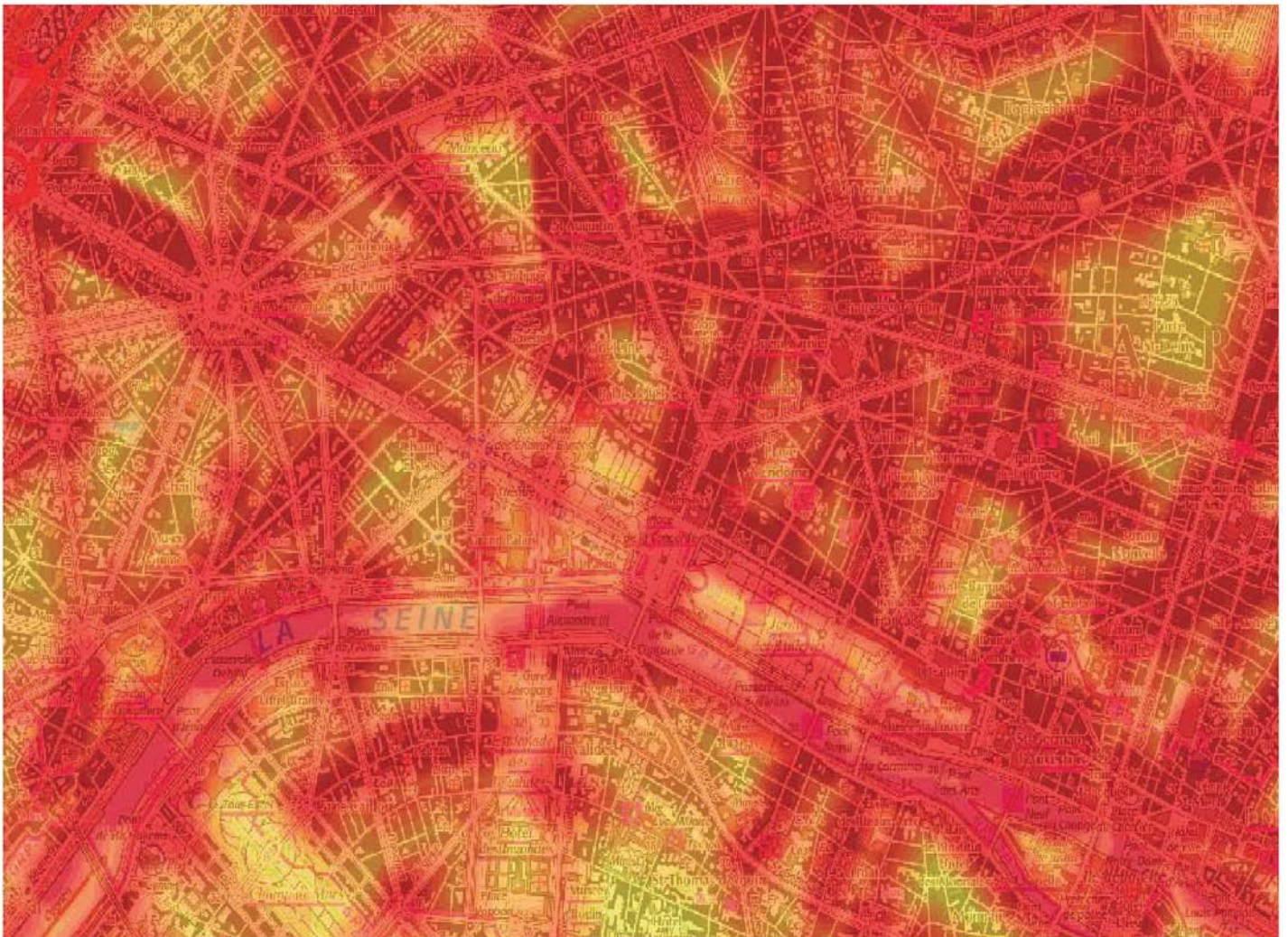


Aphekom

**Improving Knowledge and Communication
for Decision Making on Air Pollution and
Health in Europe**

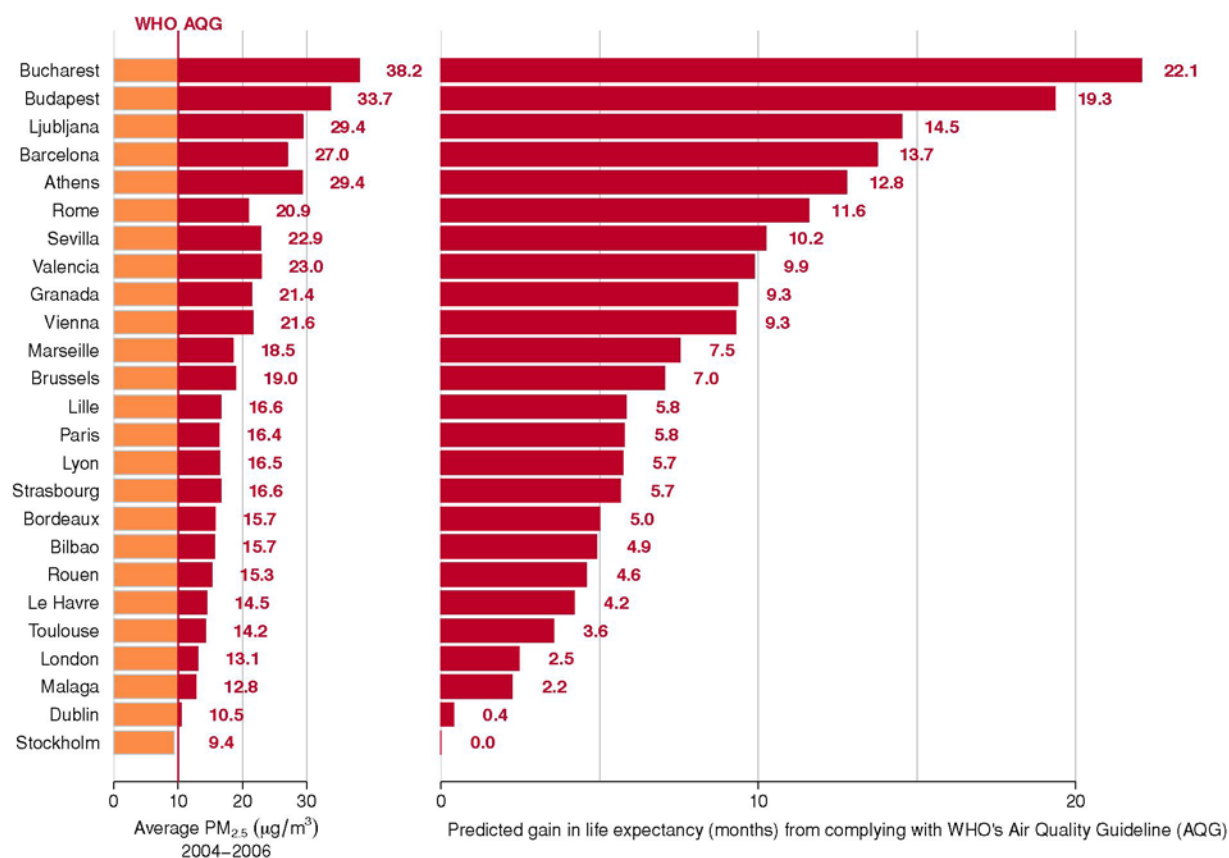


Average annual NO₂ levels in Paris 2009

KEY APHEKOM NUMBERS

- 60 scientists
- 3 years
- 25 cities
- 12 countries
- 39 million inhabitants

Predicted average gain in life expectancy (months) for persons 30 years of age and older in 25 Aphekom cities for a decrease in average annual level of PM_{2.5} to 10 µg/m³ (WHO's Air Quality Guideline)

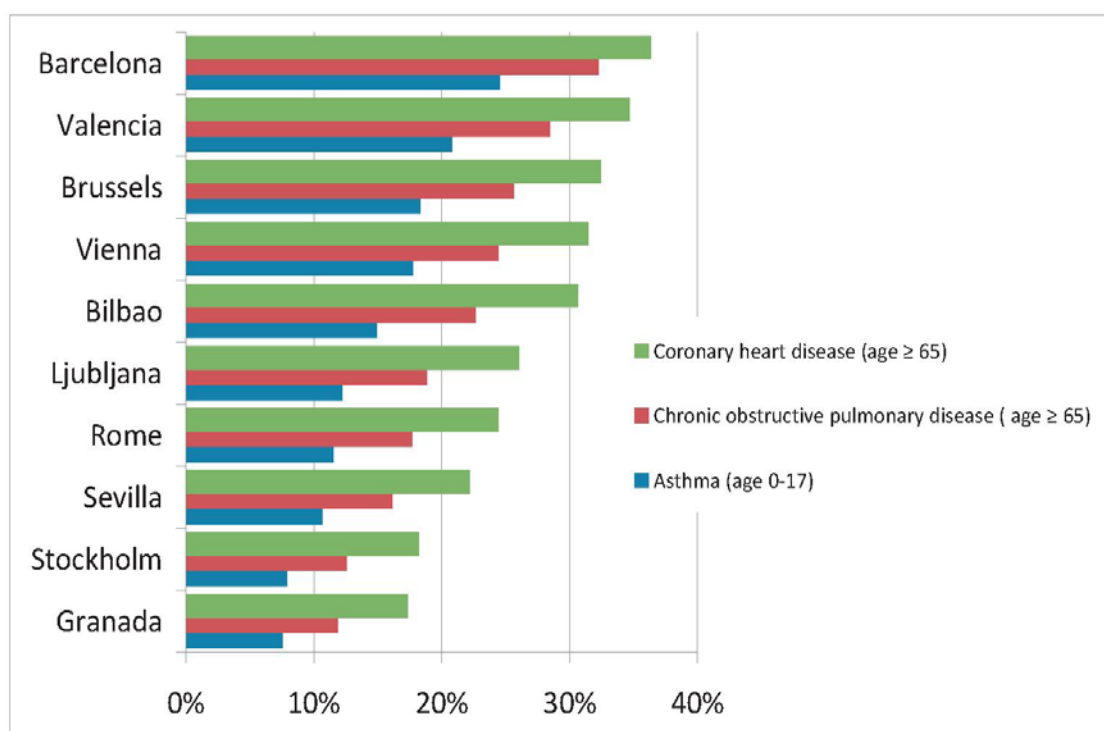


KEY APHEKOM NUMBERS

Exceeding WHO Air Quality Guidelines on PM_{2.5} in 25 European cities with 39 million inhabitants results annually in:

- 19,000 deaths
- 15,000 of them from cardiovascular diseases
- €31.5 billion in health and related costs

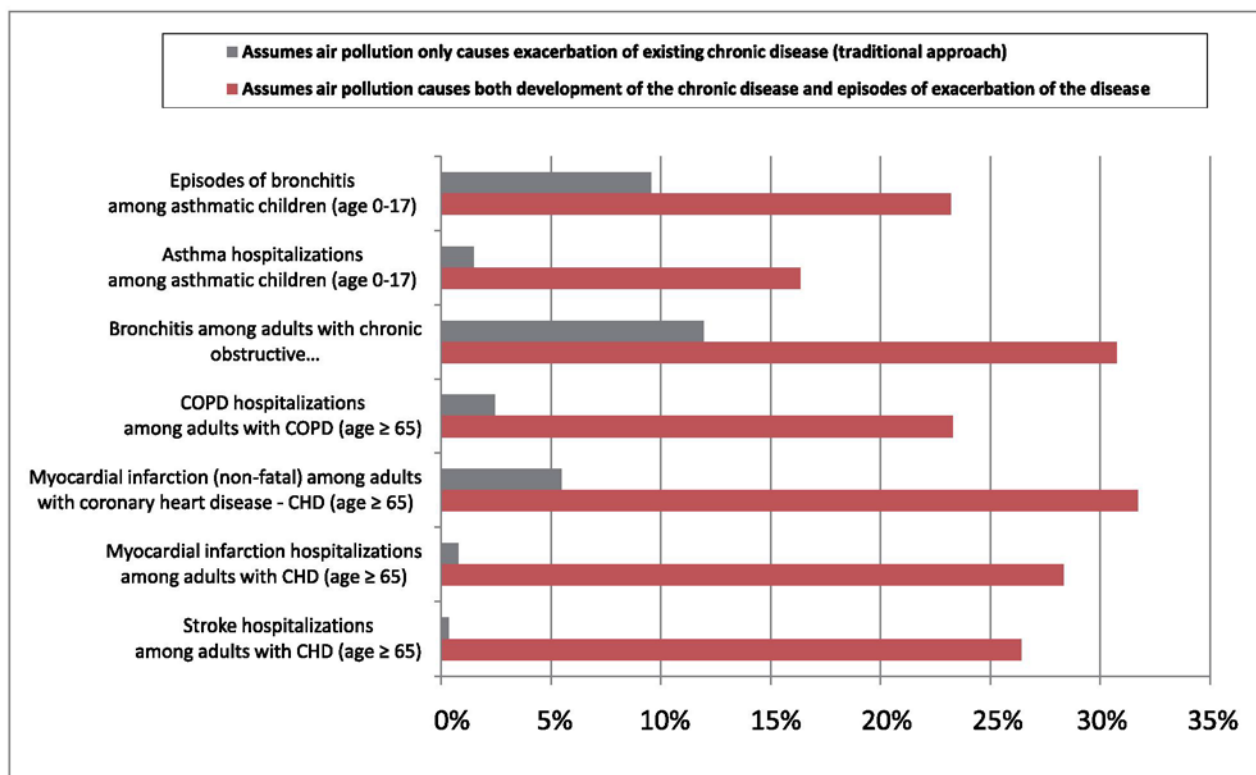
Percentage of population with chronic diseases whose disease could be attributed to living near busy streets and roads in 10 Aphekom cities



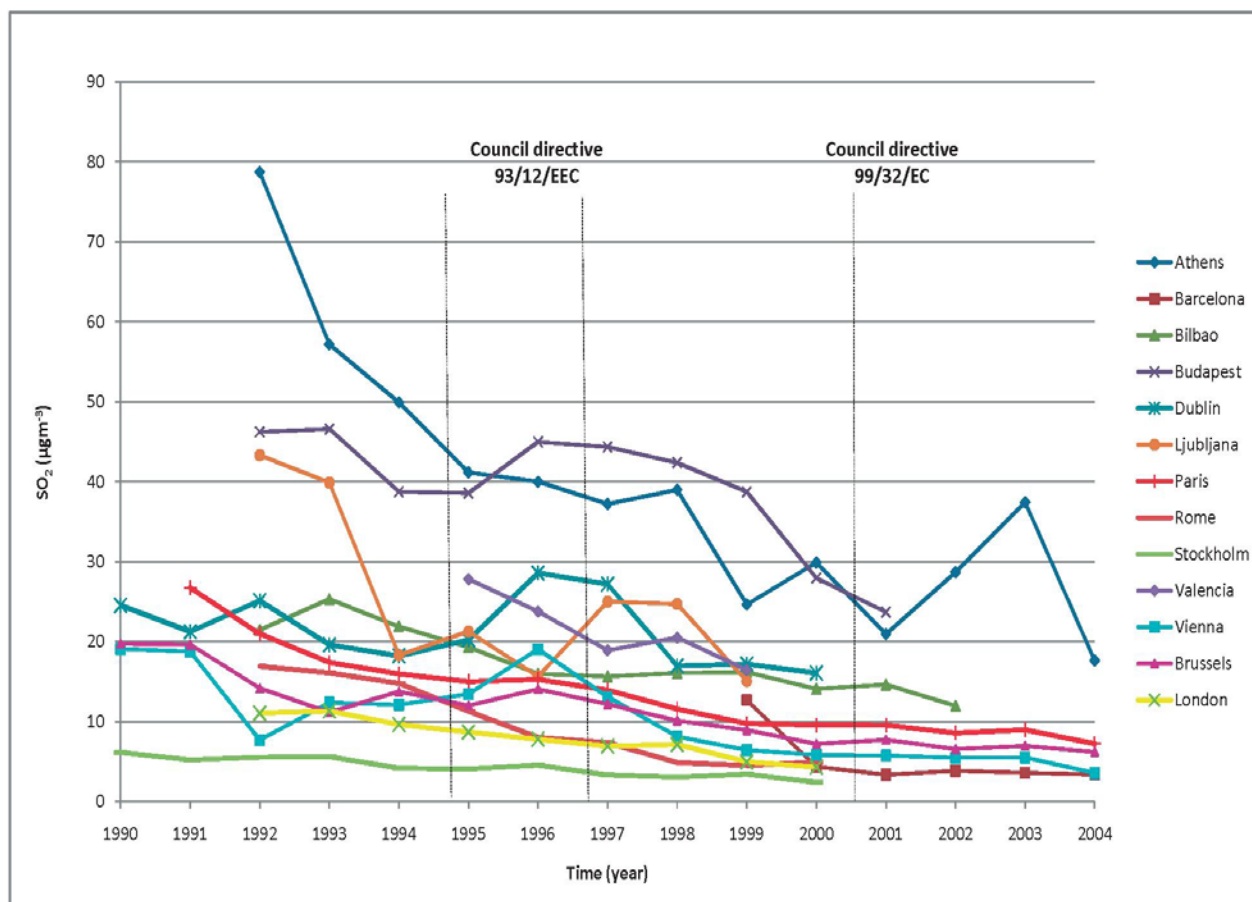
KEY APHEKOM NUMBERS

- Living near busy roads could be responsible for some 15-30% of all new cases of asthma in children; and of chronic obstructive pulmonary disease and coronary heart disease in adults 65 years of age and older
- The associated economic burden could total €300 million every year

Comparison of impact of air pollution on chronic diseases calculated using two different HIA approaches in Aphekomb



Yearly urban background SO₂ averages for Aphekom cities from 1990 to 2004



KEY APHEKOM NUMBERS

In 20 cities where sulphur in fuels was reduced by EU legislation:

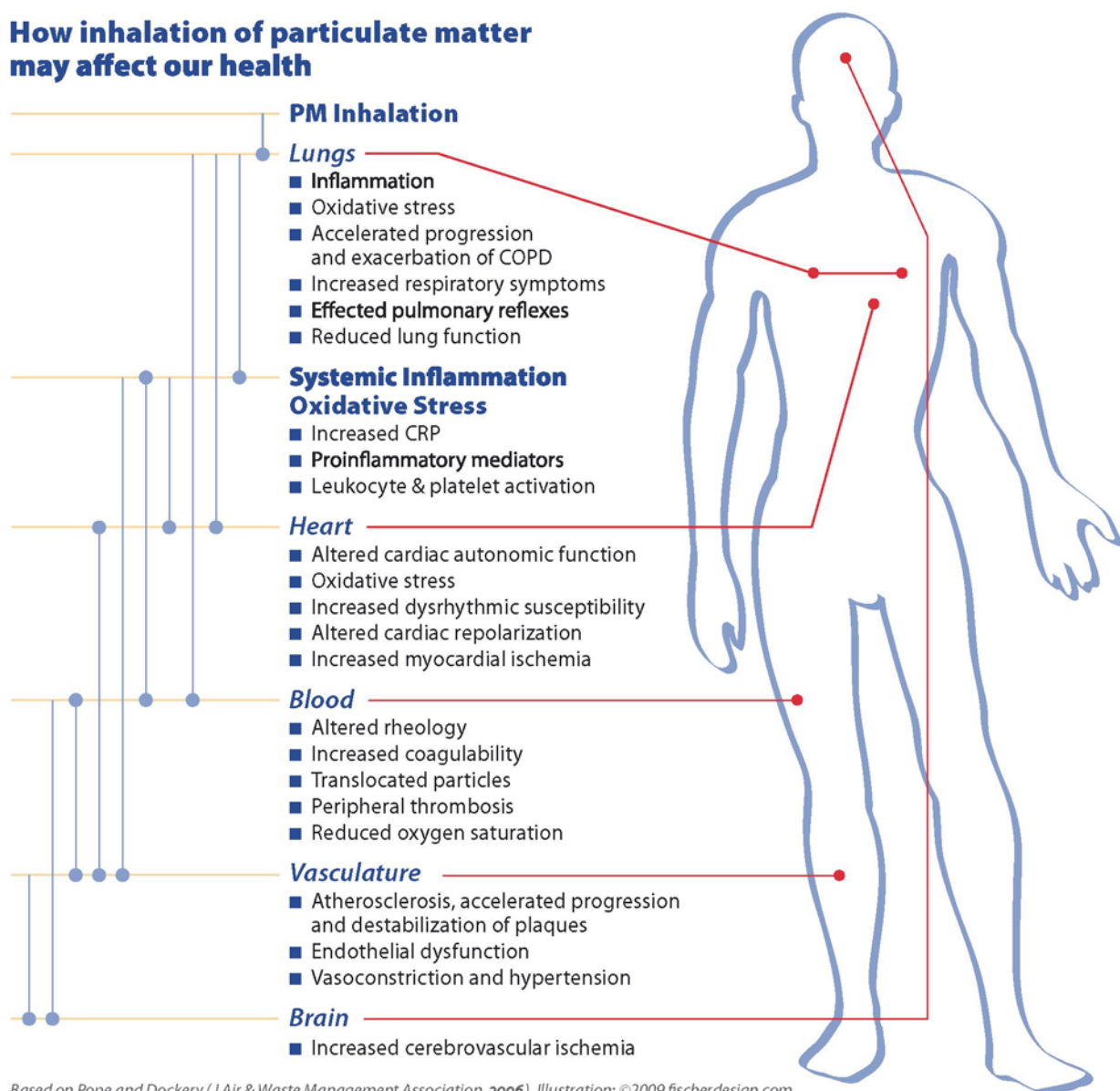
- 2,200 premature deaths from ambient SO₂ prevented
- Some €192 million saved

The Aphekom collaborative network

- Aphekom cities
- External scientific committee



How inhalation of particulate matter may affect our health



Based on Pope and Dockery (J Air & Waste Management Association, 2006). Illustration: ©2009 fischerdesign.com