



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



## **HSE Public Health Medicine Environment and Health Group**

### **Submission to the Public Consultation On the National Planning Framework**

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### Submission Summary

The Consultants in Public Health Medicine on the Public Health Medicine Environment and Health Group (PHMEHG) welcome this major planning initiative and we particularly appreciate that health is one of the sectors considered in the requirement for an overall planning strategy.

This group, which represents the Directors of Public Health and the Medical Officer of Health statutory function in relation to the environment, would like to be part of the consultation on an on-going basis to contribute to the public health of our citizens. Part of our duty lies in assessing the health of the public and identifying positive and negative influences on health. Another part lies in providing appropriate health advice to the relevant authorities.

Our key recommendation is that formal Health Impact Assessment is part of the planning process to ensure that all decisions made are future proofed for health and wellbeing and that planning is dynamic and flexible to overcome avoidable challenges from unpredictable future events

The Public Health Medicine Environment and Health Group welcomes this major planning initiative and particularly that health is one of the sectors considered towards an overall strategy. We particularly welcome that People's Health and Wellbeing is given such prominence in the goals of planning. The natural and built environment has a very significant influence on the health of populations therefore planning needs to be "health-proofed" to ensure investment in our environment is safe and likely to endure. Many health conditions are caused by or impacted by the environment, and the following are some examples:

#### 1. Respiratory diseases

- Asthma, chronic obstructive pulmonary disease and other respiratory conditions – people with these conditions are at risk of serious exacerbation by poor air quality. The European Environment Agency states "*air pollution remains the single largest environmental health hazard in Europe, resulting in a lower quality of life due to illnesses and an estimated 467 000 premature deaths per year.*"<sup>1</sup>
- Lung cancer – about 250 lung cancer cases per year are attributable to the radioactive gas Radon<sup>2</sup>, which can accumulate indoors in homes and workplaces.

#### 2. Obesity

- Obesity is a risk factor for heart and other vascular diseases, type 2 diabetes and some cancers such as breast cancer and colon cancer. It is also associated with conditions such as arthritis, sleep apnoea, stress, depression, gallstones and infertility.
- Environments which contribute to obesity through increasing energy imbalance are called "obesogenic" and obesogenicity is defined as "*the sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations*"<sup>3</sup>. Research on specific factors has increased

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<sup>1</sup> EEA. Stronger measures needed to tackle harm from air pollution. Accessible at: <http://www.eea.europa.eu/highlights/stronger-measures-needed>

<sup>2</sup> DECLG. National Radon Control Strategy. Accessible at: <http://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Environment/EnvironmentalRadiation/FileDownload%2C35484%2Cen.pdf>

<sup>3</sup> Lake A, Townshend T. Obesogenic environments: exploring the built and food environments. JRS 2006;126(6):262-267. Accessible at: [http://www.fao.org/fileadmin/user\\_upload/red-icean/docs/Obesogenic%20environment\\_Lake.pdf](http://www.fao.org/fileadmin/user_upload/red-icean/docs/Obesogenic%20environment_Lake.pdf)

over the last decade, but it is quite challenging to tease out the contribution of the many potential factors. Obesogenic factors that have been identified to date include urban sprawl and low land use mix<sup>4</sup>, but with the use of more sophisticated assessment tools, it is likely that this topic will be elucidated more clearly in the coming years.

### 3. Gastro-intestinal illness

- Contaminated drinking water is a source of serious infections in Ireland – for example, Ireland has the highest reported rates of Verotoxigenic E. Coli<sup>5</sup> and Cryptosporidiosis<sup>6</sup> in Europe. There is huge variation in Ireland as to the availability of safe drinking water and waste water systems<sup>7</sup> which are part of the built environment and could be subject to safer planning

### 4. Health inequalities

- Some groups are more vulnerable to living in unhealthy environmental conditions, for example through poverty. The built environment affects the health of groups differently with some groups, such as the old, the young, the more poor being predictably more adversely affected, for example, socioeconomic inequalities in mortality, caused by 2003 heat wave were found in several European cities<sup>8</sup>
- Environmental justice research, looking at unequal burdens and benefits, is identifying issues in many areas including green space, drinking water, energy, food, flooding, gender dynamics and sustainability<sup>9</sup>

### 5. Environmental nuisance and health including mental health

- *“Annoyance is the most widespread adverse effect of exposure to environmental nuisance. In the context of the holistic definition of health and wellbeing (World Health Organization, 1948), it is a health impact in its own right. Whilst undesirable in itself, annoyance may also mediate an indirect stress response pathway leading to the physiological and mental health effects described above”*<sup>10</sup>. Environmental nuisances include noise, odours, light, smoke, fumes and dust, waste, accumulations and pests, and apart from annoyance, some of

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<sup>4</sup> Mackenbach J et al. Obesogenic environments: a systematic review of the association between the physical environment and adult weight status, the SPOTLIGHT project. BMC Public Health, 2014;14:233. Accessible at: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-233>

<sup>5</sup> EFSA. EU summary report on zoonoses, zoonotic agents and food-borne outbreaks 2014. EFSA Journal. 2015;13(12):4329 Accessible at: <http://ecdc.europa.eu/en/publications/Publications/zoonoses-trends-sources-EU-summary-report-2014.pdf>

<sup>6</sup> ECDC. Annual epidemiological report 2014 – food- and waterborne diseases and zoonoses. Accessible at: <http://ecdc.europa.eu/en/publications/Publications/food-waterborne-diseases-annual-epidemiological-report-2014.pdf>

<sup>7</sup> CSO. Census 2011 Profile 4 The Roof over our Heads - Housing in Ireland. Accessible at: <http://www.cso.ie/en/census/census2011reports/census2011profile4theroofoverourheads-housinginireland/>

<sup>8</sup> Gelormino E, Melis G, Marietta C, Costa G. From built environment to health inequalities: An explanatory framework based on evidence. Preventive Medicine Reports. 2015; 2: 737–745. Accessible at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4721462/>

<sup>9</sup> Chakraborty J, Collins T, Grineski S. Environmental Justice Research: Contemporary Issues and Emerging Topics. International Journal of Environmental Research and Public Health 2016 Nov; 13(11): 1072. Accessible at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5129282/#B10-ijerph-13-01072>

<sup>10</sup> Tomlinson A, Brunt H. The health impacts of environmental nuisances and their contribution to health inequities – a review. Journal of Environmental Health Research. Accessible at: <http://www.cieh.org/assets/0/72/948/129834/2b7f0c99-0531-4c0a-81ef-a37c5fe98f32.pdf>

these can cause significant physical health risks such as respiratory effects or infections

- Uncertainty regarding the safety of environmental development can result in public concerns. For example, the international surge in wind farm development in recent years has led to concerns regarding potential public health impacts of wind turbines. Published scientific evidence is inconsistent and does not support adverse effects of wind turbines on health. However, adequate setback distances and meaningful engagement with local communities are recommended in order to address public concerns regarding wind farms.

6. Displacement and loss from flooding or erosion

- Strong “sense of place” is associated with better self-perceived health and mental health. Planning choices may require people to move and/or bear major loss for individuals e.g. abandoning protection from flooding, coastal erosion, redevelopment of existing development

In addition, healthy environments can provide many health benefits. For example, green spaces are likely to have many benefits including for human health. The World Health Organisation published evidence in 2016 that *“shows that green spaces offer numerous public health benefits, including psychological relaxation and stress reduction, enhanced physical activity and a potential reduction in exposure to – among other harmful urban factors – air pollution, noise and excessive heat”*<sup>11</sup>

There are many public health challenges and potential benefits that need to be taken into account in future planning including in relation to climate change, demographic pressures and migration.

### **Health recommendations on safe planning into the future**

A “Health in All Policies” approach is needed to ensure safe planning of public services. The World Health Organization recommends Health Impact Assessment: *“Economic sectors such as transport, agriculture and housing have profound impacts on health. For instance, transport is a major factor in traffic injuries, air pollution and noise. But “healthy transport policies” can help reduce these risks, as well as promoting walking and cycling.....Health Impact Assessment (HIA) is a means of assessing the health impacts of policies, plans and projects in diverse economic sectors using quantitative, qualitative and participatory techniques. HIA helps decision-makers make choices about alternatives and improvements to prevent disease/injury and to actively promote health”*.

**Overall Recommendation** – that Health Impact Assessment is widely used in the development of a national planning framework, and in subsequent planning at national, regional and local levels. This is especially important because of climate change as we need to plan a more resilient and adaptable built and natural environment. While research is not complete in many areas of environmental risk to health, ongoing consideration of health impacts through assessment will aid the minimization of negative health impacts and maximization of positive health impacts.

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<sup>11</sup> WHO. Urban Green Spaces and Health. A review of evidence. Accessible at: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0005/321971/Urban-green-spaces-and-health-review-evidence.pdf](http://www.euro.who.int/_data/assets/pdf_file/0005/321971/Urban-green-spaces-and-health-review-evidence.pdf)

### **Specific recommendations:**

**Recommendation 1** - planning needs to ensure that developments lead to decreased airborne pollution, for example

- a. facilitating active and efficient transport with reduced transport emissions
- b. designing and building passive buildings that require little additional heat energy with reduced pollution from domestic fuel use
- c. ensuring that energy from wood burning uses the least polluting technologies etc

**Recommendation 2** - planning needs to ensure that buildings are designed and built to exclude Radon ingress including full implementation of the national radon control strategy currently and effective follow-on into the future

**Recommendation 3** - planning should design out car dependence where possible, and increase opportunities for active transport. In general, to avoid an obesogenic environment planning is needed to the healthier option for food or exercise easier

**Recommendation 4** - planning should aim for universal access to safe public drinking water and waste water services

**Recommendation 5** – planning should consider the health of the most impoverished and most vulnerable to avoid health inequalities for example in the provision of affordable houses with healthy indoor temperature, indoor air etc and with healthy housing density that allows for easy access to important services, but that allows for sufficient privacy, noise control etc. It should be remembered that the more socially disadvantaged groups are often more affected by potential negative impacts of policies if the policies are not health oriented

**Recommendation 6** – planning should minimize inequity of exposure of individuals or groups to nuisance

**Recommendation 7**- planning should consider people at risk of displacement and how to assist them and if necessary compensate them to reduce health impacts including stress and mental health impact on people and communities

**Recommendation 8** - Public engagement and consultation is required in relation to energy, renewable energy and planning policy and we welcome efforts to address concerns of local communities through the new National Planning Framework