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Mortality among workers at a municipal waste incinerator.

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Source

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Abstract **http://www.ncbi.nlm.nih.gov/pubmed/2929614**

Mortality was investigated among 176 male workers employed for at least 1 year between 1920 and 1985 at a municipal waste incinerator. Expected numbers of deaths from 1951 to 1985 were calculated from national and local death rates, standardized for age and calendar year. There was an excess of deaths from lung cancer and, after long follow-up, for ischemic heart disease. Analysis of duration of exposure supported that the excess of ischemic heart disease was caused by occupational factors; the lung cancer cases were too few to permit conclusions in this respect. Exposure to combustion products and polycyclic aromatic compounds were common, but other occupational exposures may also have contributed to the risk excesses. Smoking habits were investigated and did not differ from the average for Swedish men in cities and towns. Some work operations are very dusty and should be performed only with appropriate protection devices.

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Health Protection Agency confirms new incinerator study

24 January 2012

A new study to further extend the evidence base as to whether emissions from modern well run Municipal Waste Incinerators affect human health has been approved by the Health Protection Agency.

The HPA's current position that well run and regulated modern Municipal Waste Incinerators (MWIs) are not a significant risk to public health remains valid, but the study is being carried out to extend the evidence base and to provide further information to the public on this subject. The HPA will be funding the Small Area Health Statistics Unit, Imperial College London, and the Environmental Research Group, King's College London, both part of the MRC-HPA Centre for Environment and Health, to carry out the study.

For a distance of up to 10 – 15 kilometres from MWIs operating in England and Wales, scientists will research whether there is a potential link between the emissions from MWIs and health outcomes, including: low birth weight, still births and infant deaths.

Researchers will also investigate any possible link between MWI emissions and babies born with congenital anomalies, such as cleft palate and spina bifida, in areas where good quality data is available.

HPA chief executive Justin McCracken said: “It is important to stress that *our current position* on the potential health effects of well run and regulated modern Municipal Waste Incinerators remains valid. This is that while it is not possible to rule out adverse health effects from modern, well regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health and on the fact that modern and well managed municipal waste incinerators make only a very small contribution to local concentrations of air pollutants.

“However, we recognise that there are public concerns about this issue and this study will provide valuable new evidence. HPA continually seeks to review and extend the evidence base on which it bases its advice. We are therefore delighted to support this new study with researchers from the MRC-HPA Centre for Environment and Health.”

Notes to editors

The HPA’s current position statement on Municipal Waste Incinerators can be viewed at: http://www.hpa.org.uk/ProductsServices/ChemicalsPoisons/IntegratedPollutionPreventionControlIPPC/ippcIncineration

Emissions exposure will be estimated by dispersion modelling using data from MWIs that is provided to the Environment Agency as required by their Environmental Permits.

Areas with good data on congenital anomalies are those with a high quality register. These areas include the North East of England, the West and East Midlands, Wessex and Wales.

The study will examine the risk to all congenital anomalies, including separate analysis of subsets such as: cleft lip, cleft palate, major heart defects, respiratory defects and anomalies of the neural tube, abdominal wall, or urinary tract.

The study will start in April 2012 with preliminary results expected in March 2014.

For more information please contact the HPA press office on 01235 822876/745.

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