

Publication

The role of burden of disease assessment in tracking progress towards achieving WHO global air quality guidelines

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 4652487

Author(s) Evangelopoulos, D.; Perez-Velasco, R.; Walton, H.; Gumy, S.; Williams, M.; Kelly, F. J.; Künzli, N.

Author(s) at UniBasel [Künzli, Nino](#) ;

Year 2020

Title The role of burden of disease assessment in tracking progress towards achieving WHO global air quality guidelines

Journal International journal of public health

Volume 65

Number 8

Pages / Article-Number 1455-1465

Mesh terms Air Pollutants, standards; Air Pollution, analysis; Cost of Illness; Environmental Monitoring, standards; Guidelines as Topic; Humans; Particulate Matter, economics; World Health Organization Objectives; : More than 90% of the global population live in areas exceeding the PM2.5 air quality guidelines (AQGs). We provide an overview of the ambient PM2.5-related burden of disease (BoD) studies along with scenario analysis in the framework of the WHO AQG update on the estimated reduction in the BoD if AQGs were achieved globally.; Methods; : We reviewed the literature for large-scale studies for the BoD attributed to ambient PM2.5. Moreover, we used the latest WHO statistics to calculate the BoD at current levels and the scenarios of aligning with interim targets and AQG levels.; Results; : The most recent BoD studies (2010 onwards) share a similar methodology, but there are differences in the input data which affect the estimates for attributable deaths (2.9-8.9 million deaths annually). Moreover, we found that if AQGs were achieved, the estimated BoD would be reduced by up to 50% in total deaths worldwide.; Conclusions; : Understanding the BoD across countries, especially in those that do not align with the AQGs, is essential in order to inform actions to reduce air pollution globally.

ISSN/ISBN 1661-8556

URL <https://doi.org/10.1007/s00038-020-01479-z>

edoc-URL <https://edoc.unibas.ch/91075/>

Full Text on edoc Available;

Digital Object Identifier DOI 10.1007/s00038-020-01479-z

PubMed ID <http://www.ncbi.nlm.nih.gov/pubmed/33057794>

ISI-Number WOS:000579640800002

Document type (ISI) Journal Article, Review