

HEALTH SERVICE EXECUTIVE (HSE)
PUBLIC HEALTH MEDICINE ENVIRONMENT AND HEALTH GROUP (PHMEHG) SUBMISSION:
**CONSULTATION ON REVISION of the EU AMBIENT
AIR QUALITY DIRECTIVES**

Prepared by:
Dr Keith Ian Quintyne
Dr Regina Kiernan
Dr Ruth McDermott
Dr Ina Kelly
AIR QUALITY SUB-GROUP
On behalf of the
PUBLIC HEALTH MEDICINE ENVIRONMENT AND HEALTH GROUP
(PHMEHG)

Publication date: 7th MARCH 2023



TABLE OF CONTENTS

PREAMBLE	3
PUBLIC HEALTH MEDICINE ENVIRONMENT AND HEALTH GROUP	3
INTRODUCTION	4
HSE PHMEHG RESPONSE TO THE PROPOSED OBJECTIVES IN THE REVISION	5
TO DEFINE COMMON METHODS FOR AIR QUALITY MONITORING AND ASSESSMENT	5
TO SET STANDARDS TO BE ACHIEVED ACROSS THE EU	5
<i>HSE PHMEHG Recommends:</i>	5
TO ENSURE THAT AIR QUALITY INFORMATION IS MADE AVAILABLE TO THE PUBLIC.....	5
<i>HSE PHMEHG Recommends:</i>	6
TO MAINTAIN GOOD AIR QUALITY AND IMPROVE IT WHERE IT IS NOT GOOD ENOUGH	6
<i>HSE PHMEHG Recommends:</i>	6
CONCLUSION	6
<i>HSE PHMEHG recommends:</i>	6



PREAMBLE

PUBLIC HEALTH MEDICINE ENVIRONMENT and HEALTH GROUP

The Public Health Medicine Environment and Health Group (PHMEHG) represents the statutory health protection service i.e. (Medical Officers of Health) and is recognised as a significant group within the Health Service Executive (HSE) for working to promote and protect the health and well-being of all in the Irish state on matters pertaining to Environment and Health. The PHMEHG works to ensure that the public's health is improved and protected through co-ordinated sustained and determined efforts of its members.

The efforts of the PHMEHG are enhanced by our vision for a healthy Ireland and by engaging with like-minded stakeholders in order to build coalitions of interest that influence public opinion, the media, and governments.

Health is a human right, a vital resource for everyday life, and a key factor in sustainability. Health equity and inequity do not exist in isolation from the conditions that underpin people's health. The health status of all people is impacted by the social, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the unfair and unjust effects of living conditions that cause poor health and disease.¹ These determinants underpin the strategic direction of the PHMEHG.

¹ World Health Organization (WHO) 2021. COVID-19 and the social determinants of health and health equity: evidence brief. Available URL: <https://www.who.int/publications/i/item/9789240038387> (Date accessed: 7th March 2022)



INTRODUCTION

HSE PHMEHG welcomes the opportunity to provide input to the Revision of the EU Ambient Air Quality Directives (AAQDs). This revision includes a comprehensive suite of actions and priorities, which are in keeping with the recently updated World Health Organization (WHO) Air Quality guidelines. The HSE PHMEHG support this comprehensive approach. In particular the proposed objectives for improving the communication and management of air pollution information based on the following objectives:

- To define common methods for air quality monitoring and assessment;
- To set standards to be achieved across the EU;
- To ensure that air quality information is made available to the public; and
- To maintain good air quality and improve it where it is not good enough.

PHMEHG notes and supports the alignment of these with the Healthy Ireland framework, which includes a central goal to:

“Protect the public from threats to health and wellbeing”²

This submission from PHMEHG concerns the wider policy context surrounding air quality in Ireland, and with references made to specifics from the Revision of the EU Ambient Air Quality Directives (AAQDs).

² Department of Health (DoH) 2022. Healthy Ireland Policies. Available URL: <https://www.gov.ie/en/policy-information/706608-healthy-ireland-policies/> (Date accessed: 7th March 2023).



HSE PHMEHG Response to the proposed objectives in the revision

To define common methods for air quality monitoring and assessment

Air quality monitoring is a highly technical area and we defer that expertise to our colleagues in the Irish Environmental Protection Agency (EPA), who are also making a submission.

To set standards to be achieved across the EU

It is widely accepted that there is a linear relationship between exposures to ambient air pollutants and adverse human health effects; whereby any increase in air pollution levels will lead to an increase in risk to the health of the population.

Air quality standards used to be thought of as defining a level of air quality that was safe – that below the given threshold for ambient air pollutants, there would be no health effects. This aligns with the term **NOAEL** standing for **No Observable Adverse Effect Level**, widely used in toxicology. It is still how the public views air quality standards, despite the science now showing this notion to be mostly false, as for many ambient air pollutants; there is no lower threshold of effect. So if there is no safe level, what is the purpose of a standard?

Standards define a maximum level of pollution that is regarded as acceptable to the community or governments, conferring a level of risk of adverse effects that it prepared to countenance, and does this uniformly across the EU. Demonstration that some countries exceed the standard gives strong support to regulators to take action to improve air quality (especially due to transboundary impacts), and it gives the non-expert community guidance to demand action if the regulators fail to proceed promptly.

If the newly proposed AAQD levels are not accepted, the standards set above the current WHO exposure levels may serve no useful purpose, except to allow environmental regulators to keep issuing reports to the public that there is no problem or risk to human health. A more appropriate approach where air quality is causing a common or a serious health problem is to set the standard at a level that will highlight problems in the most polluted parts of the EU, regions and communities, to guide efforts for abatement.

HSE PHMEHG Recommends:

1. Graded introduction of AAQDs over a fixed timeframe, to allow sustainable mitigation measures to be put in place to reduce ambient air pollution.
2. Support legislation for significant punitive measures to be assigned to ambient air pollution producers for more sustainable long-term gains.
3. Given the heterogeneity in EU around ambient air pollution generation, consideration of encompassing an exposure reduction framework to assist in meeting newly proposed air quality standards homogeneously.

To ensure that air quality information is made available to the public

It is well documented that there are significant technical challenges in reaching the general public, but in particular vulnerable populations (i.e. individuals with respiratory problems children, elderly, and persons working outside) about air quality information. It also appreciated that there is some general public ambiguity in understanding best air quality information sources.



HSE PHMEHG Recommends:

1. **Improvement of information sources:** there should be an increase in the clarity about responsibility for communication about air quality from the competent authorities.
2. **Improvement of information quality:** there should be consideration given to existing air quality communication strategies and work on explanation of critical information including risk mitigation behaviours and long-term health impacts.
3. **Improvement in information reach:** seek to consider more successfully reaching vulnerable populations about ambient air quality.

To maintain good air quality and improve it where it is not good enough

HSE PHMEHG supports this strategic priority outlined in the revision of the EU AAQDs.

HSE PHMEHG Recommends:

The best value action from the realisation of this strategic priority will be the reduction of air pollutants as much as possible across all sectors. It is therefore vital that the following be considered:

1. It is recommended that measures aimed at preventing or reducing ambient air pollution (i.e. emission reduction) activities are prioritised over those that reduce ambient air pollution once it has occurred (i.e. concentration reduction) or rely on avoiding existing pollution (i.e. exposure reduction).
2. It is recommended that if this strategy is adopted, then any new expansion or proposal for change to existing developments will intend to deliver an overall benefit to Ireland's public health. In effect, this means that any new development should be clean by design.
3. It is recommended that evaluation also be embedded in the design and costing of all future interventions, from their outset, to systematically gather evidence to inform best practice in the future.

CONCLUSION

HSE PHMEHG strongly support the review of the revision of EU Ambient Air Quality Directives (AAQDs). Within EU, the standards are currently heterogeneous, and do create health inequities, and will urgently need to be rectified before full alignment with newly proposed WHO recommendations.

HSE PHMEHG recommends:

1. The introduction of homogenous ambient air quality monitoring across Europe.
2. Standards should be set according to the greatest health benefits that can be uniformly applied.
3. Alternative non-/minimally polluting options should be readily available and not more costly alternatives that most European citizens cannot readily access.
4. A detailed timeline for implementation of newly proposed WHO recommendations, to allow for realignment at a population level.
5. Greater education to the general public around impacts of poor air quality.



The HSE PHMEHG appreciates the opportunity to make this submission and the opportunity to contribute to improved air quality and health outcomes for all citizens in Europe.

Please do not hesitate to contact us should you require additional information or have any queries in relation to this submission.

Dr Keith Ian Quintyne
Dr Regina Kiernan
Dr Ruth McDermott
Dr Ina Kelly