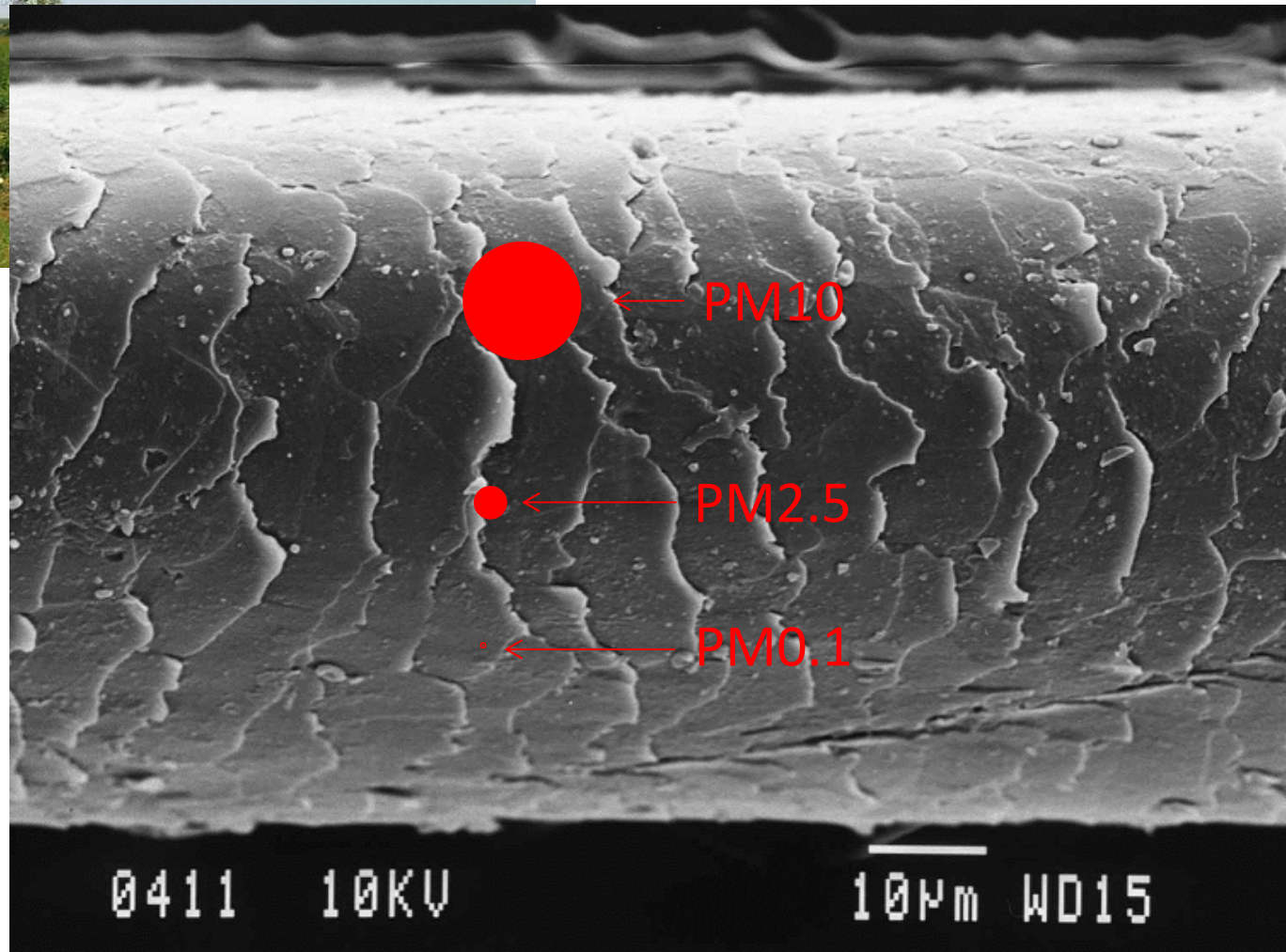
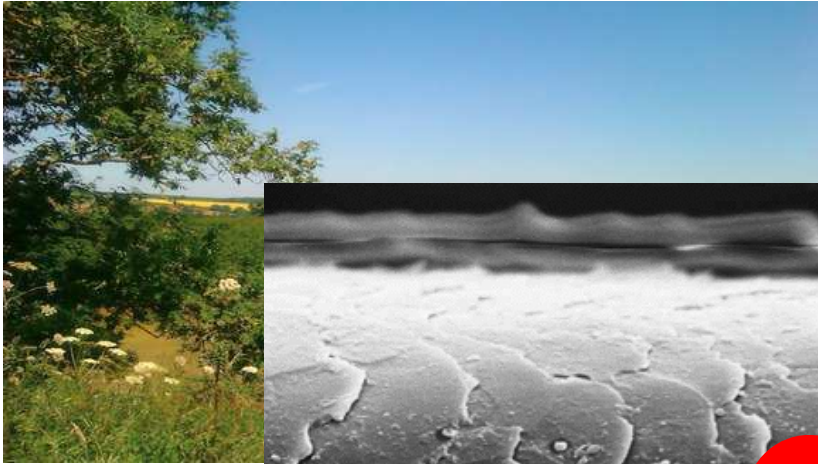




# Impact of air quality on people in Nottinghamshire

Health & Wellbeing Board, July 2014



... and  $\text{NO}_x$  and  $\text{O}_3$  gases

# Development of the evidence base

## In 2005 ...

### PM10 particles

- **Thought** to cause respiratory and cardiovascular problems. Well measured.

### PM2.5 particles

- **Thought** to be the best way of quantifying the impacts of the air pollution. An epidemiological study suggested it **could cause 800-8,000 premature deaths in London** per year. Not measured widely.

### PM0.1 particles

- Lab evidence **suggests it might be** very poisonous to humans. Not measured at all.

### NOx & O3 gas

- O3 peaks induce asthma. NOx possibly harmful, but unclear if separate issue to PM.

## Now ...

### PM10 particles

- **Certain** to cause lung cancer, asthma, bronchitis symptoms especially in the young

### PM2.5 particles

- **Certain** to cause CVD, stroke, lung cancer, respiratory disease. PHE estimate it **causes 3,300 premature deaths in London** each year. Associated with cognitive impairment, Parkinsons, Alzheimers, Type II diabetes, adverse birth outcomes.

### PM0.1 particles

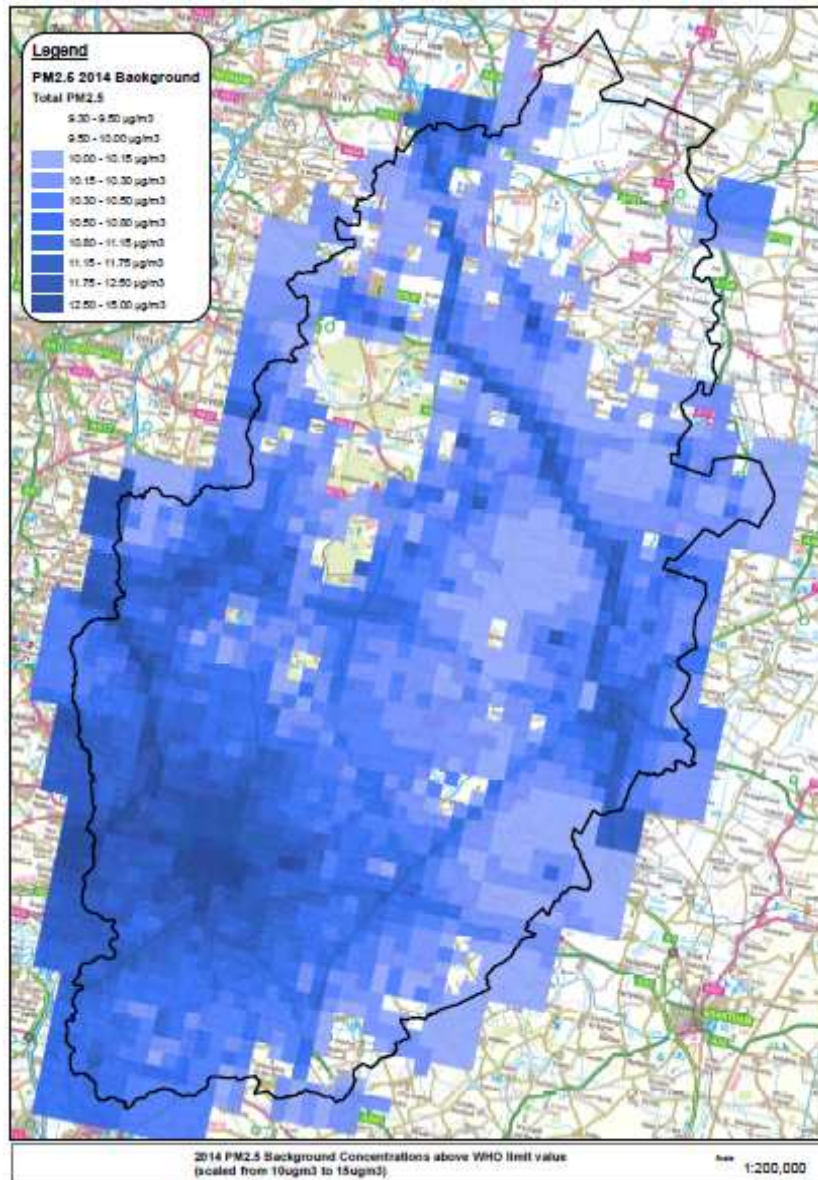
- **Probable evidence this is the main cause of harm**, passing throughout the body and driving system inflammation.

### NOx & O3 gas

- Causes respiratory disease at levels found in London and most UK and EU cities. CVD, COPD, diabetes patients more vulnerable.







**PM<sub>2.5</sub> Background Concentrations above the WHO limit value, Nottinghamshire County & Nottingham City in 2014**

- To note the public health significance of good air quality and that the adverse health impact on our residents of long term exposure to air pollution is modifiable.
- To exercise shared oversight with the Nottingham City Health and Wellbeing Board of the work of the Nottinghamshire Environmental Protection Working Group in order to raise the profile of the health impacts of air quality, and to secure partner engagement to the review and subsequent implementation of the Notts Air Quality Improvement Strategy.
- To endorse the inclusion of a chapter on air quality in the JSNA
- To receive a draft of the Notts Air Quality Improvement Strategy for review and comment a future meeting.