

Excess pneumonia deaths linked to engine exhaust

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Engine exhaust fumes are linked to excess deaths from pneumonia across England, suggests research published in the *Journal of Epidemiology and Community Health*.

The annual death toll is comparable to that caused by the London smog in 1952, suggests the author.

Data on atmospheric emissions, published causes of death, and expected causes of death for 352 local authority jurisdictions in England were combined to calculate the impact of pollution on death rates between 1996 and 2004.

Levels of air pollution varied substantially among the local authorities.

Calculations revealed that pneumonia, peptic ulcer, coronary and rheumatic heart diseases, lung and stomach cancers, and other diseases, were all associated with a range of emissions, as well as deprivation, smoking, binge drinking and a northern location.

Further analysis, allowing for the effects of the social factors, showed that pneumonia deaths were strongly and independently linked to emissions, with the exception of sulphur dioxide from coal burning.

The primary culprits were emissions associated with oil combustion, including vehicle exhaust fumes.

During the eight years of the study there were almost 390.000 deaths from pneumonia.

And 35 local authorities accounted for almost 54,000 of these deaths, or around 15,000 more than would be expected.

“Total annual losses as a result of air pollution probably approach those of the 1952 London smog,” writes the author.

Because the links were so strong across all categories of exposure and deaths were so much higher than would be expected, this suggests that these pollutants directly damage lung tissue, he says.

Excess deaths from the progressive lung disease COPD (Chronic Obstructive Pulmonary Disease) and rheumatic heart disease, both of which are characterised by failing lung function, could also be precipitated by engine exhaust, he adds.

Source: British Medical Journal

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