

# Public Health Medicine Environment and Health Group



Public Consultation on Climate Action Plan 2021

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Public Health Medicine Environment and Health Group (PHMEHG) are Consultants in Public Health Medicine, who work together to provide a national medical service in environment and health. Members are: Dr. Anthony Breslin, DPH/MOH, HSE North West Dr. Melissa Canny, SPHM/MOH, HSE West Dr. Breda Cosgrove, SPHM/MOH, HSE Mid West Dr. Sinead Donohue, SPHM/MOH, HSE South Fast Dr. Una Fallon, DPH/MOH, HSE Midlands Dr. Laura Heavy, SpR in Public Health Medicine, HSE Midlands Dr. Ann Herlihy, SpR in Public Health Medicine, HSE Midlands Dr. Kevin Kelleher, Assistant National Director Health and Wellbeing – Health Protection Dr. Ina Kelly, SPHM/MOH, HSE Midlands (Chair) Dr. Regina Kiernan, SPHM/MOH, HSE West Dr. Ruth McDermott, SPHM/MOH, HSE Fast Dr. Helena Murray, SPHM/MOH, HSE East Dr. Mary O'Mahony, SPHM/MOH, HSE South Dr. Keith Ian Quintyne, SPHM/MOH, HSE North East Dr. Anne Sheahan, SPHM/MOH, HSE South Chair can be contacted at ina.kelly@hse.ie

#### Summary

We support Ireland tackling our international and national obligations as comprehensively and safely as possible.

The impact of Health Systems on the environment in Ireland appears to be almost ignored in Climate Action to date.

It is essential that Ireland implements the WHO Eurorecommended 10 "avenues for action" environmentally sustainable health systems.

The health impacts of climate change are among the important reasons for climate action. Therefore it is essential that the potential impact of climate actions on human health is considered for each and every action – a **Health in All Policies** approach. Specific examples of potential adverse health impacts of climate actions to date include:

- Unsafe indoor air as a result of increased airtightness in homes and other buildings, due to efforts to conserve energy;
- Indoor vulnerability to dangerous hyperthermia during heatwaves if buildings are not able to prevent overheating;
- Mental health impacts from the many losses possible from unfair or inadequate climate actions; and
- 4. Continued exposure of 720,000 Irish people to the risk of very serious zoonotic infections from intermittently contaminated, untreated drinking water, because the emphasis of water quality related to agriculture is on chemical hazards and biological hazards are have been ignored.

Health Impact Assessment is a WHO supported way of considering the complexity of health impacts in the planning stage so that costly and tragic adverse consequences can be avoided.

# Issue 1 – Environmental Impact of Health Systems

### The World Health Organization EURO identified that health systems have a considerable impact on the environment in

Towards environmentally sustainable health systems in Europe. A review of the evidence (2016)<sup>1</sup>

### Environmental Impact of Health Systems – WHO EURO found:

Health systems contribute to GHG emissions as a result of direct energy use in health care facilities, patient and staff travel and via procured goods and services. Embedded emissions in procured goods account for a large part of the carbon footprint of health systems, especially pharmaceuticals, medical devices and food.

Health systems release ecological and human health hazards into the environment including pharmaceuticals, heavy metals, and endocrine disrupting chemicals through wastewater.

Health systems produce large volumes of different types of waste, including hazardous waste.

Health systems contribute to the depletion of natural resources.

Benefits of fostering environmental sustainability in health systems – WHO EURO see the importance of:

Reducing the negative environmental impacts of health system activities.

Strengthening those areas where health systems have a positive effect on the environment.

Improving the resilience of health systems to environmental change.

Opportunities include:	Barriers	Enablers
Environmental benefits from addressing impacts.	Lack of knowledge of sustainable practices.	Awareness of sustainable practices.
Financial benefits e.g. From resource-use efficiencies.	Unclear responsibilities for environment impacts.	Clarity of responsibility.
Health benefits e.g. From tackling hazardous waste.	Psychological barriers such as "moral offset".	Enabling culture and leadership styles.
Access/quality benefits e.g. From tele-health reducing patient travel.	Inadequate procedures and resources.	Ability to devolve responsibility , permit experimentation, create conditions for learning.
Workforce benefits e.g. From employee engagement, improved		
recruitment and retention. Improved climate resilience e.g. Through better preparedness for extreme weather events.	Weak governance.	Strong leadership and governance.
	Absence of regulatory frameworks.	Financial and infrastructural incentives.

# Recommendation 1 – Environmentally Sustainable Health Systems

2. Minimize and adequately manage waste and hazardous

chemicals

1. Adopt a national environmental sustainability policy for health systems

10. Promote

innovative models of care

9. Create incentives for change

> 8. Increase community resilience and promote local assets

The World Health Organization EURO in its Environmentally sustainable health systems: a strategic document 2017<sup>2</sup> makes 10 recommendations

Recommendation 1 - we recommend that Ireland implements these

> 7. Engage the health workforce as an agent of sustainability

3. Promote an efficient management of resources

> 4. Promote sustainable procurement

5. Reduce health systems' emissions of greenhouse gases and air pollution

6. Prioritize disease prevention, health promotion and public health services

## **Recommendation 2 – Health in All Policies**

### World Health Organization and International Best Practice

*"Health in All Policies* is an approach to public policies across sectors that systematically takes into account the **health implications** of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity. ..It includes an emphasis on the consequences of public policies on health systems, determinants of health and well-being". The Helsinki statement on Health in All Policies (2013)<sup>3</sup>

Ireland as a UN/WHO Member State needs to implement Health in All Policies.

### Health Impacts of Climate Change are among the main drivers for Climate Action

Climate change is predicted to impact on humans and their health and wellbeing in many ways. In Ireland it is likely that there will be significant health risks from infectious diseases, flooding, air pollution, heatwaves and other severe weather events. The risks to Ireland's people include mental health stressors, hyperthermia, exacerbations of severe respiratory and cardiovascular diseases, as well as increased risk of pandemics and reintroduction of vectorborne diseases such as malaria (outbreak in Cork after Crimean War), and the entry of others such as dengue and chikungunya.

Recommendation 2 - Consider Health in All Policies

# **Recommendation 3 – Health in Climate Policies**

Climate change is likely to impact on many people in adverse ways through flooding, severe weather events, loss of habitable land, changes in viable employment opportunities and so on. Some of these losses may be "unbearable". Mental health impacts from the many different types of losses are predicted<sup>4</sup> and if possible should be prevented or minimised.

**Recommendation 3 - Consider the impact on Mental Health in all Climate Policies** 

## **Recommendation 4 – Just Transition and Just Resilience**

Climate change is likely to impact on some groups more than for others. There is already environmental inequality by geographical location, for example, access to clean air and water, adequate housing, green and blue spaces. In Public Health we are concerned about health inequalities where some groups have greater levels of healthcare need, such as older people, those with underlying health conditions.

Climate action is likely to bring challenges in transition, and building resilience will have challenges too. Hence the need for just transition and just resilience. It is essential that the health consequences of unjust transition and unequal resilience are prevented and minimised as much as possible.

Recommendation 4 - Consider Health Inequalities in all Transition and Resilience Climate Actions

## **Recommendation 5 – Health in Building Policies**

#### Unsafe indoor air quality

•Energy conservation is the goal of Part L of the Building Regulations<sup>5</sup> and this means aiming for airtight buildings.

•However, air-tightness without appropriate ventilation may increase the health risks to the occupants from accumulation of hazardous gases indoors such as Radon, volatile organic compounds and moulds.

•The Regulations do not mention the need to ensure that health is protected through good air quality, though the technical guidance mentions it.

•Many anecdotal accounts from those in the building industry, indicate that ventilation systems may not be understood and used appropriately by householders. Potential adverse health impacts of energy conservation actions need to be addressed

•Technical Guidance Document C, 2.10 (b) is not an effective measure, as it depends on testing by householders for the standby sump to be used. The view of the Medical Officers of Health (members of PHMEHG) who have advised on this is that all houses should have a barrier as per 2.10 (a), as this is the measure that will actually protect most people from exposure to Radon. There is no safe threshold for Radon exposure and the majority of radon attributable lung cancer occurs in exposures less than the National Reference Level of 200Bq/m3. Radon barriers need to be installed in all New Builds

Poorly ventilated, crowded indoor spaces have also been associated with increased transmission of COVID-19 and other airborne diseases, such as TB. Improving indoor ventilation will reduce the spread of airborne infectious disease and is a vital part of future pandemic preparedness.

#### **Unsafe indoor temperature**

Climate change is likely to increase the risk of heatwaves in Ireland. In 2003, it is estimated that 70,000 people died during the summer heatwaves in Europe<sup>6</sup>. The main risk comes from overheating in buildings and is greatest for elderly people, who have difficulty with thermoregulation<sup>7</sup>.

Even short periods of overheating may have serious health consequences

#### **Recommendation 5 - Consider Health in Building Policies**

### **Recommendation 6 – Health in Agriculture Policies**

Climate risks to health from agriculture include: GHGs from animals; increased risk of zoonotic infection of drinking and recreational water; and use of contaminated alternative supplies of water in horticulture during drought. There is an emphasis on chemical contamination (such as Nitrates) in water quality related to agriculture but the biological hazards are mainly ignored. Agriculture policies in Ireland have resulted in increasing the national herd of cattle, without significant consideration of the biological contamination from cattle to recreational water and even more importantly, drinking water. Source protection appears not be implemented safely in many instances.

**Recommendation 6** - Consider Health in Agriculture Policies

## **Recommendation 7 – Health in Water Policies**

Ireland has ongoing exposure of about 720,000 Irish people<sup>8</sup> to the risk of very serious zoonotic infections from intermittently contaminated, untreated drinking water from private wells that are "exempt" from regulation. Ireland has by far the highest rates of VTEC (STEC) in Europe year on year<sup>9</sup>. This is a disease that affects children mainly, of whom about 10% require ICU care with frequent permanent organ damage. The infection comes mainly from cattle (reservoir) through either direct contact, water or food. In one annual review in the Midlands in 2012, 82.7% of primary cases of VTEC notified to Public Health were strongly or probably associated with drinking water<sup>10</sup> through finding the actual organism or other evidence of contamination in the drinking water.

Ireland has allowed people to build and use wells that do not have sanitary seals and so are very vulnerable to direct contamination from animal faeces from neighbouring farms. Common beliefs about the purity of water from private wells are not science based, but the information to well-owners from local authorities under DW Regulations is not implemented comprehensively. Safe drinking water is necessary for all our citizens but climate change will likely increase the risk through heavier precipitation and severe weather events.

**Recommendation 7 – Consider Health in Water Policies** 

### **Recommendation 8 – Health in Transport Policies**

#### **Climate Change Challenge**

Fossil fuel emissions from vehicular transport, as well as carbon cost of vehicle production contribute to the massive global risks from climate change, and air pollution. 1,300 people die prematurely in Ireland annually from air pollution. Transport policies need to prioritise the move to active and green transport which have important co-benefits with health.

#### Make Active Travel the Easy Choice

Active travel is important to improve physical activity, reduce air pollution and tackle greenhouse gas emissions from transport. It needs to be:

•Safe including safe routes – from vehicular impacts, air pollution

•Suitable for different types of active travellers – e.g. disabled pedestrians who need exercise to increase mobility, parents with buggies, children on tricycles, people in wheelchairs, athletic walkers, runners, non-competitive cyclists, athletic cyclists

There are co-benefits with health from reduced air pollution and more opportunities to exercise.

•Prioritise pedestrian transport, then cycling, then public transport followed by cars (as per Dept of Transport Design Manual for Urban Roads and Streets).

•Facilitate security of bicycles.

#### Public Transport and Accessibility

Accessibility policy in transport should not be confined to public transport. Accessibility starts at our pathways, road crossings etc. For example, dished kerbs for car access create a challenge for people with mobility problems walking due to angle of path.

**Recommendation 8 - Consider health in all transport policies.** 

# **Recommendation 9 – Health in Planning Policies**

The World Health Organization supports Health Impact Assessment which is "used to judge the potential health effects of a policy, programme or project on a population, particularly on vulnerable or disadvantaged groups"<sup>11</sup>.

Health Impact Assessment provides methods to consider the health impacts of planning policies

#### Land Use and Transport Planning

Sustainability needs efficient use of resources and cutting out waste across sectors. Disjointed policies contribute to challenging and costly problems which also impact on health e.g. Difficulties and delays in accessing essential health services, health inequalities.

Fully integrated planning is essential to:

- •Identify and prioritise "work from home/hub" reducing need for big commutes.
- •Support and incentivise viable communities in terms of economies of scale for public services
- •Develop sustainable communities.

#### Planning after COVID-19

Covid-19 has resulted in reduced commuting with remote working. Planning and transport policies need to ensure that the benefits such as reduced air pollution and waste of our precious resource, time, are maintained and sustained as much as possible.

# **Recommendation 10 – Health in Global Policies**

Ireland needs to consider the impact of migration pressures from countries more catastrophically affected by climate change. For example, South East Asia, with a population of about 1 billion people, is likely to be impacted by climate change impacts on Himalayan glacial retreat and changing rainfall patterns resulting in worsening droughts and floods. Some areas with large and growing populations may become uninhabitable.

COVID-19 and other pandemic viruses are more likely to emerge 1) through changing land use and other pressures on the natural environment associated with globalisation, and 2) and to spread quickly through our fast global connections. This pandemic has taught us how vulnerable we still are to pandemic preparedness and control in other jurisdictions. Climate change is a similar global interconnected problem for us all.

Ireland needs to contribute to improving Global Health through its international roles

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