AIR POLLUTION : Historical perspectives, health effects and approaches to regulation

It is all too easy to take a narrow view of air pollution either because one's own particular indoor and/or outdoor environment is not representative of what people in other locations or climates are exposed to, or because one is too young to have experienced and remember important and serious air pollution scenarios of the past. For this reason, a recent brief review by **Cameron and Maynard 'A new look at the health effects of air pollution', Health Trends, 24, 82-85, 1992** is particularly welcome.

The perspective they provide goes back to 1306 AD when a Royal Proclamation prohibited the use of seacoal in London and it became a capital offence to do so. However neither this measure not the Smoke Abatement and Public Health Acts passed in the 18th century did much to alleviate the outdoor air pollution problems of London and other growing cities. It is even doubtful whether it was the 4,000 extra deaths of humans during the serious London "Smog" of 1952 which provided the effective spur to the passing of the 1956 Clean Air Act. The happening which made more impression on an animal-loving British public was the deaths of prize cattle in the annual Smithfield Show!

Since the passing of that Act particle counts and sulphur dioxide levels in outdoor air have fallen but levels of nitrogen dioxide and carbon monoxide have risen because of increased motor vehicle emissions. Nitrogen dioxide is particularly important because it contributes to the formation of ozone. In one respect, the decline in particulate air pollution may have made the problem worse insofar as carbon particles absorb irritant gases.

In their review, Cameron and Maynard discuss at length the health effects of ozone and provide an overview of ongoing legislation in the European Community, United States and elsewhere aimed at controlling photochemical pollution involving ozone.

Amongst the most serious and puzzling of present-day health concerns is an apparently increasing incidence of asthma, particularly amongst children. Rising levels of nitrogen dioxide and/or ozone are under suspicion but proof is illusive because of the lack and/or imprecision of personal exposure data (see first report of Advisory Group on the Medical Aspects of Air Pollution Episodes: Ozone. London HMSO, 1991).

Although Cameron and Maynard's review primarily addresses problems associated with outdoor air pollution, much of what they say is also highly relevant to indoor air pollution.

Francis J C Roe