Print this Page for Your Records Close Window

Control/Tracking Number: 2020-A-3303-ISEEPI
Activity: Abstract
Current Date/Time: 5/7/2020 7:27:14 AM

Developing an air pollution exposure surveillance system in England; a new national vulnerability indicator

Author Block: O. Adedire[1], **H. Crabbe**[1], R. Hams[2], C. Mitsakou[1], A. Doutsi[1], T. Fletcher[1], G. Leonardi[1], M. Reacher[2];
[1]Public Health England, Didcot, UNITED KINGDOM, [2]Public Health England, Cambridge, UNITED KINGDOM.

Abstract:
Background: Air pollution is a serious public health issue. Providing better information on vulnerabilities to poor air quality will help stakeholders (local authorities) focus on protecting those most at risk. Public Health England was tasked to develop enhanced vulnerability surveillance for air pollution, as part of the Environmental Public Health Tracking programme, which includes surveillance of hazards (such as air pollution), exposures (concentrations of $PM_{2.5}$ and NO_2) and susceptibility (pre-existing health conditions). **Aims:** 1) To scope and develop pilots to demonstrate feasibility of air pollution exposure surveillance for stakeholders in England, 2) To agree potential new indicators to represent human vulnerabilities to air pollution, and 3) to help identify areas with populations who are sensitive, i.e. by age or socio-economic status (SES). **Methods:** We formed a working group which included several surveillance experts. In developing a new model for England, the vulnerability indicator development was split into two stages: 1) choice of exposure data and susceptibility indicator, and 2) linkage of the exposure and susceptibility indicators to produce population-vulnerability that can be provided in a useful output format, e.g. map, rating index or indicator. **Results:** Initially, we focused on susceptibility to ambient air pollution: age, SES and location, and related these to air pollution ($PM_{2.5}$ and NO_2) concentrations. We combined the exposure data and susceptibility to derive the vulnerabilities indicator. We scoped out different methodologies, practicalities, constraints and their application to pilot areas. **Conclusions:** An air pollution exposure surveillance system is being designed for England. The priority was showing where exposure needs to be tackled to reduce health effects including mortality associated with exposure to outdoor air pollution. Next, the indicator needs to reflect the impact of interventions where changes in air pollution occur.
:

Abstract Type (Complete): Late-Breaking Abstract

Topic (Complete): Air Particulates ; Susceptible Sub Populations ; Exposure Assessment
Symposium Information (Complete):
Is this abstract part of an accepted session?: No
Enter Symposium Name and Number : n/a

Status: Complete

Feedback