

# Research and analysis: COMEAP: mortality effects of long-term exposure to particulate air pollution in the UK

*Updated:* Added link to new COMEAP report on 'Particulate air pollution: effects on mortality'.

COMEAP has published updated advice on this topic; see ['Particulate air pollution: effects on mortality'](#).

This report deals with answering what, at first glance, appear to be relatively simple questions regarding the effects of particulate air pollution on mortality in the UK. We have tried to explain not only the approaches we have used to answer the questions, but also the limitations of the interpretations that can be put on the results. We anticipate that it will be useful to policy makers and elected representatives, and hope also that it will make a helpful contribution to public awareness and understanding of the health effects of air pollution.

In summary:

- Airborne particles comprise an anthropogenic component and a natural component.
- There is an interest in the effects of air pollution on mortality in terms of the impact that policies for reduction would have, or the current burden in terms of public health.
- These effects can be expressed at the population level in terms of life expectancy, and on loss or gain in life years. The burden can also be expressed in terms of deaths occurring in a specified year across the population.
- As everyone dies eventually no lives are ever saved by reducing environmental exposures – deaths are delayed resulting in increased life expectancy.
- These measures are averages or aggregates across the population; it is not known how the effects are distributed among individuals.