



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

National Office for Environmental Health Services  
2nd Floor, Oak House,  
Lime Tree Avenue  
Millennium Park,  
Naas,  
Co. Kildare  
E: ehnationaloffice@hse.ie

22 December 2022

Development Plan Team,  
Planning and Strategic Infrastructure Department,  
Fingal County Council,  
County Hall,  
Main Street,  
Swords,  
Co. Dublin,

**EHIS Ref No: 2833**

**Re: Proposed Material Alterations to Draft Fingal County Development Plan 2023 – 2029**

Dear Sir/Madam,

I refer to the proposed material alterations to the Draft Fingal County Development Plan 2023-2029, the following HSE departments were made aware of the consultation request on 11 November 2022.

- Emergency Planning – Brendan Lawlor
- Estates – Helen Maher/Stephen Murphy
- Director of National Health Protection – Eamonn O' Moore
- CHO – Mellany McLoone

The Environmental Health Service made a submission regarding the proposed Fingal Development plan on 5<sup>th</sup> May 2021. I have examined the proposed material alterations and have no observations to add to the submission made in May 2021.

The HSE Public Health Area A Department have made a submission regarding the proposed material alterations to the Draft Fingal County Development Plan 2023-2029, the submission is attached below for your consideration.

If you have any queries regarding the report, please contact me.

Yours Sincerely,

**Environmental Health Officer,  
Environment/Climate Change Network Support Unit**





**HSE Public Health, Area A**  
(Cavan, Louth, Meath, Monaghan & North Dublin)

**FSS Sláinte Poiblí, Ceantar A**  
(An Cabhán, An Lú, An Mhí, An Muineachán agus Baile Átha Cliath Thuaidh)  
T: + 353 46 928 2700 | F: + 353 46 928 2744 | E: PublicHealth.AreaA@hsc.ie

**For Cavan, Louth, Meath & Monaghan:**  
Unit H/I, Kells Business Park, | Cavan Road | Kells | Co Meath A82 W2P3  
Aonad H/I Páirc Ghnó Cheanannais | Bóthar an Chabháin | Ceanannas | Cona Mí A82 W2P3

**For North Dublin:**  
Dr. Steevens' Hospital | Dublin 8 | D08 W2A8  
Ospidéal Dr. Steevens' | Baile Átha Cliath 8 | D08 W2A8

**TO:** Mr Derek Bauer  
Principal Environmental Health Officer

**FROM:** Dr Paul Mullane  
Specialist in Public Health Medicine

**RE:** *EHIS Ref Number: 2833 - Public Consultation on the Proposed Material Alterations of Fingal County Development Plan 2023-2029*

**DATE:** 20<sup>th</sup> December 2022

---

Thank you for the opportunity for HSE Public Health, Area A (covering counties Cavan, Louth, Meath, Monaghan and North Dublin) to provide a submission on the Proposed Material Alterations of the Fingal County Development Plan 2023-2029.

The following submission represents the views of HSE Public Health, Area A, and does not necessarily reflect the views of the population living in the area. Please refer to Appendix A for more information on HSE Public Health, Area A.

Dr Paul Mullane will be the primary contact for this submission, if further input is required from HSE Public Health, Area A.

Yours sincerely,

**Dr Ciara Carroll**  
**MB BCh BAO MSc DOWH**  
SpR in Public Health Medicine  
MCRN: 414987

**Dr Muireann De Paor**  
**MB BCh BAO MICGP, PhD**  
SpR in Public Health Medicine  
MCRN: 246473

**Dr Paul Mullane**  
**MB BCh BAO MRCP MPH MFPHMI**  
Specialist in Public Health Medicine  
MCRN: 400068

## **INTRODUCTION**

Thank you for the opportunity for HSE Public Health, Area A to make a submission on the *Proposed Material Alterations of the Fingal County Development Plan 2023-2029*.

HSE Public Health, Area A commends Fingal County Council on the progress made thus far on the *Fingal County Development Plan 2023-2029*.

In this submission, we will focus on the proposed amendments to the Draft Development Plan Written Statement for the chapters listed below. We have arranged our response in accordance with the reference number(s) as shown in the Draft Development Plan document (except Chapter 5 and 6 where we provide general commentary).

**CHAPTER 2: Planning for Growth – Core Strategy, Settlement Strategy**

**CHAPTER 3: Sustainable Placemaking and Quality Homes**

**CHAPTER 4: Community Infrastructure and Open Space**

**CHAPTER 5: Climate Action**

**CHAPTER 6: Connectivity and Movement**

**CHAPTER 8: Dublin Airport**

## **CHAPTER 2: PLANNING FOR GROWTH – CORE STRATEGY, SETTLEMENT STRATEGY**

### ***PA CH 2.1: Section 2.2.11 The Core Strategy***

HSE Public Health, Area A recognises the existing extensive network of pedestrian and cycle routes serving zoned lands in the area and support the further expansion of the pedestrian and cycle network, in keeping with the National Activity Plan for Ireland<sup>1</sup>. Cycling and walking should be encouraged to promote physical activity and health<sup>2</sup>, cardiac and respiratory health<sup>2</sup>, and mental health<sup>3</sup>. Cycling has been associated with additional benefits such as reduced air and noise pollution<sup>4</sup>, increased social cohesion and interaction<sup>5</sup>, decreased road danger for cyclists and motorists<sup>5</sup>, and enhanced accessibility to businesses<sup>6</sup>.

---

<sup>1</sup> Department of Health (DoH). Get Ireland Active! National Physical Activity Plan for Ireland. 2016. Department of Health, Dublin: Ireland. 2016. Available from:

<https://assets.gov.ie/7563/23f51643fd1d4ad7abf529e58c8d8041.pdf> (Accessed Dec 16 2022).

<sup>2</sup> De Hartog JJ, Boogaard H, Nijland H, Hoek G. Do the Health Benefits of Cycling Outweigh the Risks? *Environmental Health Perspectives*. 2010; 118(8): 1109-1116. Doi: 10.1289/ehp.0901747

<sup>3</sup> Kelly P, Williamson C, Niven A, Hunter R, Mutrie N, & Richards J. Walking on sunshine: scoping review of the evidence for walking and mental health. *British Journal of Sports Medicine*. 2018; 52 (12): 800 - 806.

<sup>4</sup> World Health Organisation (WHO), Regional Office for Europe. Implementation Framework for Phase VII (2019 - 2024) of the WHO European Healthy Cities Network: Goals, Requirements and Strategic Approaches. World Health Organisation. 2019. Available at:

[https://www.euro.who.int/\\_data/assets/pdf\\_file/0020/400277/04-FINAL-Phase-VII-implementation-framework\\_ENG.PDF](https://www.euro.who.int/_data/assets/pdf_file/0020/400277/04-FINAL-Phase-VII-implementation-framework_ENG.PDF) (Accessed 16 Dec 2022)

<sup>5</sup> Marshall WE, Ferencsik NN. Why cities with high bicycling rates are safer for all road users. *Journal of Transport & Health*. 2019; Vol 13: 100539.

<sup>6</sup> Lee A, March A. Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton. *Australian Planner*. 2010; 47 (2): 85-93. DOI: 10.1080/07293681003767785

### ***PA CH 2.2: Section 2.2.12 Strategic Long-Term Reserve***

HSE Public Health, Area A supports the development of the Hamilton Way to promote walking. The planning and design of this walkway should involve the local community, be implemented in a way that reduces crime and fear of crime, and promote age-friendly and equitable access, to increase the use of this space<sup>26</sup>.

The opportunity to develop the closed landfill into a regional park is recognised as an opportunity to strengthen access to good quality green space, and would ideally be integrated with other facilities such as schools and residential care homes<sup>26</sup>. However, due consideration would need to be given to the potential health risks that may be associated with closed landfills, such as the release of methane gas and the presence of inorganic and organic contaminants in soil<sup>7</sup>.

The capacity for up to 7,000 residential units identified in the Dunsink Feasibility Study is recognised by HSE Public Health, Area A as a potential facilitator of improved access to housing in the Fingal region by increasing new housing supply. In developing this area, we would highlight the following measures that may be instituted to promote health in the area:

- Adequate and sustained access to affordable housing to prevent negative mental health impacts<sup>8</sup> and reduce the potential for stress associated with insecure housing<sup>9</sup>. Affordable housing may also increase the income available to residents to spend on healthy food and mitigate against food insecurity<sup>10</sup>.
- Residential areas should promote physical activity through the provision of walking and cycling infrastructure and access to public transport<sup>26</sup>, and the provision of open green spaces which may play a particularly important role for certain populations, such as women and the elderly<sup>11</sup>.

### ***PA CH 2.3: Section 2.2 Core Strategy***

HSE Public Health, Area A supports the Council's engagement with social and affordable housing delivery. We recommend that social and affordable housing be integrated with other forms of housing, to avoid the potential negative health effects associated with residential segregation by income. These include obesity, cancer, poorer pregnancy outcomes and increased mortality<sup>12</sup>.

---

<sup>7</sup> Hard HR, Brusseau M, Ramirez-Andreotta M. Assessing the feasibility of using a closed landfill for agricultural graze land. *Environmental Monitoring and Assessment*. 2019;191(7):458. doi: 10.1007/s10661-019-7579-9.

<sup>8</sup> Baker E, Lester L, Mason K, Bentley R. Mental health and prolonged exposure to unaffordable housing: a longitudinal analysis. *Social Psychiatry and Psychiatric Epidemiology*. 2020;55(6):715-721. doi: 10.1007/s00127-020-01849-1

<sup>9</sup> Rolfe S, Garnham L, Godwin J, Seaman P, Donaldson C. Housing as a social determinant of health and wellbeing: developing an empirically-informed realist theoretical framework. *BMC Public Health*. 2020;20,1138. doi: 10.1186/s12889-020-09224-0

<sup>10</sup> Fafard St-Germain AA, Tarasuk V. Homeownership status and risk of food insecurity: examining the role of housing debt, housing expenditure and housing asset using a cross-sectional population-based survey of Canadian households. *International Journal for Equity in Health*. 2020;19(1):5. doi: 10.1186/s12939-019-1114-z

<sup>11</sup> Wang H, Dai X, Wu J, Wu X, Nie X. Influence of urban green open space on residents' physical activity in China. *BMC Public Health*. 2019;19(1):1093. Published 2019 Aug 13. doi:10.1186/s12889-019-7416-7

<sup>12</sup> Kramer MR. 'Residential Segregation and Health'. In: Kawachi I, Berkman LF, eds. *Neighborhoods and Health*. New York: Oxford Academic Press. 2018. doi: 10.1093/oso/9780190843496.003.0012

***PA CH 2.24: Section 2.7.2 Role of Each Settlement***

HSE Public Health, Area A supports the development of a multi-functional green infrastructure corridor between Dunsink and Tolka Valley Park. We reiterate the importance of developing high quality, safe infrastructure that incorporates the principles of universal, age-friendly and equitable access to increase health, environmental and climate benefits<sup>26</sup>.

***PA CH 2.26: Section 2.7.2 Role of Each Settlement***

HSE Public Health, Area A supports the provision of a coastal cycleway between Malahide and Swords along the Broadmeadow Estuary. To ensure that the potential for health, environmental and climate benefits associated with this cycleway is maximised, we recommend integrating it with cycling, walking and public transport networks<sup>26</sup>.

## **CHAPTER 3: SUSTAINABLE PLACEMAKING AND QUALITY HOMES**

***PA CH 3.2: Section 3.5.1 Healthy Placemaking***

HSE Public Health, Area A commends the health promoting, inclusive and sustainable approach to development outlined, and welcomes the prioritisation of sustainable, active transport modes to meet community requirements and provide access to local services.

***PA CH 3.5: Section 3.5.2 Successful Public Realms including Town Centre First***

HSE Public Health, Area A commends the addition of climate resilient and pollinator friendly planting to enhance the visual amenity of town and village centres, with the additional potential benefits of improved mental health and air quality<sup>13</sup>.

***PA CH 3.6: Section 3.5.3 Core Strategy and Housing Growth***

HSE Public Health, Area A agrees that active travel options should also be considered while liaising with Transport Infrastructure Ireland to ensure public transport options to and from new developments to local amenities such as shops and libraries. We suggest that this should include options to enable access to other public services, particularly educational facilities and recreational and leisure facilities, in keeping with WHO Guidelines<sup>26</sup>.

***PA CH 3.7: Section 3.5.4 Ensuring Housing Supply***

HSE Public Health, Area A welcomes the development of active travel links to access public transport, schools, amenities and neighbouring communities prior to occupation of residential units.

***PA CH 3.8: Section 3.5.6 Social Inclusion***

HSE Public Health, Area A recognises the value associated with the appointment of a dedicated Access Officer, both to co-ordinate disability issues across departments, and to advocate for those with disabilities.

---

<sup>13</sup> Garibaldi, LA, Gomez-Carella, DS, Nabaes-Jodar, DN, Smith, MR, Timberlake, TP, Myers, SS. Exploring connections between pollinator health and human health. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2022;377(1853).

### ***PA CH 3.9: Section 3.5.6 Social Inclusion***

HSE Public Health, Area A supports the inclusion of an accessibility audit as part of urban framework plans and welcomes the proposed engagement with disability groups and local organisations.

### ***PA CH 3.22: Section 3.5.15 Housing in Rural Fingal***

HSE Public Health, Area A welcomes the recognition of the need to develop appropriate accommodation for seasonal or temporary workers where an unmet need for this exists. When developing new residential accommodation for seasonal farm workers, where possible single persons should be accommodated in single occupancy rooms to prevent overcrowding as defined by European standards<sup>14</sup>. Overcrowding in houses has been associated with poor mental health<sup>15</sup> and increased spread of infectious diseases<sup>16,17</sup>.

The transport arrangements outlined to ensure ease of access for seasonal or temporary workers to nearby towns and villages are recognised by HSE Public Health, Area A as an opportunity to prevent the social isolation of workers, particularly when they may already be isolated as a result of their work, financial situation or due to language barriers<sup>18</sup>. Efforts should be made to ensure that accommodation is built as close as possible to cycling and pedestrian infrastructure to ensure that towns and villages can be accessed safely in a manner that is acceptable to the workers<sup>26</sup>.

## **CHAPTER 4: COMMUNITY INFRASTRUCTURE AND OPEN SPACE**

### ***General***

Adequate provision of open green space for urban residents is a priority for planners and public health policy makers internationally. The positive effects of green space on the mental and physical health of those who interact with it is well documented. The World Health Organization (WHO) states that “availability, accessibility, quality and security of public green spaces” is an important factor for an individual’s access to healthy environments<sup>19</sup>. The Environmental Protection Agency (EPA) in Ireland has made a similar statement, recognising

<sup>14</sup> Eurostat. Glossary:Overcrowding rate - Statistics Explained. Eurostat; 2022. Available from: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary%3AOvercrowding\\_rate](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary%3AOvercrowding_rate). (Accessed 16 Dec 2022)

<sup>15</sup> Singh A, Daniel L, Baker E, Bentley R. Housing Disadvantage and Poor Mental Health: A Systematic Review. *American Journal of Preventive Medicine*. 2019;57(2):262-272. doi: 10.1016/j.amepre.2019.03.018.

<sup>16</sup> Hayward SE, Deal A, Cheng C, Crawshaw A, Orcutt M, Vandrevalla TF, Norredam M, et al. Clinical outcomes and risk factors for COVID-19 among migrant populations in high-income countries: A systematic review. *Journal of migration and health* 2021;3:100041.

<sup>17</sup> Colosia AD, Masaquel A, Hall CB, Barrett AM, Mahadevia PJ, Yogev R. Residential crowding and severe respiratory syncytial virus disease among infants and young children: A systematic literature review. *BMC Infectious Diseases*. 2012;12(1).

<sup>18</sup> Quandt SA, Brooke C, Fagan K, Howe A, Thornburg TK, McCurdy SA. Farmworker housing in the United States and its impact on health. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*. 2015;25(3):263–86.

<sup>19</sup> WHO. WHO. Health Indicators of Sustainable Cities in the Context of the Rio+20 UN Conference on Sustainable Development. 2012

that “people gain physical, mental, cognitive, physiological, emotional, tangible and aesthetic benefits from nature and green spaces”<sup>20</sup>.

***PA CH 4.1: Update all references to open space in the Draft Plan***

The way in which open green space is measured is varied and can be objective or subjective. In addition, perceived green space is an unreliable measure if the quality of the space in terms of safety and cleanliness is poor. A recent Irish study from the Economic and Social Research Institute (ESRI) concluded that while availability of green space is important, it is also essential that these spaces should be of high quality<sup>21</sup>. Planners should take these other characteristics of open space into account, particularly in cases where the lower limit of 12% open space applies.

***PA CH 4.2: Section 4.5.1.5 Higher and Further Education, page 159***

“Healthy Ireland” is a national framework (2013-2025) for action set out by the Department of Health to improve the health and wellbeing of the people of Ireland. The vision is one where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is supported at every level of society and is everyone’s responsibility. Part of the Healthy Ireland vision is to work in partnership with Higher Education Institutes in developing a Health Promoting campus model of health promotion.

HSE Public Health, Area A supports the development and implementation of measures to encourage uptake of active and public transport options to higher and further education institutions, and discourages the use of private motorised vehicles.

***PA CH 4.3: Section 4.5.1.1 Community Centres, page 155***

***PA CH 4.4: Section 4.5.1.1 Community Centres, page 155***

We suggest that a reference / link is made here to an appendix with details of minimum standards for new community centre developments.

***PA CH 4.5: Section 4.5.2.3 Quantity, page 168***

As per suggestions above in PA CH 4.1, the same applies here: The way in which open green space is measured is varied and can be objective or subjective. In addition, perceived green space is an unreliable measure if the quality of the space in terms of safety and cleanliness is poor. A recent Irish study from the ESRI concluded that while availability of green space is important, it is also essential that these spaces should be of high quality<sup>21</sup>. Planners should take these other characteristics of open space into account, particularly in cases where the lower limit of 12% open space applies.

***PA CH 4.6: Section 4.5.2.9 Allotments, Community Gardens and Community Initiatives, page 172***

There is much literature confirming the public health benefits of allotments and community gardens, especially in terms of healthy and active lifestyles, in particular for older people<sup>22</sup>.

---

<sup>20</sup> Carlin C, Cormican M, Gormally M. Health Benefits from Biodiversity and Green Infrastructure. Environmental Protection Agency, Johnstown Castle, Ireland. 2016

<sup>21</sup> Barlow P, Lyons S, Nolan A. How Perceived Adequacy of Open Public Space Is Related to Objective Green Space and Individuals’ Opinions of Area-Level Quality. Sustainability. 2021; 13(15):8516

<sup>22</sup> van den Berg AE, van Winsum-Westra M, de Vries S, van Dillen SME. Allotment gardening and health: a comparative survey among allotment gardeners and their neighbors without an allotment. Environmental Health. 2010;9(1):74.



Furthermore, Allotments have the additional benefit of being an example of sustainable land use<sup>23</sup>.

HSE Public Health, Area A supports the development and implementation of measures to increase the number of allotment spaces throughout the county.

## **CHAPTER 5: CLIMATE ACTION**

General, rather than specific, comments apply to content of chapter 5: Climate Action.

The built environment in which we live has a direct influence on our health. It can influence physical activity, active travel and the occurrence of non-communicable diseases. According to figures from the WHO, approximately one quarter of annual deaths worldwide can be attributed to the environment<sup>24</sup>. In recent years, there has been an unprecedented rise in the health impacts of climate change. Countries around the globe have been slow and inconsistent in their response, and the health consequences of this provide a clear imperative for coordinated action that places the health of people and planet foremost. Rates of heat-related deaths are increasing worldwide, reaching a record high of approximately 345,000 in 2019, in people over 65 years of age<sup>25</sup>. Air pollution alone causes seven million preventable deaths every year<sup>24</sup>. Access to green and blue spaces provide opportunities for activity, recreation and social engagement, and can improve both physical and mental health.

HSE Public Health, Area A supports the development and implementation of measures to adhere to CAP21 and deliver on climate targets in Fingal.

## **CHAPTER 6: CONNECTIVITY AND MOVEMENT**

General, rather than specific, comments apply to content of chapter 6: Connectivity and Movement.

HSE Public Health, Area A supports the development and implementation of measures to encourage uptake of active and public transport options in Fingal, and discourages the use of private motorised vehicles.

To enable safe and equitable participation in active transport, the following measures are recommended, as outlined by the World Health Organisation (WHO) Global Action Plan on Physical Activity 2018-2020<sup>26</sup>:

---

<sup>23</sup> Irvine S, Johnson L, Peters K. Community gardens and sustainable land use planning: A case-study of the Alex Wilson community garden. *Local Environment*. 1999;4(1):33-46.

<sup>24</sup> WHO global strategy on health, environment and climate change: the transformation needed to improve lives and wellbeing sustainably through healthy environments. 2020.

<sup>25</sup> Romanello M, McGushin A, Di Napoli C, Drummond P, Hughes N, Jamart L, et al. The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future. *The Lancet*. 2021;398(10311):1619-62

<sup>26</sup> World Health Organisation (WHO). Global action plan on physical activity 2018–2030: more active people for a healthier world. World Health Organisation. 2018. Available at:

<https://www.who.int/publications/i/item/9789241514187> (Accessed 16 Dec 2022)

- Develop a safe, high quality network for walking, cycling and other forms of mobility on wheels (including wheelchairs), incorporating the principles of universal and equitable access for people of all ages and abilities.
- Increase the connectedness of walking and cycling networks to promote safe access to services including educational facilities, sports and leisure facilities, green areas, local shops and public transport hubs.
- Prioritise actions that reduce risk for the most vulnerable road users, such as the development of pedestrian and cycle infrastructure, which is segregated from motor vehicle and appropriate speed restrictions (i.e. 30km/hr in residential areas) and traffic calming interventions. There should be a particular focus on zones close to schools and other educational facilities.
- Where possible, future development within Fingal should aim to locate educational settings, workplaces and other services together, to enable efficient access by walking and cycling.
- Uptake of active transport should be promoted through social marketing campaigns and the implementation of policies and programmes, which encourage walking and cycling, such as travel to school or work initiatives, or the implementation of cycle hire schemes.

Similarly, HSE Public Health, Area A recognises the existing and planned public transport corridor provision considered in this strategy. Public transport is associated with increased physical activity<sup>27</sup>, with improved access to public transport suggested as a means to reduce healthcare costs<sup>28</sup>. To encourage the use of public transport, the following measures are advised as proposed by the WHO<sup>26</sup>:

- Provide public transport that is accessible to all and integrated with facilities for pedestrians and cyclists in urban, peri-urban and rural communities.
- Public transport should be as cost-effective, efficient and accessible as private motor vehicles. Services should have sufficient capacity, coverage and frequency to support this, and should be accessible to people of all ages and abilities.

## CHAPTER 8: DUBLIN AIRPORT

***PA CH 8.1: Section 8.5.7 Ensuring Environmental Protection and Sustainability, page 309***

***PA CH 8.2: Section 8.5.7 Ensuring Environmental Protection and Sustainability, page 311***

***PA CH 8.3: Section 8.5.7 Ensuring Environmental Protection and Sustainability, page 311***

International evidence is in abundance demonstrating that increased exposure to aircraft noise is associated with an increase in diagnoses of cardiovascular disease, substance misuse/mental health emergencies and insomnia among local residents<sup>29</sup>.

<sup>27</sup> Patterson R, Webb E, Millett C, Lavery AA Physical activity accrued as part of public transport use in England. *Journal of Public Health*. 2019; 1;41(2):222-230. doi: 10.1093/pubmed/fdy099.

<sup>28</sup> Brown V, Barr A, Scheurer J, Magnus A, Zapata-Diomed B, Bentley R. Better transport accessibility, better health: a health economic impact assessment study for Melbourne, Australia. *The International Journal of Behavioral Nutrition and Physical Activity*. 2019; 16(1):89. doi: 10.1186/s12966-019-0853-y.

<sup>29</sup> Wang SS, Glied S, Williams S, *et al* Impact of aeroplane noise on mental and physical health: a quasi-experimental analysis *BMJ Open* 2022;12:e057209. doi: 10.1136/bmjopen-2021-057209

There has been considerable research into the effect of aircraft noise on cognitive performance in schoolchildren, due to the interruptive nature of high levels of aircraft noise. Research has suggested effects on reading comprehension and memory. Cognitive performance affects attention, perception, mood, learning and memory. There is evidence to suggest that long-term aircraft noise has a harmful effect on memory, sustained attention, reading comprehension and reading ability. Early studies highlighted that aircraft noise was also implicated in children from noisy areas having a higher degree of helplessness i.e. were more likely to give up on difficult tasks than those children in quieter areas. Reports often indicated that children exposed to long-term aircraft noise showed a higher degree of annoyance than those children from quieter areas. Evidence has been presented to suggest that children do not habituate to aircraft noise over time, and that an increase in noise can be correlated with a delay in reading comprehension compared to those children not exposed to high levels of aircraft noise<sup>30</sup>.

A 2021 study was the first to investigate the role of annoyance due to aircraft noise and of sensitivity to noise in the association between aircraft noise exposure and medication use, with a large European study population. The results showed significant associations between aircraft noise annoyance and the use of antihypertensive, anxiolytic-hypnotic-sedative, and anti-asthmatic medications, as well as between aircraft noise exposure and antihypertensive medication use<sup>31</sup>.

HSE Public Health, Area A strongly supports the development and implementation of measures to mitigate against excess aircraft noise, and advocates that such measures are expedited insofar as possible.

HSE Public Health, Area A appreciates the opportunity to make this submission. Please do not hesitate to contact us should you need additional information or have any queries in relation to this submission.

---

<sup>30</sup> ERCD Report 0908: Aircraft Noise and Children's Learning  
<https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=3925>

<sup>31</sup> Baudin, C., Lefèvre, M., Babisch, W. *et al.* The role of aircraft noise annoyance and noise sensitivity in the association between aircraft noise levels and medication use: results of a pooled-analysis from seven European countries. *BMC Public Health* **21**, 300 (2021). <https://doi.org/10.1186/s12889-021-10280-3>

## APPENDIX A

*Context: Ireland faces a number of public health challenges through changing demographics, increasing incidence of lifestyle-related health conditions such as obesity and type 2 diabetes, infrastructure requirements, the balancing of transport needs, and the reconciliation of urban design and urban intensification issues.*

HSE Public Health, Area A has a statutory obligation to improve, promote and protect the health of people and communities in the East and North-East region of Ireland. Consultants and Specialists in Public Health Medicine (CPHMs and SPHMs) are all designated as Medical Officers of Health (MOH). They are appointed in the HSE Public Health, Area A to provide public health services for Cavan, Louth, Meath, Monaghan, and North Dublin.

The current mandate and statutory responsibility for comprehensive health protection related to the environment comes through MOH legislation. The Health (Duties of Officers) Order, 1949 (S.I. No. 128 of 1949)<sup>32</sup> states that Medical Officer of Health (MOH) *shall* carry out the following roles:

**Section (1):** *Advise the county council – generally in relation to the health of the people and the provision of health services, sanitary services and housing accommodation, on any questions relating to health matters or sanitary matters in the making and subsequent operation of such bye-laws.*

Section 1 is the advisory mandate. While the law expects the MOH to advise the county council (as would have been appropriate at the time of enactment) in practice, because of the changes in operational responsibilities, CPHMs and SPHMs advise the relevant authorities, including the county council.

**Section (2):** *Inform himself 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.*

Section 2 provides a mandate for public health investigations and risk assessment and for descriptive and analytical epidemiology of the effect of the environment on health, including for climate change influences on health.

In addition, where there is an environmental source of an infectious disease, Infectious Diseases Regulations, 1981 (S.I. No. 390 of 1981) also applies<sup>33</sup>. This mandates the MOH to investigate and take all necessary steps to prevent the spread of infection. The most common area where the MOH investigates and takes control measures is for drinking water contamination, but other areas include contamination of bathing water, air quality incidents, chemical contamination incidents, and the MOH also has an important emergency planning, preparedness and response role.

HSE Public Health, Area A's primary role is to improve population health. It therefore actively seeks to influence any initiatives or proposals that may affect population health in the East and North-East regions of Ireland to maximise their positive impact and minimise possible negative effects.

---

<sup>32</sup> Health (Duties of Officers) Order, 1949 Available URL: <http://www.irishstatutebook.ie/eli/1949/si/128/made/en/print> (Date accessed 19th December 2022).

<sup>33</sup> Infectious Diseases Regulations 1981 Available URL: <https://www.irishstatutebook.ie/eli/1981/si/390/#> (Date accessed 19th December 2022).