



HSE Public Health Medicine  
Environment and Health Group (PHMEHG)  
Annual Report for 2021





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# About Annual Report 2021<sup>1</sup>

The Public Health Medicine Environment and Health Group (PHMEHG) supports the implementation of the environmental roles and responsibilities of the Medical Officers of Health (MOH) at regional and national level as described at [www.hse.ie/moh](http://www.hse.ie/moh).

This brief report highlights some of the activities of the Public Health Medicine Environment and Health Group in 2021 in line with our terms of reference. For more information on the PHMEHG please see Appendix A and the terms of reference of the group are in Appendix B.

## International and national context

Apart from fulfilling our statutory functions, PHMEHG activities also align with implementation of international and national legislation and policies including the:

- United Nations Development Programme [Sustainable Development Goals](#) (SDGs) especially SDGs 3, 6, 11, 12 and 13 (See Figure 1);
- [International Health Regulations 2005](#);
- [EU Decision on Serious Cross Border Threats 2013](#);
- [Healthy Ireland Goal 3](#) “Protect the public from threats to health and wellbeing”

## Sustainable Development Goals

The Sustainable Development Goals (SDGs), were adopted by the United Nations in 2015 towards ending poverty, protecting the planet, and ensuring that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated – action in one area has impacts on others. So while we have focused on the following 5 SDGs (in Figure 1) we are aware of the inter-connectedness of all SDGs and strive to achieve positive impacts for all in our work.

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<sup>1</sup> The report is in accordance with the Health (Duties of Officers) Order 1949 which requires Medical Officers of Health to “prepare as soon as possible after the close of each calendar year and in such form and dealing with such subjects as the Minister may from time to time direct, in addition to any other matters relating to his duties on which it may be considered desirable that he should report, an annual report for such calendar year and furnish to the county council and to the Minister such copies of such report as they may require”.

Figure 1. The key Sustainable Development Goals relevant to the PHMEHG



**Goal 3** – Ensure healthy lives and promote well-being for all at all ages

**Target 3.9** – By 2030, substantially reduce deaths and illnesses from hazardous chemicals, and air, water and soil pollution and contamination

**Our work includes:**

- Public Health Risk Assessment (PHRA)
- Public Health Advice
- Management of water incidents
- Advocacy for improved air quality
- Planning consultations
- Management of Seveso site incidents



**Goal 6** – Ensure access to water & sanitation for all

**Target 6.3** – By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

**Our work includes:**

- Public Health Risk Assessment (PHRA)
- Public Health Advice
- Prevention and management of water incidents



**Goal 11** – Make cities inclusive, safe, resilient and sustainable

**Target 11.1** - access for all to adequate, safe and affordable housing and basic services

**Target 11.2** - access to safe, affordable, accessible and sustainable transport systems for all & improving road safety

**Target 11.5** – reduce number of deaths and people affected by disasters

**Target 11.6** – reduce environmental impact of cities, particularly air quality and waste management

**Target 11.7** – access to safe, inclusive and accessible, green and public spaces

**Our work includes:**

- Advocacy including:
  - Affordable housing
  - Basic services and sanitation
  - Active transport
- Emergency preparedness
- Public Health Risk Assessment (PHRA)
- Public Health Advice including
  - Improved air quality
  - Waste management
  - Planning and licensing consultations
  - Green spaces / City Greening



**Goal 12** - Ensure sustainable consumption and production patterns

**Target 12.4** – environmentally sound management of chemicals and all wastes

**Our work includes:**

- Management of Seveso site incidents
- Interagency work
- Advocacy
- Awareness raising



**Goal 13** - Take urgent action to combat climate change and its impacts

**Target 13.1** - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

**Target 13.2** - Integrate climate change measures into national policies, strategies and planning

**Target 13.3** - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

**Our work includes:**

- Emergency preparedness
- Public Health Risk Assessment (PHRA)
- Public Health Advice
- Advocacy work
- Education
- Awareness raising

## Summary

Although COVID-19 remained a key priority for the health protection services in 2021, attention returned to other important facets of health protection, such as Environment and Health (E&H). Pressing environmental concerns, such as air pollution, climate change and issues with drinking water quality and quantity, have previously been identified as important threats to human health, and remain so in 2021.

The World Health Organization (WHO) has highlighted the negative impact of poor air quality calling it the “single biggest environmental threat to human health,” with the burden of disease attributable to air pollution now believed to be equivalent to that caused by other important public health issues, unhealthy diets and tobacco smoking.<sup>2</sup> New guidelines released by the WHO in 2021 reflect the need for drastic improvements, recommending more stringent threshold levels for major air pollutants. Any improvements seen in air quality in Ireland during the period of COVID-19 transport restrictions in 2020 and early 2021 are likely to have been temporary, as vehicular traffic volume has returned to pre-pandemic levels. Air quality needs to be a priority for public health action going forward.

The activities of the PHMEHG in 2021 were conducted in the context of the Public Health Reform process in line with the Crowe Horwath Report. The PHMEHG has advocated for E&H to be included as a key component of health protection reform and as such, **resourced adequately**.

The recommendations of the report reflect the changes occurring at this time.

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<sup>2</sup> WHO global air quality guidelines. Particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. Geneva: World Health Organization; 2021. Available at: <https://apps.who.int/iris/bitstream/handle/10665/345329/9789240034228-eng.pdf?sequence=1&isAllowed=y>

## Activities in 2021

PHMEHG meetings resumed in 2021 after a hiatus in 2020 because of the COVID-19 pandemic. Four meetings were held in 2021, all via videoconference.

The following table outlines progress in implementing the PHMEHG terms of reference in 2021.

*Table 1. Progress in implementing objectives of the Terms of Reference of PHMEHG*

| Objectives as per Terms of Reference of PHMEHG  | Comments on progress   |
|---|--|
| 1. Standardise approaches to: <ul style="list-style-type: none"> <li>• Risk assessment of environmental hazards and concerns</li> <li>• Risk communication of environmental hazards and concerns</li> <li>• Risk management of environmental hazards and concerns</li> <li>• Surveillance of incidents requiring public health risk assessment</li> </ul> | Informal feedback has been that the online guidance at <a href="http://www.hse.ie/publichealth">www.hse.ie/publichealth</a> has been found to be very useful |
| 2. Co-ordinate work/projects requiring a national response  | Three submissions on a public consultation of public health importance.  |
| 3. Provide collegiate support to each other   | Ongoing  |
| 4. Provide a forum for the review of difficult incident management issues and the identification of lessons learned, potential interventions and/ or need for guidance  | Group met 4 times via videoconference.   |
| 5. Develop and maintain guidance as required  | Manganese (Mn) in drinking water guidance.   |
| 6. Develop and maintain inter-professional work with appropriate colleagues within the Health Service Executive (HSE)   | On-going   |
| 7. Develop and maintain inter-professional work with other stakeholders external to the health sector   | On-going   |

| Objectives as per Terms of Reference of PHMEHG  | Comments on progress  |
|---|---|
| 8. Advocate on issues of concern as required  | See “Submissions” – advocacy in relation to AQ, county development plans, climate change, and transport in the Dublin region.   |
| 9. Facilitate continuing professional development (CPD) and audit   | Training planning in 2021 for training sessions in 2022 (AQ Study Day 7 <sup>th</sup> February & Water Study Day 27 <sup>th</sup> June 2022). Bi-annual formal study days not held in 2021 due to pandemic. |
| 10. Facilitate training of: • Current PHMEHG members from each Department of Public Health • SPHMs who participate in MOH work • Specialist Registrars (SpRs) in public health medicine (PHM) | 3 SpRs given opportunity to join PHMEHG.<br><br>Formal training sessions planned for 2022.  |
| 11. Support research as resources allow   | On-going  |
| 12. Communicate risk to the public as appropriate   | As required   |
| 13. Assist in the development of a national focal point for public health advice on environment and health  | On-going  |
| 14. Monitor and review where necessary the contract for chemical advisory support with Public Health England (PHE)  | As required prior to contract renewal   |
| 15. Identify capacity, infrastructure and succession planning needs to Directors of Public Health (DPHs)  | On-going  |



## Regional reports

### Regional *issues* addressed in 2021 included:

- **East**
  - Drinking & bathing water issues
  - Consultation re Dublin Region Air Quality Management Plan
  - Waste burning in halting site – advocated for improved living conditions, and collaborated with key stakeholders to produce educational pieces
  - Initiated inter-agency working with DCC Climate Change Co-ordinator focussing on active travel, sustainability, healthy eating, urban greening, and Health Impact Assessment.
- **North-East**
  - Ongoing water issues: surge in biochemical exceedances related to warmer weather and bromate exceedance related to treatment plant processes.
- **South**
  - Air quality (AQ) incident in Kerry, issues with testing and monitoring process.
  - Investigation of acute liver failure of unknown aetiology cluster. Clinical course compatible with hepatotoxin as cause. Clinical, public health, NPIS, EHS, PHE involvement.
- **Midlands**
  - Risk assessment conducted for large factory fire
  - Numerous drinking water incidents - microbiological and THMs
  - Air pollution in a town
- **West**
  - Hydrocarbon leak in housing estate in Mayo – PH Wales provided support
  - Several water exceedances
- **Mid-West**
  - THM and manganese water exceedances
  - Silvermines chronic land contamination

**Regional consultations in 2021 included:**

- **East**
  - Made submissions in response to the following consultations:
    - Kildare County Development Plan 2023-2029
    - South Dublin County Plan 2016-2022
    - Air Quality Plan for NO<sub>2</sub> in Dublin
    - Greater Dublin Area Transport Strategy

**Regional environment and health *meetings*:**

**East** - established Regional Environment and Health Working Group East for co-ordination of environment work in the former East region with division of Dublin city as restructuring of Public Health progresses (3 meetings in 2021).

## Reports on Areas of Expertise

### **Air Quality – Dr. Ian Quiltyne, Dr. Regina Kiernan & Dr. Ruth McDermott**

Dublin City Council website on air quality now supplementing national EPA data and Cork Council/UCC monitoring AQ in Cork city. AQ Subgroup reformed and submission made to EU Consultation on AQ. Attendance at EPA AQ meetings. Dr Quiltyne presented at TCD AQ Workshop and had two peer-reviewed articles published on the topic of health impacts of poor AQ.

Dr Kiernan was part of the Ventilation Expert Group in relation to COVID-19 and produced an information paper for the PHMEHG on issues around ventilation and COVID-19

### **Radiation – Dr. Mary O’Mahony**

Attendance at HSE Radiation Protection Committee and the National Radon Control Strategy Implementation Group. EPA recommended amending housing regulations – sealed membrane for all new buildings in Ireland. In presence of a sealed radon barrier, new evidence supports conversion of standby sump to passive sump to reduce indoor radon concentration. Economic evaluation of proposals awaited.

### **Water – Dr. Breda Cosgrove**

Involved in development of FAQs on manganese in drinking water. Subgroup of National Drinking Water Group developing guidance document on managing manganese exceedances.

### **Bathing Water – Dr. Regina Kiernan**

Attendance at HSE Bathing Water Group. Highlighted potential risk to human health of contamination incidents at non-designated beaches or outside of bathing season – wording drafted re MOH legislation applicability to such incidents.

## Climate Change – Dr. Ina Kelly

Attended Department of Environment, Climate and Communications National Adaptation Steering Committee

Attended the Climate Change Advisory Council Adaptation Committee meetings through COVID-19

Liaised with Department of Health newly set up Climate Unit.

## Advocacy Papers

Sectors outside of the health sector may have impacts on health, so it is important that Public Health brings potential risks to the health of the public to the attention of these sectors. The PHMEHG does this through submissions to public consultations.

We made the following **submissions** in 2021:

April 2021      [Consultation on the Development of a New Solid Fuel Regulation for Ireland](#)

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May 2021      [Public Consultation on Climate Action Plan 2021](#)

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October 2021      [Consultation on WHO Air Quality Guidelines – Revision of EU Rules](#)

We produced the following **position papers** in 2021:

July 2021      [Position Paper on Housing and Health](#)

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December 2021      [Position Paper on the use of e-Scooters](#)

## Public Health Reform

The activities of the PHMEHG in 2021 were conducted in the context of the Public Health Reform process in line with the Crowe Horwath Report. The PHMEHG has advocated for E&H to be included as a key component of health protection reform and as such, resourced adequately.

Although there is no environment and health surveillance system the PHMEHG contributed environment and health risk and activity data in the reform process towards proportionate resourcing of regions in line with population need. This process highlighted the importance of developing a national environment and health surveillance system urgently.

It is unclear at this point in time what role the PHMEHG will play in the reformed Public Health structure. There is a pressing need for Environment and Health (E&H) to be included appropriately in any reform of health protection as we are moving to an All-Hazards Model.

Members of the PHMEHG are actively involved in all aspects of reform and bringing the environment and health issues to the attention of our colleagues. There is an important opportunity to develop a strengthened Public Health Medicine Environment and Health function into the future.

## Recommendations for 2022

There are a number of clinical priorities for Public Health Medicine related to the environment including the health impacts of air pollution, issues with water quality and quantity, climate change and the need for strong advocacy on preventing environmental issues that impact on health. So in 2022 the first recommendation is that:

1. PHMEHG continues to prioritise protecting health from serious environmental issues as above

The following recommendations are related to the reform process:

2. PHMEHG will continue to operate in line with the Terms of Reference (TORs) during the transition phase of Reform until developments, if any, replace it. TORs may need to be amended as they are becoming out of date
3. PHMEHG will continue to contribute as requested to the reform process towards more comprehensive All Hazards Health Protection
4. A National Health Protection Strategy is being developed and PHMEHG will advise on the environment and health objectives
5. PHMEHG will advise on and support the Health Improvement developments relevant to environment and health, in line with the reform process
6. PHMEHG advocacy towards a national E&H surveillance system
7. PHMEHG advocacy towards a Case and Incident Management system for health protection including for environmental issues

# Appendices

## Appendix A: About the Public Health Medicine Environment and Health Group (PHMEHG)

### Governance

The Public Health Medicine Environment and Health Group is a group of Consultants in Public Health Medicine (CPHMs) who represent all those who implement [the Medical Officer of Health \(MOH\)](#) functions in the Environment and Health area of Health Protection. The group reports to the Directors of Public Health and all departments of Public Health are represented, so the coverage of the group is national. See Appendix 1 for the main terms of reference as updated in 2017.

### MOH Legislation relevant to the Environment

The main Medical Officer of Health functions for Environment and Health are described in the Health (Duties of Officers) Order, 1949 (S.I. No. 128 of 1949)<sup>3</sup> which includes the following roles:

- A. *Inform ourselves “as respects all influences affecting or threatening to affect injuriously the public health in the county and as respects the causes, origin and distribution of diseases in the county”.*
- B. *“Advise the county council – generally in relation to the health of the people and the provision of health services, sanitary services and housing accommodation”*

These statutory functions provide for health protection functions including:

- Public Health Risk Assessment in environmental emergencies and acute and on-going environmental incidents
- Environmental epidemiology
- Cluster investigations
- Public health medical advice to the appropriate authorities
- Advocacy on environmental matters

In addition, where there is an environmental source of an infectious disease, Infectious Diseases Regulations, 1981 is also implemented by MOHs. There is also environmental legislation which cites the HSE (or health board) as a prescribed body, including [Planning and Development Regulations 2001](#) as amended, [Drinking Water Regulations](#), [Bathing Water Regulations](#), [European Communities \(Environmental Liability\) Regulations 2008](#), [Waste Management \(Management of Waste From the Extractive Industries\) Regulations 2009](#)

Directive EPA Act on IPC, Strategic Environmental Assessment (SEA) etc. This legislation does not mention MOHs, but as the purpose is generally to protect the health of the public, therefore MOHs are informed. MOH legislation as above then provides for the assessment and advisory roles of the MOH when informed.

### Medical Officer of Health function in relation to the Environment

The [Medical Officer of Health function](#) is implemented on a regional basis. The regions are those of the Departments of Public Health – East, West, South, Mid West, South East, North West, North East and the Midlands. At national level, the Medical Officer of Health function is implemented by the HSE National Director of Health Protection.

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<sup>3</sup> Health (Duties of Officers) Order, 1949 Available at:

<http://www.irishstatutebook.ie/eli/1949/si/128/made/en/print>

## Appendix B: Terms of Reference of the Public Health Medicine Environment and Health Group

To assist in the implementation of the Medical Officer of Health (MOH) function at regional and national level by:

1. Providing a forum for sharing of clinical and Public Health expertise on environmental public health hazards in Ireland between Specialists in Public Health Medicine (SPHMs)/ MOHs in the Departments of Public Health
2. Supporting the provision of consistent evidence-based advice from Departments of Public Health to national bodies and agencies as required

### Objectives

1. Standardise approaches to:-
  - a. Risk assessment of environmental hazards and concerns
  - b. Risk communication of environmental hazards and concerns
  - c. Risk management of environmental hazards and concerns
  - d. Surveillance of incidents requiring public health risk assessment
2. Co-ordinate work/projects requiring a national response
3. Provide collegiate support to each other
4. Provide a forum for the review of difficult incident management issues and the identification of lessons learned, potential interventions and/ or need for guidance
5. Develop and maintain guidance as required
6. Develop and maintain inter-professional work with appropriate colleagues within the Health Service Executive (HSE)
7. Develop and maintain inter-professional work with other stakeholders external to the health sector
8. Support provision of advice on environment and health issues of concern at national level to government, national bodies and other relevant agencies
9. Advocate on issues of concern as required
10. Facilitate continuing professional development (CPD) and audit
11. Facilitate training of:
  - a. Current PHMEHG members from each Department of Public Health
  - b. SPHMs who participate in MOH work
  - c. Specialist Registrars (SpRs) in public health medicine (PHM)
12. Support research as resources allow
13. Communicate risk to the public as appropriate
14. Assist in the development of a national focal point for public health advice on environment and health.
15. Monitor and review where necessary the contract for chemical advisory support with Public Health England (PHE), now UK Health Security Agency (UKHSA).
16. Identify capacity, infrastructure and succession planning needs to Directors of Public Health (DPHs).





HSE Public Health Medicine Environment and Health Group (PHMEHG)  
Annual Report for 2021

The report was prepared by:

- Dr Ina Kelly, Consultant in Public Health Medicine/ Medical Officer of Health, HSE Midlands and Chair of the PHMEHG, *and*
- Dr Caitriona Kelly, SpR in Public Health Medicine and Medical Secretary of the PHMEHG.

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