases in animals including those which can be transmitted between animals and humans (zoonoses), working closely with veterinary and policy colleagues in the Scottish Government Animal Health and Welfare Division of the Rural Directorate.

Drinking Water Quality Regulator for Scotland (DWQR)

The DWQR was created in 2002 by the Water Industry (Scotland) Act 2002 to monitor and regulate the quality of public water supplies in Scotland, and to supervise the discharge of local authority duties with respect to private water supplies. The work of the DWQR is supported by a small team of technical staff within the Drinking Water Quality Division of the Scottish Government. They provide advice to government on longer term strategies to improve water quality as well as advice and support to local authorities and NHS boards especially in relation to private water supplies as well as maintaining an overview of Scottish Water's activities as the main public drinking water supplier. Local authorities are responsible for carrying out tests for both routine monitoring purposes or to investigate complaints or to check compliance with legal standards.

Scottish Water

Scottish Water provides water and sewerage services throughout Scotland as a state owned public water utility. Its general responsibilities and powers are set out under the Water Industry (Scotland) Act 2002. Scottish Water has a duty under the Water (Scotland) Act 1980 to provide a supply of wholesome water. The Water Supply (Water Quality) (Scotland) Regulations 2001 define what is meant by wholesome by setting the quality standards for a number of different parameters and also define the monitoring frequency to establish the quality of all supplies.

The Police

Police Forces have a range of responsibilities which overlap with NHS Boards in managing public health incidents. The police will normally coordinate the activities of those responding at and around the scene of a land based sudden impact emergency. They liaise with NHS Boards in managing the

coordinated provision of essential services to protect the public from exposure to hazards in chemical incidents and other public health emergencies.

Fire and Rescue Service

Fire and rescue services may be involved at declared major incidents and have received specialist training eg to recover individuals from areas where they have been exposed to hazardous agents.

The Scottish Ambulance Service (SAS)

The Scottish Ambulance Service has a role in relation to health protection as a first responder to incidents including chemical and other hazardous environmental exposure incidents. SAS developed three Special Operations Response Teams (SORT) in Edinburgh, Glasgow and Aberdeen, comprising 106 paramedics and ambulance technicians specially trained to work inside the inner cordon alongside police and fire and rescue services at large scale hazardous incidents. They have all completed an intensive training course that enables them to operate in chemical, biological, radiological, nuclear and explosives (CBRNE) incidents and other accidents that involve hazardous materials.

Health and Safety Executive

The Health and Safety Executive (HSE) is a non-departmental public body with Crown status. The Chair and members of HSE's Board are appointed to provide strategic direction for Great Britain's health and safety system. The Board reports to the Secretary of State for Work and Pensions and other Secretaries of State. HSE's primary function is to secure the health, safety and welfare of people at work and to protect others, including members of the public from risks to health and safety from work activity in accordance with the Health and Safety at Work etc Act 1974 (HSWA) and regulations made under it. HSE does this in partnership with Local Authorities. If a public health incident arises as a result of work activity, HSE could have a role in investigating the matter under HSWA and reporting its findings to the Crown Office and Procurator Fiscal Service. Health and safety matters dealt with by HSE have not been devolved to the administrations in Scotland and Wales.

Scottish Environment Protection Agency

SEPA is a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament. Their main role is to protect and improve the environment, by being an environmental regulator, helping business and industry to understand their environmental responsibilities and helping customers to comply with legislation. SEPA protect communities by regulating activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water. The regulations they implement also cover the keeping and use, and the accumulation and disposal, of radioactive substances. SEPA are responsible for delivering Scotland's flood warning system, helping to implement Scotland's National Waste Strategy and controlling, with the Health and Safety Executive, the risk of major accidents at industrial sites.

The Procurator Fiscal Service

The Crown Office and Procurator Fiscal Service (COPFS) is responsible for the prosecution of crime in Scotland, and the investigation of sudden, unexpected, accidental and suspicious deaths which occur in Scotland.

Other strategic business units of NHS National Services Scotland

There are a number of services within NHS National Services Scotland (NSS) which contribute to the health protection effort in Scotland as part of their service delivery. National Services Scotland (NSD) are collaborators in reference laboratory commissioning, National Procurement (NP) provide indicator data for IP&C. Practitioner Services provide antimicrobial prescribing data. Health Facilities Scotland (HFS) provides technical and engineering decontamination advice and guidance on the healthcare built environment, and HPS collaborates with them on IP&C in that context. Information Services Division (ISD) provides data used across health protection: this will be covered in more detail in other commissions. In turn, HPS provides cover for the Scottish National Blood Transfusion Service (SNBTS) Infection Control Manager (ICM).

Third sector organisations

Health protection services in Scotland look to organisations in the third sector for a range of contributions, for instance in provision of information and patient advocacy and support in areas of meningitis, HIV/AIDS, Hepatitis and drug use.

Annex 1 Historical context of Health Protection Services in Scotland

The following is a brief history of the evolution of health protection services from the early days of public health to the present day. Today, health protection is one of the three principle domains of Public Health, however, modern day public health has its origins in the development of health protection in the 19th century. The main public health issues of the 19th century were sanitation, housing, infection, nutrition and the poor health and excess mortality of the population. Legislation was introduced between 1848 and 1890 to address these issues in order to improve public health. The work of the 19th century public health pioneers started in Liverpool with Dr William Henry Duncan, a local physician, who became the first Medical Officer of Health (MOH) in the country; spread to London in 1848 and the whole country by 1872. Medical Officers of Health were appointed to all local authorities. They helped establish much improved environmental and living conditions, including sanitation, for the population as a whole.

Early in the 20th century the specialty began to broaden its perspective from hygiene and sanitation to consider the effects of poverty and deprivation on health more generally. The Royal Commission on the Poor Laws in 1909 made recommendations on workhouses and better coordination of charitable aid. Reports were produced proposing old age pensions and a state insurance scheme for sickness and unemployment. A Ministry of Health was established in 1919. Public Health came to the forefront of the political agenda during the post WW1 reconstruction. The central concerns were (a) general sanitation, housing, epidemiology and infectious disease; (b) prevention and treatment of tuberculosis and venereal disease; (c) food control in respect of disease; (d) maternity and child welfare; and (e) health insurance and other public medical services.

The Local Government Act of 1929 paved the way for the final ending of the Poor Law. Local authorities were required to ensure that the health and welfare of the inhabitants, or some of them, were not endangered by the action or inaction of the authority.

Modern day Health Protection has a long and distinguished history. The return of the public health focus on inequalities in health is in some ways a return to recognition of the priorities identified in the early days of health protection and public health.

2019 will see the 50th anniversary of the establishment of the original progenitor organisation of Health Protection Scotland (HPS); the Communicable Diseases (Scotland) Unit (CD(S) U), established in 1969. This was the first national unit dedicated to health protection work within the UK (and among the first in the world) designed to support this area of public health work. CD(S) U was established in response to issues raised during the Aberdeen typhoid outbreak, where the nationwide scale of the outbreak severely challenged the capacity of the then local authority public health departments and national level structures to cope. This highlighted the lack of adequate coordinated and systematic surveillance of communicable disease at national level. It also highlighted the need to develop the capacity to support and coordinate the investigation and control of large scale national disease outbreaks.

CD(S) U was succeeded by the Scottish Centre for Infection and Environmental Health (SCIEH) as the national level Health Protection organisation for Scotland, then in 2005 by HPS. The priorities for national level health protection have evolved over time to reflect changes in the predominant communicable disease and environmental public health challenges of the period.

The adoption of the term 'Health Protection' in 2005, helped to clarify the fundamental common purpose of this area of public health work for the wide range of professional practitioners involved. It has also helped to improve external stakeholder understanding of this domain of public health, by establishing a clearer focus of common objectives and by better describing the full range of activities covered.

Changes in the organisational structure of the national level HP agency have reflected wider organisational changes within the NHS in Scotland. The changing structure and internal organisation of HPS has also mirrored the progressive adoption of multi-disciplinary and multi-agency working in public health practice generally, reflecting the widening range of professional and organisational interests relevant to the developing Health Protection agenda.

Annex 2 Joint Public Health Protection Plans

Section 7 of the Public Health Act describes responsibility for Joint public health protection plans (<http://www.legislation.gov.uk/asp/2008/5/section/7>)

- (1) Each health board must prepare such plans relating to the protection of public health in its area as the board considers appropriate.
- (2) In preparing a plan under subsection (1), a health board must consult the relevant local authority.
- (3) A plan under subsection (1) must—
 - (a) be prepared in accordance with any guidance issued by the Scottish Ministers; and
 - (b) include provision about such matters as may be specified in such guidance.
- (4) A board may comply with subsection (1) by incorporating the plan in any other plan the board is required or has power to prepare under any other enactment.
- (5) A board which prepares a plan under subsection (1) must publish the plan (whether as part of another plan in which it is incorporated or otherwise).
- (6) The board—
 - (a) may from time to time vary a plan under subsection (1); and
 - (b) must publish the plan as so varied.
- (7) The board must, before varying a plan under subsection (6) (a), consult the relevant local authority.
- (8) In this section, the “relevant local authority” —
 - (a) is the local authority for the area in relation to which a board is constituted; or
 - (b) where the area of the board comprises or includes the areas of two or more local authorities, is both or all of those authorities.

The table below contains links to the JPHPPS that are currently available on line, please check with individual boards for availability of more up to date versions.

Health Board	Local Authority	Link to joint plan	Notes
NHS Ayrshire & Arran	<p>East Ayrshire Council</p> <p>North Ayrshire Council</p> <p>South Ayrshire Council</p>	<p>Ayrshire & Arran JHPP 16-18</p>	<p>The JHPP covers 2016 to 2018 and was produced by the Joint Health Protection Planning Group which includes representatives from NHS Ayrshire & Arran, the 3 Ayrshire local authorities (Environmental Health) and the Ayrshire Civil Contingencies Team. The NHS Board has approved the JHPP.</p> <p>https://www.north-ayrshire.gov.uk/business/environmental-health/joint-health-protection-plan.aspx</p>
NHS Borders	<p>Scottish Borders Council</p>	<p>Scottish Borders JHPP 13-15</p>	<p>The Plan was produced by the NHS Borders Public Health Department Team and SBC Regulatory Services. The NHS Borders' Consultant in Public Health Medicine (Health Protection) has the responsibility for overseeing the development and review of the Plan.</p> <p>www.scottishborders.moderngov.co.uk</p>
NHS Dumfries and Galloway	<p>Dumfries and Galloway Council</p>	<p>D&G JHPP 14-16</p>	<p>The Joint Health Protection Plan covers the period from 1 April 2014 to 31 March 2016.</p> <p>http://www.dghps.org/policies-and-plans/</p>
NHS Fife	<p>Fife Council</p>	<p>Fife JHPP 18-20</p>	<p>The JHPP covers the period 1st April 2018 to the 31st March 2020.</p> <p>www.nhsfife.org</p>

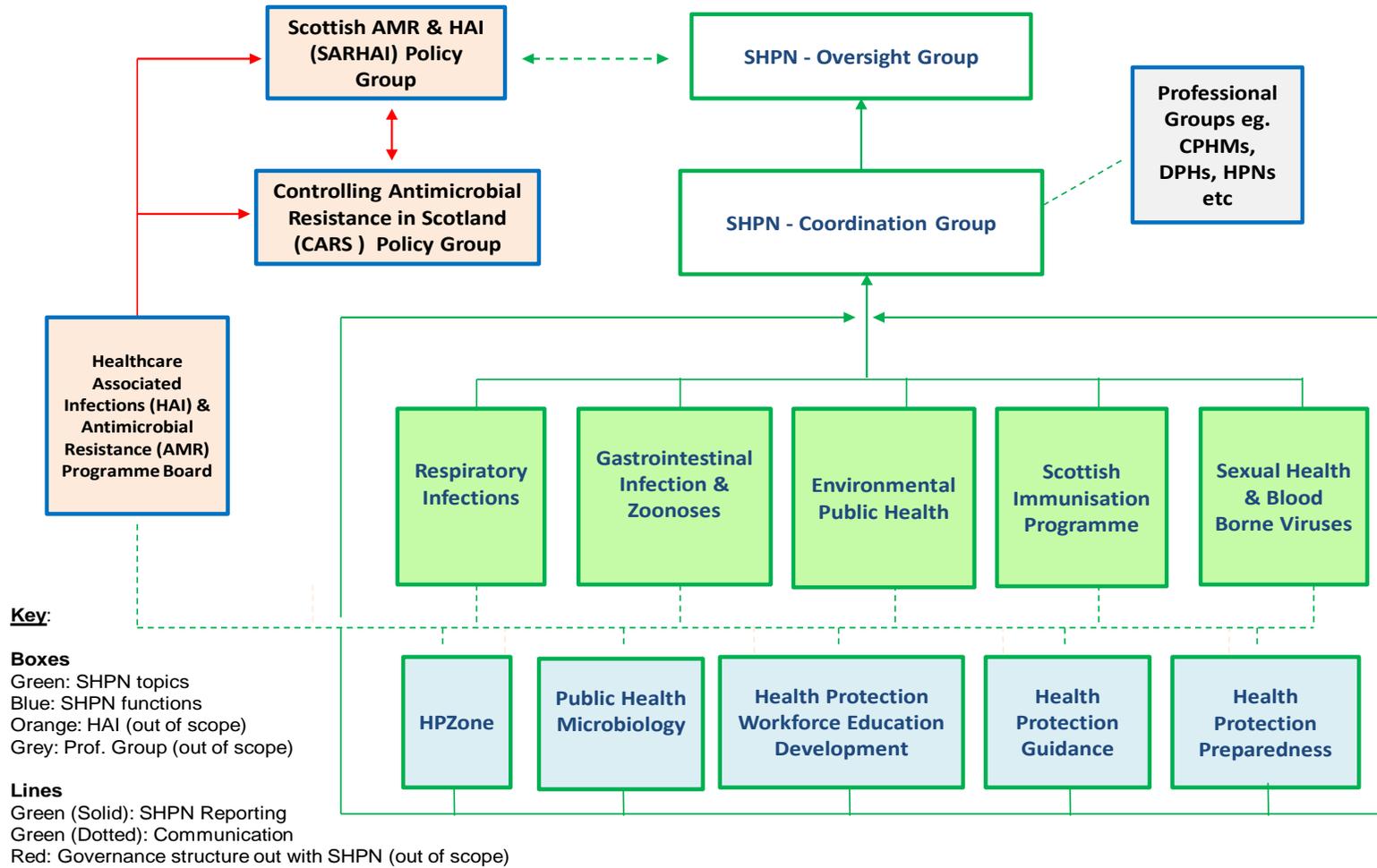
<p>NHS Forth Valley</p>	<p>Clackmannanshire Council</p> <p>Stirling Council</p> <p>Falkirk Council</p>	<p>Forth Valley JHPP 12-14</p>	<p>The Health Protection function is to monitor and protect the public from communicable disease and environmental health risks and to minimise the impact of such risks to the population. This is achieved in partnership with the Local Authorities and our combined objectives are published in the Joint Health Protection Plan 2012 – 2014.</p> <p>https://nhsforthvalley.com/health-services/public-health/health-protection/</p>
<p>NHS Grampian</p>	<p>Aberdeen City Council</p> <p>Aberdeenshire Council</p> <p>The Moray Council</p>	<p>Grampian JHPP 16-18</p>	<p>The JHPP 2016-2018 provides an overview of health protection (communicable diseases and environmental health) priorities, provision and preparedness for NHS Grampian, Aberdeen city, Aberdeenshire and Moray councils as required by the Public Health (Scotland) Act 2008. The plan covers the period from 1 April 2004 to 31 March 2016 and has been prepared by the NHS Grampian in collaboration with Aberdeen city, Aberdeenshire and the Moray councils.</p> <p>http://www.nhsgrampian.co.uk/nhsgrampian/gra_display_simple_index.jsp;jsessionid=13B639BD6A8C46139932BBB930808FB8?pContentID=7144&p_applic=CCC&p_service=Content.show&</p>

<p>NHS Greater Glasgow and Clyde</p>	<p>East Dunbartonshire Council</p> <p>East Renfrewshire Council</p> <p>Glasgow City Council</p> <p>Inverclyde Council</p> <p>Renfrewshire Council</p> <p>West Dunbartonshire Council</p>	<p>Greater Glasgow and Clyde JHPP 2010-12</p>	<p>The plan describes how the Board and the Local Authorities deal with the range of health protection topics and also outlines areas identified as requiring further work.</p> <p>The plan provides an overview of health protection (communicable disease and environmental health) priorities, provision and preparedness within Greater Glasgow and Clyde.</p> <p>http://www.nhsggc.org.uk/your-health/public-health/public-health-protection-unit-phpu/health-protection/environmental-health/nhs-ggc-joint-health-protection-plan/</p>
<p>NHS Highland</p>	<p>Argyll & Bute Council</p> <p>Highland Council</p>	<p>Highland JHPP 15-17</p>	<p>This plan covers the period 1st April 2015 to the 31st March 2017.</p> <p>www.nhshighland.co.uk</p>
<p>NHS Lanarkshire</p>	<p>North Lanarkshire Council</p> <p>South Lanarkshire Council</p>	<p>Lanarkshire JHPP 13-15</p>	<p>The current Lanarkshire JHPP covers the period from 1 April 2013 to 31 March 2015. It is hoped that members of the public will find the plan to be of interest, and of value, and that its production will contribute to protecting the health of people who visit, work in and live in Lanarkshire.</p> <p>http://www.nhslanarkshire.org.uk/Services/PublicHealth/Pages/JointHealthProtectionPlan.aspx</p>

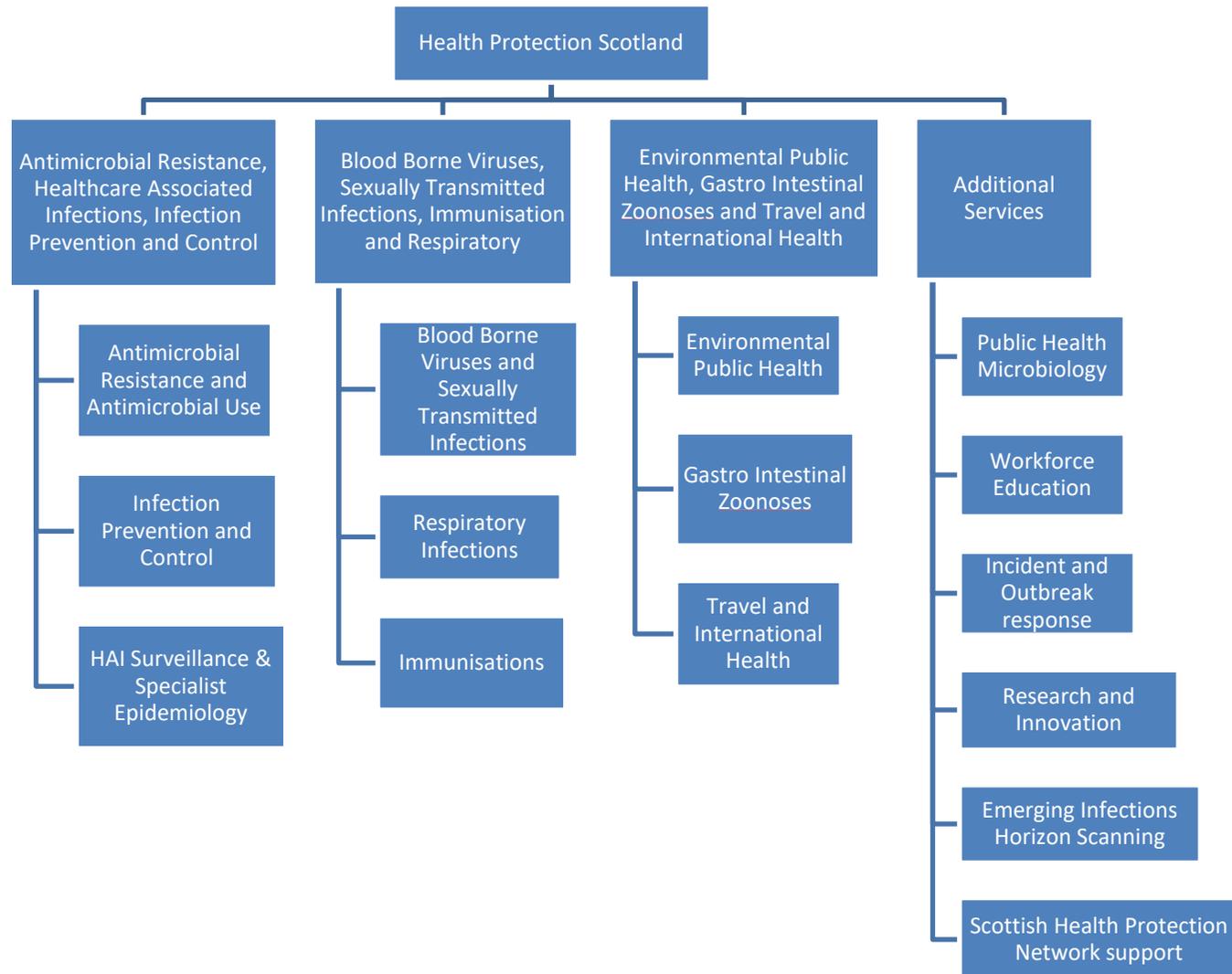
<p>NHS Lothian</p>	<p>East Lothian Council</p> <p>The City of Edinburgh Council</p> <p>Midlothian</p> <p>West Lothian Council</p>	<p>Lothian JHPP 16 - 18</p>	<p>This plan has been prepared in close collaboration between NHS Lothian and the four Local Authorities of the City of Edinburgh, East Lothian, Midlothian and West Lothian.</p> <p>www.westlothian.gov.uk</p>
<p>NHS Orkney</p>	<p>Orkney Islands Council</p>	<p>NHS Orkney Public Health</p>	<p>This link is to the NHS Orkney public health pages.</p>
<p>NHS Shetland</p>	<p>Shetland Islands Council</p>	<p>Shetland Isles Strategic Commissioning Plan 17-20</p>	<p>Service Plan – Public Health Directorate 2017-20</p> <p>We work to deliver the requirements of the Public Health Etc (Scotland) Act 2008, which governs the requirements and arrangements for public health in Scotland.</p> <p>http://www.shb.scot.nhs.uk/board/strategies.asp</p>
<p>NHS Tayside</p>	<p>Angus Council</p> <p>Dundee City Council</p> <p>Perth & Kinross Council</p>	<p>Tayside JHPP 17-19</p>	<p>Tayside’s JHPP for the period 2017-2019 was written jointly by NHS Tayside, Angus Council, Dundee City Council and Perth and Kinross Council. The plan provides an overview of health protection priorities, provision and preparedness within Tayside.</p>

NHS Western Isles	Comhairle nan Eilean Siar	Western Isles JHPP 10-12	<p>The purpose of this plan is to provide an overview of health protection (communicable disease and environmental health) priorities, provision and preparedness within the NHS Board area and covers the two years from 1 April 2010 to 31 March 2012.</p> <p>www.wihb.scot.nhs.uk</p>
--------------------------	----------------------------------	--	--

Annex 3 Overview of Scottish Health Protection Network



Annex 4 Structure of HPS



Annex 5 HPS Services

<p>The role of HPS as part of health protection services in Scotland is to plan and deliver effective and specialist national services which co-ordinate, strengthen and support activities aimed at protecting the people of Scotland from infectious and environmental hazards</p>			
Activities	Functions	Future Priorities	Programmes
<p>Assess the risks to public health associated with exposure to environmental hazards and work to minimise the adverse health impacts of these and other environmental factors.</p> <p>Evaluate and characterise the epidemiology of communicable diseases in Scotland; develop strategies to reduce the incidence of such diseases; use surveillance data and evidence based intelligence to develop good practice guidance on the control and prevention of transmissible infection in the general community and in the health and care settings.</p> <p>Investigate and manage outbreaks of communicable disease and environmental incidents to limit the impact on public health</p>	<p>Surveillance (monitoring the hazards and exposures effecting people and the impact they have on their health)</p> <p>Co-ordination of national health protection programmes (e.g. Immunisation and Anti-Microbial resistance)</p> <p>Expert advice and horizon scanning</p> <p>Effective preparation and response to outbreaks and incidents</p> <p>Enabling good professional practice</p> <p>Supporting the ongoing development of a confident and competent health protection workforce</p> <p>Support commissioning specialist/reference lab services</p> <p>Research and innovation to provide evidence for action</p>	<p>To reduce the burden of disease associated with both endemic and emerging communicable disease in the general community and in health and care settings</p> <p>To prevent outbreaks of transmissible infection when possible and to identify, investigate and manage them when they do occur including learning lessons from these incidents</p> <p>To contain AMR and reduce HAI caused by gram negative bacteria</p> <p>To assess and monitor environmental factors that can pose a risk to public health, including but not limited to air pollution</p> <p>To maintain high levels of public and professional confidence and uptake rates in preventive programmes such as screening and immunisation</p>	<p>Antimicrobial Resistance, Healthcare Associated Infections, Infection Prevention and Control and Decontamination</p> <p>Blood Borne Viruses, Sexually Transmitted Infections, Immunisations and Respiratory</p> <p>Environmental Public Health, Gastro Intestinal Zoonoses and Travel and International Health</p>



Antimicrobial Resistance,
Healthcare Associated
Infections, Infection
Prevention and Control

Epidemiology of HAI in Scotland, production of HAI national data reports, production of evidence based guidance for HAI prevention and infection prevention and control, outbreak and incident response for the boards, monitoring emerging antimicrobial resistance. Delivered via 10 health protection programmes (SAB, CDI, E. Coli, SSI, BBV, AMR, MDRO HAI Screening, Decontamination and the Built Environment, NPGO, UTI). Co-ordinate response from national organisations for NHS Boards requiring HAI support, national expert advice on HAI, work in partnership with national organisations (NES, HIS, Care Inspectorate) on national HAI agenda.

**Antimicrobial Resistance and
Antimicrobial Use (AMR/AMU)**

Surveillance of antimicrobial
resistance and use in humans and
animals

Provide intelligence in support of
policy and better practice in
AMR/AMU

Coordinate the Scottish response
to the UK national AMR strategy

**Surveillance & Specialist
Epidemiology**

National HAI mandatory
surveillance of CDI, E. coli, SAB,
SSI with associated
interventions

Intensive Care Unit Surveillance
HAI Prevalence, acute and long
term care

Outbreak support and
investigations

Multi-Drug Resistant Organism
Screening and uptake rates

Support for monitoring national
targets and support measures

Infection Prevention & Control

National Policies and Guidance
including the National Infection
Prevention and Control Manual
for all healthcare settings.

Infection Control in the Built
Environment and
decontamination

Neonatal unit surveillance

Campaigns – NORO, Hand
Hygiene, UTI

Provision of community IP&C
advice across Health Protection

Delivery of national SARHAI
agenda and policy



Blood Borne Viruses, Sexually Transmitted Infections, Immunisations and Respiratory

In relation to the Sexual Health and BBV Framework provision of strategic leadership, advice, programme support, performance of service delivery, information and the evaluation of interventions (to reduce BBVs and STI and disease). Co-ordination and evaluation of the benefits (including clinical effectiveness) of the Scottish Immunisation Programme. Co-ordination of the Scottish TB Action Plan (to reduce the incidence of TB in Scotland through improved surveillance and the identification of latent infection). Update Legionella Guidelines in Scotland.

Blood Borne Viruses and Sexually Transmitted Infections

Maintenance and further development of information systems including communications initiatives e.g. open access data portal

Results of evaluations of BBV/ STI interventions e.g. HIV PrEP, Hepatitis C treatment.

Respiratory

Support to the national TB Network. Introduction of electronic surveillance. Publication of up-to-date Health Protection Network (HPN) guidance. Proposal for identifying and screening new entrants for latent infection. Monitoring of TB against TB indicators.

Support the Legionella Guideline Development Group. Draft the Legionella Guideline.

Immunisations

Planning for the delivery of routine and seasonal programmes.

Reporting of vaccine uptake rates.

Public health impact defined



**Environmental Public Health,
Gastro Intestinal Zoonoses and
Travel and International Health**

Carries out surveillance of, and offers operational support and advice in relation to environmental public health hazards, gastrointestinal and zoonotic diseases, and travel-related disease. Utilises this information to help inform policies and strategies aimed at improving health outcomes in these areas. Provides Travax®, an interactive database of information for healthcare professionals on the health risks associated with overseas travel. Delivers Fitfortravel, a database of advice and information to the general public on travel-related illnesses and infections.

Environmental Public Health

Provision of expert advice and guidance on environmental hazards and risk assessment in relation to chemical and environmental exposures.

Outbreak and incident support in relation to incidents involving suspected environmentally-associated illness.

Efforts to reduce the long term burden of environmental hazards to health.

Gastro Intestinal Zoonoses

Surveillance, research, support, evidence-base guidance and expertise for gastrointestinal and zoonotic diseases.

Outbreak and incident support to NHS Boards for GIZ pathogens.

Investigation and management of national outbreaks and incidents.

Travel and International Health

Provision of TRAVAX® Fitfortravel as an evidence based, real time Travel Health information aimed at healthcare professionals and general public retrospectively.

Management of Yellow Fever Vaccination Centres in Scotland.

Port Health advice.



Additional Services

Several functions are delivered across HPS service as a whole, in addition to those delivered through the topic led national health protection programmes above.

Public Health Microbiology

Enhance communicable disease capacity and capability

Monitor, alert and response

Technical expertise, clinical and scientific advice & collaboration

Reference Microbiology

Supporting the ongoing development of a confident and competent health protection workforce

Coordinate and deliver health protection training to the national HP workforce

Working with NES, provide advice on development of national training modules

Effective preparation and response to incidents and outbreaks

Lead national health protection emergency response to incidents and outbreaks

National HAI support framework for AMR & HAI incidents and outbreaks

Support boards incident and outbreak response

Research & Innovation

Evaluation of interventions in partnership with academia and international organisations (Hepatitis C, respiratory, vaccines including influenza)

Participation in national and international networks

Participation in national and international research and surveillance programmes

Emerging Infections

Surveillance, support and expertise for emerging infections

Scottish Health Protection Network

Infrastructure support for the SHPN

