

**FOR MEMBERS' USE ONLY**

**COMEAP/2007/4**

**COMMITTEE ON THE MEDICAL EFFECTS OF AIR POLLUTANTS**

**NEW ENGLAND JOURNAL OF MEDICINE PAPER**

**LONG-TERM EXPOSURE TO AIR POLLUTION AND INCIDENCE OF  
CARDIOVASCULAR DISEASE IN WOMEN.**

**MILLER K A *ET AL*, 2007; 356 (5): 447 – 458**

Members will note that the attached paper reports an association between air pollution levels and occurrence of cardiovascular disease in a cohort of 65,893 women in 36 US Metropolitan areas followed up between 1994 and 1998. 1816 women had one fatal or one or more non-fatal cardiovascular events. A clear association between air pollution levels close to the individual's place of residence and the risk of illness was reported. Each  $10\mu\text{g}/\text{m}^3$  increase in  $\text{PM}_{2.5}$  was associated with a 76% increase in the risk of illness and the increase was statistically significant. Between city effects appeared to be smaller than within city effects.

This is a surprising and large effect.

Members are asked to comment on:

- The methods used in the paper
- The likely significance of the findings
- The implications of the findings for predictions of the effects of particles on health in the UK.

**COMEAP Secretariat  
February 2007**