

### **Published by**

Health Service Executive Dr Steevens' Hospital Steevens' Lane DO8 W2A8

Tel. 01 635 2000

www.hse.ie

ISBN: 978-1-78602-213-4

#### **Citation text**

Health Service Executive (2022). Health Service Executive Health Protection Strategy 2022-2027. HSE, Dublin, Ireland. Available at <a href="https://www.hpsc.ie/HPStrategy">www.hpsc.ie/HPStrategy</a>

#### In text citation

(Health Service Executive, 2022)

The Health Service Executive Health Protection Strategy 2022-2027 outlines the objectives and priority actions for public health to take to achieve the protection of the population of Ireland from all health protection hazards in collaboration with key stakeholders.

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## **ABBREVIATIONS**

**CBRN** Chemical, biological, radiological, and nuclear incidents

**CCO** Chief Clinical Officer

CIDR Computerised Infectious Disease Reporting

**CPHM** Consultants in Public Health Medicine

**DOH** Department of Health

**EAG** Expert Advisory Group

**ECDC** European Centre for Disease Prevention and Control

**EWRS** Early Warning and Response System of the European Union

**HiAP** Health in All Policies

**HCID** High Consequence Infectious Disease

**HSE** Health Service Executive

IAR Intra-Action review

IHI Individual health identifier

IHR International Health Regulations

**MOH** Medical Officer of Health

**ONCDHP** Office of the National Clinical Director for Health Protection

RCPI Royal College of Physicians Ireland

**SOP** Standard Operating Procedure

**WHO** World Health Organization

## WELCOME

The COVID-19 pandemic highlighted the fundamental importance of a robust and resilient public health and health protection service, demonstrating its role as an essential element of a quality healthcare system. During a time of great uncertainty, our health protection teams demonstrated significant commitment and professionalism in



delivering a dynamic, flexible, and comprehensive response that always focused on protecting our population's health and our health service.

As we emerge from the pandemic and look towards the future, I am very pleased to welcome the first HSE Health Protection Strategy. The key objectives and enablers identified within this strategy will build on the strengths of the service and prioritise capacity to deliver the greatest impact for our population over the next five years.

I wish to acknowledge the work of Dr Lorraine Doherty, National Clinical Director of Health Protection HSE and her team; members of the Strategy Development Steering Committee; and all those who contributed to the development of this strategy via workshops, survey or written submissions.

The HSE Public Health Service is currently implementing the most fundamental reforms in its history, including the development of a nationally-integrated all hazards health protection function for Ireland. This strategy provides a unifying focus for delivery of health protection aligned to these reforms over the years ahead. Through its implementation, this strategy will enable the service to realise the vision of an agile, intelligence-led and evidence-informed all hazards health protection approach, embedded in HSE Public Health.

I encourage health protection and public health professionals nationally and in HSE Public Health Areas to embrace the strategy, and I look forward to working collaboratively with our health protection teams to support and enable its implementation.

Dr Colm Henry, Chief Clinical Officer, HSE

## **FOREWORD**

Given the importance of preventing and responding to significant threats to health, I was happy to lead the development of the first ever Health Service Executive (HSE) Health Protection Strategy 2022 - 2027. The strategy acts as the framework for HSE Public Health Service delivery into the future, and aims to protect the population of Ireland



from all hazards associated with key health protection threats, and not those solely associated with infectious diseases. The delivery of the objectives will protect health with regard to specific threats posed by infectious diseases, chemical incidents, radiation incidents, and environmental hazards. Also, this strategy will complement other HSE work programmes in related areas of emergency planning, social inclusion, climate change, and global health.

I am pleased that colleagues across the HSE and externally greeted the development of this strategy with enthusiasm and were committed to working together to develop it. The output of this work is this five-year strategy that supports ongoing collaboration with partners within the health service and beyond.

The strategy comes at a critical time in the HSE Public Health Reform journey at national and regional health levels and in the establishment and delivery of an integrated national health protection service. I want to thank all who have contributed to the development of this strategy and worked hard along the entire process to deliver strong strategic direction on the priorities for health protection over 2022-2027. It has been a pleasure to collaborate with public health and health protection colleagues, HSE colleagues and colleagues from Government departments and supported by a Strategy Development Steering Committee. Stakeholder engagement through multidisciplinary workshops, facilitated by an external Public Health expert, Professor Mary Black, was a key success factor. Professor Black encouraged us to showcase our strengths and to focus on the ways in which public health can lead initiatives that protect and improve health into the future.

Public health must continue to lead efforts to address emerging and existing health protection threats during and following major service reform process. Implementation of this strategy, under the leadership of the national health protection service in the HSE working in partnership with all our stakeholders throughout, will protect people in Ireland against all health protection hazards.

"Pioneering spirit should continue, not to conquer the planet or space... but rather to improve the quality of life." (Bertrand Piccard, Swiss explorer, 2016)

**Dr Lorraine Doherty** MB.BCh.BAO, MPH, FFPH (UK), FRCPI **National Clinical Director Health Protection, HSE October 2022** 

## **AIM**

To provide strategic health protection direction to HSE public health on the prevention, early identification, preparedness and response to threats from all health protection hazards, working in collaboration with key partners.



## **EXECUTIVE SUMMARY**

The Health Service Executive (HSE) Health Protection Strategy 2022-2027, provides a framework for health protection service delivery by defining ten key strategic objectives and eleven key enablers necessary to protect the population against all health hazards.

Health protection is defined as, "the prevention and control of infectious disease, environmental and radiation risks including the emergency response to major incidents and health threats" (HSE, 2019). The new national health protection service in Ireland is being established under the HSE Public Health Reform Programme, and as such is embedded within the wider public health service whose responsibilities align to the twelve essential public health functions (WHO, 2018).

For this strategy, an all hazards approach is employed. A health hazard is defined as "a potential source of harm of adverse health effect on a person(s)" (Collins, 2017). Threats can include environmental, chemical, biological, radiological, nuclear and natural events.

The Health Protection Strategy 2022-2027 centres on ten strategic objectives:

- 1. Strengthen **surveillance** and epidemiological analysis of health protection threats.
- 2. Ensure standardised public health approaches to prevention, investigation, surveillance, and response to notifiable **infectious diseases**.
- 3. Further develop public health risk assessment of, advice on, and advocacy on non-infectious disease **hazards related to the environment.**
- 4. Enable prevention, early detection and optimal public health **preparedness and response** of major incidents for all hazards.
- 5. Deliver a high level of prevention and control of vaccine-preventable diseases across population groups through **immunisation** programmes.
- 6. Employ evidence-informed approaches to mitigate the impact of **inequities** on prevention and control of infectious diseases and other defined hazards.
- 7. Enhance our understanding of and health protection approaches to **global health** issues and their impact on the population of Ireland.
- 8. Develop a health protection **research strategy** for Ireland that includes both local and international collaboration.
- 9. Expand and enhance the capabilities, education, and training of the **multidisciplinary** health protection workforce.
- 10. Provide direction and support to the development of a **nationally-integrated health protection service,** rooted in strong governance.

For each of the above objectives the importance, goals, key actions and performance measures are outlined

In order to achieve the objectives of the strategy, **eleven key enablers** have been identified:

- Visible support and commitment from the HSE leadership to adopt the strategy as the
  overall strategic framework for delivery of the health protection elements of the public health
  work programmes. Health protection should be explicitly included in the annual HSE National
  Service Plan.
- 2. **Endorsement by and collaboration with the Department of Health** for the strategy to set direction and to initiate a programme of work to protect the population from all hazard health protection threats.
- 3. **A supportive culture** across the HSE including HSE Public Health to deliver on health protection strategic objectives and to empower staff in their delivery.
- 4. **Strong public health leadership** to implement the strategy, including recruiting key public health positions related to health protection and strong advocacy for a Health in All Policies (HiAP) approach.
- 5. **Information Technology support** for development and maintenance of essential health protection systems in order to provide both integrated surveillance and incident management.
- 6. Essential **data integration, data quality, and data protection** that operate in an effective and timely fashion, including utilising individual health identifiers (IHI) and alignment to current and forthcoming health information policy at national and European levels.
- 7. A commitment to **strategic partnerships** to address health protection issues, including meaningful and regular engagement of key stakeholders and the community.
- 8. **Engagement of the public health workforce** in delivery of strategic objectives, including the development of relevant implementation plans.
- 9. **Continual and sufficient resourcing** of all heath protection programmes, including workforce development.
- 10. An approach in place for **public health legislation review** and updating by Department of Health.
- 11. A commitment to putting the "public" back into "public health" through an **active approach** to community engagement.

#### **Next steps**

The strategic objectives will be delivered over the five-year period 2022-2027.

An implementation plan for the strategy will be developed in 2022/23 in partnerships with key stakeholders, to include arrangements for performance and outcome monitoring. For each year of the strategy's life, an annual progress report on delivery will be developed and shared with HSE leadership teams and other relevant stakeholders.

## Section 1

# WHERE ARE WE NOW, AND WHERE DO WE AIM TO BE IN FIVE YEARS?

Public health is "the art and science of preventing disease, prolonging life and promoting health through the organised efforts of society." (Acheson, 1988)

#### Where are we now?

Health protection is a core domain and statutory function of public health in Ireland, which involves preventing, responding to, investigating, and controlling emergency incidents (heretofore primarily involving notifiable infectious diseases).

The HSE defines health protection as, "the prevention and control of infectious disease, environmental and radiation risks including the emergency response to major incidents and health threats" (HSE, 2019).

Health protection requires expert advice and effective collaboration to identify, prevent, and mitigate the impacts of infectious disease, environmental, and radiation threats (Ghebrehewet, Stewart and Rugus, 2016). Health protection involves a broad range of activities, including:

- Risk assessment and surveillance of hazards
- Investigation and control of communicable diseases
- Emergency preparedness and response
- Leadership and communication to the public and stakeholders and collaborative working with other agencies and organisations.

Health protection activities are usually implemented along the same model regardless of the cause.

Health protection requires consideration of the balances between the benefits and risks of public health action to protect the population from hazards to health and should not be delivered in isolation of the other areas of public health.

In addition to strategy development meetings, two strategy development workshops were held in March and June 2022. These were attended by the strategy development committee members and invited stakeholders outlined in Appendix 1 and 2. Figure 1 below outlines core functions of health protection in public health identified during development of this strategy.

Immunisation Programmes			Enhanced Health Protection Research	
Infection Control	Risk Assessment and Management	Monitoring Threats and Advising	Communication on Health Protection	
Global Health	Outbreak Detection and Management	Surveillance	Outbreak Control Plans	
<b>E</b> pidemiology and <b>Modelling</b>	Technology and Non-Infectious Disease Surveillance	Action for Clean Air, Water and Food	Infectious Disease Control	
Environmental Health Hazard Protection	Chemical Incidents and Emergency Response	Collaboration to Protect Health	Workforce Development	

Figure 1: Core functions of health protection identified during strategy development

The Medical Officer of Health (MOH) legislation<sup>1</sup> underpins the work required to protect populations and sets out the obligations of this statutory service in Ireland. Area Directors of Public Health and Consultants/Specialists in Public Health Medicine are designated Medical Officers of Health who implement the MOH legislation.

<sup>1</sup> 

A review of the current and future role, training and career structures of public health doctors in Ireland recommended the development by the HSE of a new organisational model for public health. Specifically, it was recommended that this new model be rooted in a strong national public health function within the HSE "which contributes effectively to major service design and policy implementation, to research and health intelligence activities, and to the achievement of the goals set out within the Healthy Ireland² initiative" (Government of Ireland, 2018 p47). It was recommended that public health physicians play a proactive key role across these areas, with national co-ordination and leadership of health protection aligned to strong regional public health networks creating a hub and spoke structure. The HSE Public Health Reform Programme is currently implementing this on a phased basis

Since 2020, there has been an enhanced and sustained focus on the health protection response to the COVID-19 pandemic. The public health workforce has significantly expanded under the national pandemic operating model (HSE, 2020) and through the establishment of the HSE's health protection service as part of HSE Public Health Reform Programme. The new national health protection service will be embedded within a wider public health service whose responsibilities align to the twelve essential public health functions<sup>3</sup> (WHO, 2018).

In January 2022, the Department of Health established a Public Health Reform Expert Advisory Group (EAG), whose remit included identification of learnings from the national public health response to the COVID-19 pandemic, with "a view towards strengthening health protection generally and future public health pandemic preparedness specifically" (Department of Health, 2022).

Looking into the twenty-first century, a rapidly changing climate and increasing globalisation brings new and emerging health threats. Alongside the changing public health landscape in Ireland, a health protection strategy is needed to establish the strategic priorities and objectives for a HSE national health protection service for the future.

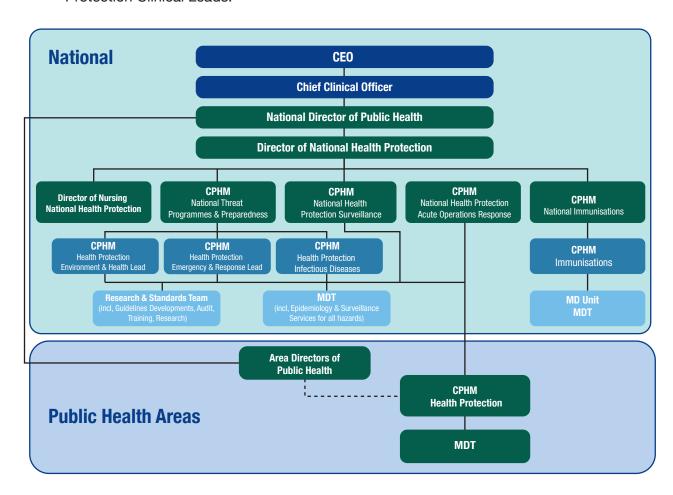
Healthy Ireland is a Government-led initiative which aims to create an Irish society where everyone can enjoy good physical and mental health, and where wellbeing is valued and supported at every level of society. Further details available at: https://www.gov.ie/en/organisation/healthy-ireland-/.

The twelve essential functions include: surveillance, emergency management, governance and regulation, planning and financing, health threats, disease prevention, health promotion, engagement, adequate workforce, quality and access, research, and medicines access (WHO, 2018).

#### The health protection service in the HSE

Following the publication of the Crowe Horwath Report on the Role, Training and Career Structures of Public Health Physicians in Ireland (Government of Ireland, 2018) and the establishment of the HSE's Public Health Reform Programme (2019 to present), the HSE appointed its first National Clinical Director for Health Protection in March 2020. A new HSE national office for health protection followed to establish a national health protection service by 2022. This new organisational model for health protection continues to be implemented. The national hub (Figure 2) currently comprises of:

- Director National Health Protection, who is also the national Medical Officer of Health;
- Four Consultants in Public Health Medicine (CPHM) who are the national clinical leads for surveillance, immunisation, health threats preparedness and acute operations response;
- One Director of Nursing, National Health Protection;
- Management and administration support staff; and
- Support functions including Research and Development Unit, management and administration support staff; and multidisciplinary teams reporting to the National Health Protection Clinical Leads.



**Figure 2:** HSE health protection service organisational structure

A description of the operating model National Health Protection Service is outlined below (Figure 3).

#### The operating model for the HSE national health protection service

Established as part of the HSE Public Health Reform Programme, a nationally integrated health protection service will implement a hub and spoke operating model for health protection as part of public health medicine service delivery, where:

#### In this model the national hub proves:

- Strategic direction, co-ordination, common standards and policies, leadership, and centralised critical expertise.
- Overall co-ordination of health protection services and leadership of major health protection crises and incidents.
- An international liaison point for the IHR, EWRS, WHO, and ECDC focal point, including a co-ordinating competent body.

#### National health protection comprises the following work programmes:

- National Health Protection Threat Programme and Preparedness
- National Health Protection Acute Operations Response Programme
- National Health Protection Surveillance Programme
- National Health Protection Immunisation Programme
- National Health Protection Support Functions.

#### The spokes provide:

- Consultant delivered health protection services across all hazards in the six Public Health Areas, where 18 Consultants in Public Health Medicine with a special interest in Health Protection (CPHMs) work through and lead multidisciplinary teams in health protection.
- HSE Public Health multidisciplinary teams (MDTs) consist of medical, nursing, surveillance and administrative staff.
- The Area CPHMs collaborate with the national hub to provide national clinical leadership of a defined threat programme for the integrated service.
- The Area Health Protection MDTs work across infectious diseases, environment and health, and emergency preparedness and response.

Figure 3: Summary of the HSE's health protection service model

Concurrently, six Public Health Areas have been established across the country to provide public health expertise and services, both regionally and nationally (Figure 4). Each area is led by an Area Director who is also a regional Medical Officer of Health. These areas are aligned to the planned Sláintecare regional health areas. Consultants in Public Health Medicine (CPHM) with a special interest in Health Protection, supported by multidisciplinary teams in each area, provide health protection services regionally with leadership support from the National Health Protection Clinical Leads. In these regional areas, CPHMs also provide national clinical leadership of a defined health threat for the integrated national health protection service.

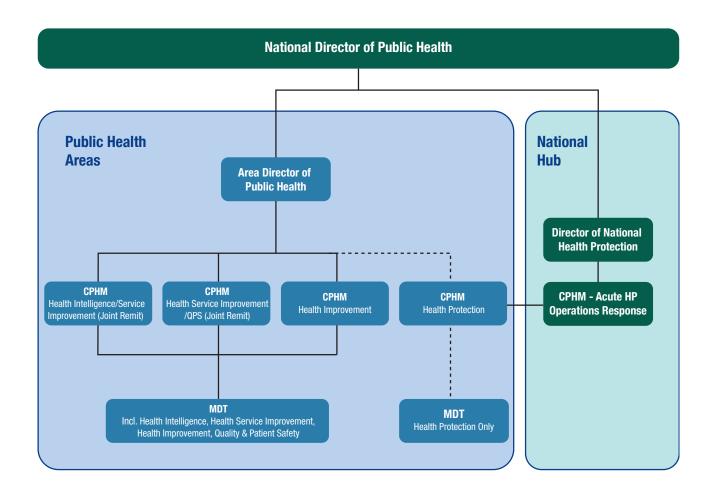


Figure 4: HSE Public Health Area structure

#### **Developing the health protection strategy**

To set the scene for the development of the HSE Health Protection Strategy 2022-2027, a background briefing was prepared for the Strategy Development Steering Committee (Appendix 1). This, paper focused on statutory functions of health protection in Ireland, the ongoing Public Health Reform Programme, the relevant public health policy documents, and key challenges and learning from the COVID-19 pandemic response. The context paper (Kelly et al, 2022) is available online at hpsc.ie/hpstrategy.

During the strategy development workshops (Appendix 2), participants further reviewed the briefing paper and considered relevant context factors for health protection. The factors identified by the group highlight the breadth of issues impacting health protection services and staff today, including the ongoing COVID-19 pandemic response; the need for an all hazards approach to health protection; the impact of social determinants of health; public health communications, leadership and governance; and workforce strengthening.

Figure 5 below summarises these contextual factors. These factors strongly influenced the selection of the ten strategic objectives and their key actions within the HSE Health Protection Strategy 2022-2027.



**Figure 5:** Contextual factors for health protection identified during strategy development.

## Where do we aim to be in five years?

#### **Vision**

The health and wellbeing of people in Ireland is protected against all health protection hazards.

#### **Aim**

To provide strategic health protection direction to HSE public health on the prevention, early identification, preparedness and response to threats from all health protection hazards, working in collaboration with key partners.

Health protection is and will continue to be a core domain and statutory function of a wider HSE Public Health Service in Ireland. Over the next five years, national and regional health protection will be provided in an integrated manner as envisaged in the ongoing HSE Public Health Reform Programme. The concurrent development of other areas of HSE Public Health (including Health Improvement, Health Services Improvement and Health Intelligence) will enable and support the new national health protection service.

This strategy is aligned to the HSE Corporate Plan 2021-2024 and underpinned by the HSE values of care, compassion, trust, and learning (HSE, 2021). Guided by these values, the ten key objectives will provide direction to a new national health protection service over the next five years. This service will deliver an agile, intelligence-led and evidence-informed public health response to threats from all hazards. A health hazard is defined as "a potential source of harm of adverse health effect on a person(s)" (Collins, 2017).

The strategy comes at a time of great change in the organisation of HSE public health. Conversations, work and developments, catalysed by the public health reform process, have highlighted challenges in the successful implementation of the HSE Health Protection Strategy 2022-2027. To overcome these challenges, eleven critical enablers were identified as necessary for the national health protection service to achieve the ten strategic objectives at the centre of this strategy.

## **Section 2**

## **OUR OBJECTIVES**

## Ten strategic health protection objectives

- 1. Strengthen **surveillance** and epidemiological analysis of health protection threats.
- 2. Ensure standardised public health approaches to prevention, investigation, surveillance, and response to notifiable **infectious diseases**.
- 3. Further develop public health risk assessment of, advice on, and advocacy on non-infectious disease hazards related to the environment urveillance
- 4. Enable prevention, early detection and optimal response in public health **preparedness** and response of major incidents for all hazards.
- 5. Deliver a high level of prevention and control of vaccine-preventable diseases across population groups through **immunisation** programmes.
- 6. Employ evidence-informed approaches to mitigate the impact of **inequities** on prevention and control of infectious diseases and other defined hazards.
- 7. Enhance our understanding of and health protection approaches to **global health** issues and their impact on the population of Ireland.

  Hazards
- 8. Develop a health protection research strategy for Ireland that includes both local and international collaboration.

  all health protection

  Environment
- Expand and enhance the capabilities, education, and training of the multidisciplinary health protection workforce.
- 10. Provide direction and support to the development of a **nationally-integrated health protection service,** rooted in strong governance.



## **OBJECTIVE 1: SURVEILLANCE**

Strengthen surveillance and epidemiological analysis of health protection threats.

#### Why is it important?

- Surveillance is defined as "information for action" (Orenstein and Bernier, 1990). Disease surveillance and epidemiological analysis are essential to the protection of the health of the Irish population. Surveillance—including timely information/surveillance data, independent advice, epidemiological investigation, research, training—are effective tools in prioritising and driving public health action.
- To protect the health and wellbeing of the people of Ireland against all hazards, surveillance must expand from primarily infectious diseases to include other health protection threats

### What are we trying to achieve?

- The development of an integrated One Health<sup>4</sup> approach to surveillance that is consistent with the global One Health initiative.
- Expand health protection surveillance from infectious disease surveillance to include all hazard threats as necessary.
- Enhance health protection surveillance through use of new technologies and systems, including the use of individual health identifiers (IHIs) and Eircodes.
- Collaborative and integrated health protection surveillance networks that include early warning systems and horizon scanning for all health protection hazards.
- Health protection surveillance networks across national and regional level, which capture the full scope of data required to inform public health actions.

#### What we will do?

- 1. Determine health protection surveillance requirements for an all hazards approach.
- 2. Expand surveillance capacity and capability for an all hazards approach, as necessary.
- 3. Modernise or replace information systems to ensure they are fit for purpose, capturing the full scope of data required to inform public health actions and aligned with other HSE client management systems.
- 4. Strengthen collaboration across national health protection and regional Public Health Areas to enhance surveillance/epidemiology methodologies and capacity.
- 5. Ensure timely surveillance data and epidemiological analysis to drive public health action and prioritisation.

- 1. A completed gap analysis of health protection surveillance requirements for an all hazards approach.
- 2. Development and implementation of a health protection surveillance plan, that provides strong information governance and data management frameworks.
- 3. The inclusion of non-infectious disease hazards in health protection surveillance.
- 4. Development of health protection information systems to ensure they are fit for purpose, including enhancement or replacement of the current system CIDR.
- 5. Introduction of a health protection case and incident management system across national health protection services.
- 6. Enhanced integration of surveillance capacity and capabilities across national and regional areas.

## **OBJECTIVE 2: INFECTIOUS DISEASES**

Ensure standardised public health approaches to the prevention, investigation, surveillance, and response to notifiable infectious diseases.

#### Why is it important?

- Biological threats include a wide range of notifiable infectious diseases that pose health and wellbeing risks to the population.
- Infectious disease threats are associated with significant morbidity, mortality, and impact on service delivery.
- Expert advice and effective collaboration to identify, prevent, and mitigate infectious disease threats benefits individuals and wider society.
- At present in Ireland, the response to infectious disease threats is not standardised, and relies on local standardised operating procedures (SOPs). Regional variations in practice can result, amongst other things, in the inconsistent collection of surveillance information.

#### What are we trying to achieve?

- An emphasis on prevention over response with particular focus on mitigating the harm caused by inequities.
- Standardised approaches to the prevention, investigation, surveillance of and response to notifiable infectious diseases.
- A One Health approach consistent with the global One Health initiative.
- Collaboration with key One Health stakeholders by leading surveillance of infections, providing expert public health advice on antimicrobial resistance and responding to cases of multidrug resistant organisms.
- Ensure lessons learned from COVID-19 and current/future health threats are embedded in health protection work.
- Build relationships with key stakeholders on emergency response.

#### What we will do?

- 1. Develop specific plans for the protection of the population from priority infectious diseases, such as tuberculosis.
- 2. Develop and resource systems and SOPs to support sustainable, robust, and efficient health protection action.
- 3. Collaborate with key stakeholders in a One Health approach to notifiable infectious diseases.
- 4. Continue to provide robust surveillance for pathogens with epidemic/pandemic potential, such as Influenza and SARS-CoV-2.
- Continue to provide comprehensive diseasespecific surveillance and responses, including, case management, vaccine programmes, prophylaxis/treatment as available.
- Develop a standardised approach with clear criteria, for the evaluation of public health responses to infectious diseases major incidents.

- 1. Engagement with national and international One Health mechanisms.
- 2. Development of health protection plans for specified priority infectious diseases.
- 3. Use of agreed SOPs for management of core health protection threats.
- 4. Establishment of a process of audit of adherence to guidelines and SOPs, including reporting of appropriate deviations.
- 5. Establishment of robust early warning/ hazard alert systems for agreed hazards.
- 6. Development of major incident plans for appropriate health protection hazards.

# OBJECTIVE 3: HAZARDS RELATED TO THE ENVIRONMENT

Further develop public health risk assessment of, advice on, and advocacy on non-infectious disease hazards related to the environment.

#### Why is it important?

- Environmental hazards pose growing direct and indirect health threats to individuals and populations.
- Evidence-informed guidelines and clear response plans optimise the HSE's ability to prevent, respond, and mitigate against priority environmental hazards.
- Some of the biggest health protection challenges are chronic risks and provide an important basis for ongoing surveillance and risk assessment, including for example poor air quality in urban areas; transport related noise stress in residential areas; diffuse pollution of water supply and amenity areas; build-up of antimicrobials in our environment; use of toxic and 'forever chemicals' and northward migration of vector-borne diseases.

### What are we trying to achieve?

- Enhanced national and regional surveillance, public health risk assessment, stakeholder advice, and advocacy on priority environmental health protection hazards.
- Prioritisation of public health action based on the impact of various hazards, including morbidity, mortality and impact on service delivery.
- Evidence-informed, sustainable, robust, and efficient health protection practice and measures supported by guidelines and written agreements between services in relation to roles and responsibilities in specific environment and health issues.
- Work towards a work environment which has net zero carbon emissions by 2027.

#### What we will do?

- 1. Collaborate with key stakeholders to develop clear health protection roles and responsibilities for environment and health issues.
- 2. Expand surveillance of environmental hazards.
- 3. Develop preparedness plans for health protection hazards which are exacerbated by climate change.
- 4. Expand the health protection role in advocacy on environment and health issues.
- 5. Collaborate with key stakeholders (e.g. Environmental Protection Agency) to support public health advocacy submissions to government departments on environmental threats to health.
- 6. Reduce carbon emissions across the HSE health protection work environment and service delivery.

- Continuous engagement with key stakeholders to define and review roles and responsibilities in surveillance and public health action on environmental hazards.
- 2. Integration of environment and health preparedness and response into the health threats workstreams.
- 3. The surveillance of environmental hazards.
- 4. Developed preparedness plans for noninfectious environmental hazards in collaboration with key stakeholders.
- 5. Engagement with national and international environment and health mechanisms.
- 6. Evidence of reduced carbon emissions across health protection work environments.

# OBJECTIVE 4: ALL HAZARDS PREPAREDNESS AND RESPONSE

Enable prevention, early detection and optimal response in public health preparedness and response of major incidents for all hazards.

#### Why is it important?

- The International Health Regulations (IHR) 2005 (WHO, 2016) require that all State parties have the ability to detect, assess, report and respond to public health emergencies.
- The HSE is part responsible for alert, through surveillance/data, and response (to cases/outbreaks/hazards) functions required under the IHR, such as the health security of the State.
- Reducing the occurrence and impact of all hazard major incidents and emergencies requires multi-agency, multi-sectorial, and multidisciplinary collaboration and planning.
- Climate change may be the defining global public health threat of the twentyfirst century. Climate change significantly increases the risk of occurrence of multiple hazards, such as heat stroke, drought, storm events, contamination of drinking waters, stress.

### What are we trying to achieve?

- Prioritisation of prevention of major incidents and emergencies.
- Mitigation of the additional threat and harm of major incidents and emergencies associated with inequities.
- Evidence-informed, sustainable, robust, and efficient HSE preparedness for and response to incidents of 'all hazards'.
- Wider regional and national preparedness for major incidents.
- A collaborative and standardised approach to the identification, threat assessment, mitigation, and response to the health threats brought by climate change.
- Integration of health threats planning with relevant existing plans/strategies.

#### What we will do?

- Develop a health threats strategy and implementation framework, including early detection and cross-/intra operational planning for chemical/biological/radiological/ nuclear (CBRN) threats.
- 2. Develop early warning surveillance systems and response plans (e.g. for high consequence infectious diseases (HCIDs)).
- 3. Strengthen capacity at Points of Entry.
- 4. Work with communities, including vulnerable and marginalised communities to improve prevention of, preparedness for and response to health threats.
- 5. Enhance collaborative working on preparedness and response to major incidents across the HSE and relevant external agencies.
- 6. Develop health threats/major incident training to contribute to public health staff development.
- 7. Strengthen Ireland's capacity to detect and report potential public health emergencies.

- 1. Development of a health threats strategy and implementation framework.
- 2. Development of early warning surveillance and response plans for specific threats.
- 3. Community engagement on health threats preparedness and response, including with vulnerable and marginalised communities.
- 4. Evidence of collaborative working across agencies and external agencies, such as joint plans, exercises and representation at national fora.
- 5. Assurance that the capacity for detection and reporting of public health emergencies is sufficient to meet IHR requirements.

## **OBJECTIVE 5: IMMUNISATION**

Deliver a high level of prevention and control of vaccine-preventable diseases across population groups through immunisation programmes.

#### Why is it important?

- Vaccine preventable diseases are a source of significant morbidity and mortality in the population.
- They are highly preventable through optimal vaccine uptake and associated herd immunity.
- Currently in Ireland, there is a lack of standardised co-ordinated collection of disaggregated vaccine uptake data including ethnicity data.
- Robust monitoring of vaccine uptake and vaccine effectiveness at population level and in defined risk populations, including ethnic/marginalised/vulnerable groups is needed to support optimisation of vaccine programmes and targeted interventions to increase vaccine uptake.
- Addressing vaccine hesitancy through targeted interventions can increase vaccine uptake amongst all groups especially in vulnerable/marginalised groups.

## What are we trying to achieve?

- Optimum uptake of vaccines in all national immunisation programmes for children, adults, and those in risk groups, including pregnant women and vulnerable/marginalised populations.
- A proactive approach to the promotion of vaccine uptake in the population and all subgroups.
- Appropriate staffing, skill-mix, team resilience, research capacity, and emergency vaccine response to deliver the national immunisation programmes.

#### What we will do?

- 1. Develop a national immunisation end-to-end information system.
- 2. Ensure robust and timely monitoring of uptake and enable estimate of vaccine effectiveness at population level and in defined risk populations.
- 3. Review and make recommendations for future service delivery of national immunisation programmes.
- 4. Collaborate with all immunisation providers, promoting collective responsibility to increase vaccine uptake.
- 5. Identify groups within the population with low vaccine uptake and develop tailored immunisation programmes for them.
- 6. Continue to integrate the COVID-19 vaccine programme into the same governance structure as other routine vaccination programmes within the HSE.
- 7. Develop processes for administration of vaccines in outbreak situations.

- 1. Delivery of a fit for purpose national immunisation information system.
- 2. A review of national immunisation programmes with recommendations for training, vaccine administration and delivery of related programmes.
- 3. Service level agreements and monitored key performance indicators (KPIs) for all national immunisation programmes.
- 4. Evidence-informed reviews of vaccine acceptance and hesitancy informing vaccine plans.
- 5. Integration of the COVID-19 vaccine programme into routine vaccination governance structures.

## **OBJECTIVE 6: INEQUITIES**

Employ evidence-informed approaches to mitigate the impact of inequities on prevention and control of infectious diseases and other defined hazards.

### Why is it important?

- Certain population groups—such as those who are Irish Travellers, homeless, engage in problematic drug use, in prison, and migrants—are more at risk of acquisition of, and poor clinical outcome from health protection hazards.
- As well as the individual-level clinical risks, some inequities also contribute to a population-level risk due to the high onward transmission potential as social, economic, employment, and/or housing situations conditions can be favourable to infection.
- Some groups require intensive, innovative, and tailored approaches to ensure their health protection needs are met.

### What are we trying to achieve?

- Mitigation of the harm to health caused by social inequities.
- Minimisation of all hazard risks on vulnerable/marginalised populations.
- Public health action regarding infectious diseases and other defined hazards that prevents the occurrence or worsening of health inequities.
- A health protection information system that can alert the HSE to population groups at risk from all hazards, without stigma.
- Collaborative and collective working across the HSE and external stakeholders to reduce health inequities.

#### What we will do?

- 1. Ensure data collection systems for surveillance and immunisation include ethnicity and other variables to capture at risk groups.
- 2. Proactively engage with at risk groups on health protection issues affecting them.
- 3. Work collaboratively with HSE Social Inclusion, communities and their advocates in responding to health protection incidents.
- Act as strong public health advocates for at risk populations within the HSE and externally.
- 5. Support further development of the migrant health protection programme including infectious disease screening and treatment, and catch-up vaccination.

- 1. Delivery of surveillance and immunisation systems which include specified variables to capture groups at risk.
- 2. Standardised collection of ethnic identifiers in health protection information systems.
- Continued development of immunisation approaches tailored to the needs of at risk groups, such as immunisation programmes for marginalised communities with low vaccine uptake, using evidence-informed interventions.

## **OBJECTIVE 7: GLOBAL HEALTH**

Enhance our understanding of and health protection approaches to global health issues and their impact on the population of Ireland.

#### Why is it important?

- Public health officials are members and/or leads of various HSE and government groups including Climate Change Adaptation, One Health-AMR, the Northern Ireland Zoonoses Group, the Human Animal Infections Group and the Risk Surveillance Group (a 5-Nations group).
- There is a need to build stronger collaborative relationships with existing global health structures including with the World Health Organization (WHO) Global Outbreak Alert and Response Network (GOARN), and European Centre for Disease Prevention and Control (ECDC).

#### What are we trying to achieve?

 Enhance our understanding of and health protection approach to global health and the impact global health issues have on the population of Ireland, such as climate change, conflict, emerging infectious diseases, and global elimination strategies.

#### What we will do?

- 1. Maintain an awareness of current global health issues, including changes in global health policies and information on emerging and novel pathogens.
- 2. Develop collaborative relationships with existing global heath structures in the HSE and externally.
- 3. Strengthen connections with other States to support global health security.
- 4. Advocate for and support actions to reduce global health inequities, including vaccine inequity.

- Evidence of Global Health information sharing, collaboration and advocacy across HSE structures and externally - including other States
- 2. Global health issues developed within the health threats preparedness and response programmes of health protection.

# OBJECTIVE 8: RESEARCH STRATEGY

Develop a health protection research strategy for Ireland that includes both local and international collaboration.

#### Why is it important?

- A culture of research and evidence synthesis—both academic and operational—promotes consistent best practice, sharing of learning, and development of new ways of thinking and working.
- The benefits of a culture of research and evidence synthesis also benefit patients, populations, and the organisation as a whole, including staff performance and retention.

#### What are we trying to achieve?

- A culture of multidisciplinary research and evidence synthesis across the HSE health protection service.
- A health protection research strategy that is aligned to current and forthcoming health information policy at a national and European levels.
- Improved health protection work/ development programmes in the HSE with the insights gained from the collaboration and learning.

#### What we will do?

- 1. Support a culture of research in health protection.
- 2. Resource evidence generation and synthesis capacity.
- 3. Engage with Higher Education Institutions (HEIs) to provide continuing professional development programmes on health protection research for staff in line with service need.
- 4. Collaborate with academic and strategic partners to develop a health protection research strategy.
- 5. Develop multidisciplinary joint health protection/academic posts with academic partners.
- 6. Facilitate multisectoral working and protected time for publication.
- 7. Promote Ireland as a partner for European research studies relevant to health protection.

- 1. Development of an HSE research strategy for health protection services.
- 2. Creation of multidisciplinary joint health protection/academic posts and academic/operational secondments.
- 3. Continuing professional development programmes in place.
- 4. Evidence of publishing.
- 5. Ireland as a partner for EU research projects relevant to health protection.

# OBJECTIVE 9: A MULTIDISCIPLINARY HEALTH PROTECTION WORKFORCE

Expand and enhance the capabilities, education, and training of the multidisciplinary health protection workforce.

#### Why is it important?

- The provision of an optimal, nationally integrated, HSE health protection service hinges on the capability, education, and training of each and all members of the multidisciplinary workforce.
- During the pandemic, new staff were recruited across regional and national health protection services. Many new recruits have primarily been exposed to and gained experience of health protection during the COVID-19 pandemic.
- As the health protection services moves forward from the pandemic, staff development is required to ensure competence across the wider range of business as usual / business continuity health protection activities.

### What are we trying to achieve?

- Expand, enhance, and strengthen the capacity, capabilities, education, and training of the multidisciplinary health protection workforce.
- The optimum configuration of the multidisciplinary health protection service at national and regional level.
- Develop a strong culture of governance, quality assurance, and improvement through all elements of service.

#### What we will do?

- Determine the skill mix, and capabilities required of the HSE health protection workforce to ensure current and future service needs are met.
- Develop a multidisciplinary education implementation plan and establish a programme of education and training for the HSE health protection workforce including: leadership and management development, team working, communications, good governance, quality assurance and quality improvement.
- 3. Further implement the training strategy for Specialist Registrar Public Health Medicine to meet all aspects of health protection, in collaboration with the RCPI.
- 4. Promote and expand the use of multidisciplinary European training programmes across health protection.
- 5. Undertake job/role planning and appraisals aligned with service plans.

- Continued progression of the HSE Public Health Reform Programme, including determination of the required workforce capabilities and the introduction of formal role planning and appraisals.
- 2. Development of a multidisciplinary education implementation plan for health protection.
- 3. Establishment of health protection education and training programmes.
- 4. Engagement of an increasing proportion of workforce with European training programmes.

# OBJECTIVE 10: AN INTEGRATED NATIONAL HEALTH PROTECTION SERVICE

Provide direction and support to the ongoing development of a nationally integrated health protection service, rooted in strong governance.

### Why is it important?

- The health protection service should meet the needs of the population and adjust to existing and emerging challenges.
- Integrated national and regional health protection services support a consistent approach to health protection practice and outcomes.
- Clear organisational structures and accountability, ongoing evaluation and feedback are essential to good governance and improve staff satisfaction in the workplace.
- A supportive quality improvement culture, rooted in learning and dynamic responses will promote integration.

### What are we trying to achieve?

- A HSE service which is a global leader in health protection.
- An agile, intelligence-led, evidence informed, dynamic, sufficiently-funded/ resourced, diverse and skilled health protection service which is fit for purpose in twenty-first century Ireland.
- Clear HSE health protection governance and accountability mechanisms.
- Implementation of the recommendations of the pandemic intra action review (IAR) (HSE, 2022) relevant to the national health protection service.

#### What we will do?

- 1. Deliver on the objectives outlined in this strategy.
- 2. Provide expert advice to the HSE Public Health Reform Programme to create an optimal health protection service (configured and resourced to meet the needs of the population).
- 3. Further develop a national health protection service based on the HSE values of care, compassion, trust and learning; and a culture of trust, openness, respect and caring.
- Ensure clarity around roles and responsibilities, including leadership, with clear lines of accountability and clarity around organisational structure and governance.
- 5. Support team development and promote integrated, collaborate working across a national health protection service.
- 6. Develop branding for a new integrated national health protection service.

- 1. Delivery on actions and performance measures outlined in this Health Protection Strategy 2022-2027.
- 2. Implementation of relevant recommendations of the pandemic intra action review (IAR) (HSE, 2022)
- 3. Evidence of continued engagement with the HSE Public Health Reform Programme.
- 4. An integrated national health protection service with clear governance structures and branding.

## **Section 3**

## **Strategic Enablers**

A number of key enablers must to be in place to support the effective, efficient, and equitable delivery of the strategy objectives:

- 1. **Visible support and commitment** from the HSE leadership to adopt the strategy as the overall strategic framework for delivery of the health protection elements of the public health work programmes. Health protection should be explicitly included in the annual HSE National Service Plan.
- Endorsement by and collaboration with the Department of Health for the strategy
  to set direction and to initiate a programme of work to protect the population from all
  hazard health protection threats.
- 3. **A supportive culture** across the HSE including HSE Public Health to deliver on health protection strategic objectives and to empower staff in their delivery.
- 4. **Strong public health leadership** to implement the strategy, including recruiting key public health positions related to health protection and strong advocacy for a Health in All Policies (HiAP) approach.
- 5. **Information Technology support** for development and maintenance of essential health protection systems in order to provide both integrated surveillance and incident management.
- 6. Essential **data integration, data quality, and data protection** that operate in an effective and timely fashion, including utilising individual health identifiers (IHI) and alignment to current and forthcoming health information policy at national and European levels.
- 7. A commitment to **strategic partnerships** to address health protection issues, including meaningful and regular engagement of key stakeholders and the community.
- 8. **Engagement of the public health workforce** in delivery of strategic objectives, including the development of relevant implementation plans.
- 9. **Continual and sufficient resourcing** of all heath protection programmes, including workforce development.
- 10. An approach in place for **public health legislation review** and updating by Department of Health.
- 11. A commitment to putting the "public" back into "public health" through an active approach to community engagement.

## **Section 4**

## **Conclusion and Next Steps**

The development of this HSE Health Protection Strategy 2022-2027 is a critical step to ensure that there is a clear framework for the delivery of health protection functions over the next five years. The objectives are designed to ensure that the HSE has a well-developed, adequately-resourced, nationally integrated health protection service that addresses priority issues, in a consistently agile, intelligence-led, evidence informed manner.

The next steps following the publication of the strategy are to:

- 1. Develop detailed **implementation plans** for each of the objectives, which clearly assign roles and responsibility for delivery of actions
- 2. Engage **key stakeholders** who will be critical to delivery of the strategic objectives and include them in the relevant area workplans.
- 3. Establish a **monitoring framework and process** for the performance measures outlined in the strategy.
- 4. **Review the strategy** and its implementation annually. In 2027, develop a follow-up strategy for the future.

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## **Appendix 1**

### **Health Protection Strategy Development Steering Committee Membership**

Name	Job Title	Affiliations	
Lorraine Doherty	National Clinical Director for Health Protection, HSE HPSC	Chair	
Mairin Boland	Consultant in Public Health Medicine National Clinical Lead, Health Threats Emergency Preparedness Programme.	National Health Protection, HSE	
Eimear Brannigan	National Clinical Lead Infectious Diseases Consultant	AMRIC Programme	
Anthony Breslin	Consultant in Public Health Medicine with special interest in Health Protection	Public Health Area F Chair of the Water Group	
Kristin Concannon	Business Manager	National Health Protection, HSE	
Philip Crowley	National Director of Strategy and Research	HSE	
John Cuddihy	Consultant in Public Health Medicine Area Director of Public Health	Public Health Area C (East and South East).	
Cillian De Gascun	Consultant Virologist & NVRL Director	National Virus Reference Laboratory (NVRL)	
Lisa Domegan	Principal Epidemiologist	HPSC	
Una Fallon	National Clinical Lead, Health Protection Clinical Lead Acute Operations Response	National Health Protection, HSE	
Margaret Fitzgerald	Principal Epidemiologist	HPSC	
Joan Gallagher	Programme Manager	National Health Protection, HSE	
David Hanlon	National Clinical Advisor and Group Lead Primary Care, HSE	Clinical Design, HSE Primary Care	
Derval Igoe	Specialist in Public Health Medicine Seroepideimiology Programme Lead	HPSC	
Lucy Jessop	Consultant in Public Health Medicine National Health Protection Clinical Lead - Immunisation and Director NIO	National Health Protection, National Immunisation Office (NIO), HSE	
Ciara Kelly	Specialist Registrar in Public Health Medicine, HPSC (January to July 2022)	HPSC	

Name	Job Title	Affiliations	
Ina Kelly	Consultant in Public Health Medicine with special interest in Health Protection.	Public Health Area B Chair of HSE Environment and Health Group	
Aileen Kitching	Consultant in Public Health Medicine with special interest in Health Protection.	Public Health Area F	
Mai Mannix	Consultant in Public Health Medicine Area Director of Public Health	Public Health Area E (Midwest)	
Greg Martin	Consultant, Public Health Medicine & Interim Director HPSC	HPSC	
Noel Mc Carthy	Professor of Population Health Medicine, Public Health and Primary Care.	Institute of Public Health, Trinity College Dublin	
Aine McNamara	Consultant in Public Health Medicine Area Director of Public Health	Public Health Area F (West and Northwest)	
Lola Odewumi	Assistant Staff Officer	National Health Protection, HSE.	
Anne Marie Part	Assistant National Director for Environmental Health	HSE	
Keith Ian Quintyne	Consultant in Public Health Medicine with special interest in Health Protection	Public Health Area A	
Anne Sheehan	Consultant in Public Health Medicine Area Director of Public Health	Public Health Area D	
Toney Thomas	Director of Nursing, National Health Protection	National Health Protection, HSE	

## Appendix 2

#### List of stakeholders consulted during the strategy development process

Other stakeholders were invited to attend development workshops and received a consultation survey to provide online feedback. These were:

#### Internal to the Health Service Executive:

- Chief Clinical Officer Clinical Design, Clinical Programme Leads and the Office of the Nursing and Midwifery Services
- Environmental Health
- Hospital Group CEOs and Community Healthcare Organisation Chief Officers
- Members of the HSE Executive Management Team Chief Clinical Officer, Chief Strategy Officer, Chief Operations Officer
- National Directors and Heads of Services for areas such as people with disability, older person services, emergency management, business services (RPA centre of excellence, data and information management, strategic planning), ambulance service, primary care services, community operations, and acute operations
- Public Health and Health Protection staff in Public Health Areas, National Health Protection including Health Protection Surveillance Centre and National Immunisation Office.

#### **External to the Health Service Executive**

- Department of Health Chief Medical Officer's Office and Department of Agriculture, Department of Children, Equality, Disability, Integration and Youth, Department of Foreign Affairs
- Economic and Social Research Institute
- Irish College of General Practitioners
- Irish Society of Clinical Microbiologists
- Irish Thoracic Society
- National University of Ireland, Galway (Pandem Research Group)
- Nursing and Midwifery Board of Ireland
- Port Authority Network
- Public Health Medicine Schools at: Trinity College Dublin, University College Cork, University College Dublin, University of Limerick, National University of Ireland, Galway
- Regulatory Bodies: Environmental Protection Agency, Food Safety Authority Ireland, Health Information Quality Authority, Health Products Regulatory Authority, Health Safety Authority
- Royal College of Physicians Ireland, Faculty of Public Health
- Social Policies Unit, Eurofound
- Tusla Child and Family Agency
- UK Heads for Health Protection, members of the Five Nations Health Protection Group (Northern Ireland, Wales, Scotland, England and Ireland).

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