

Polluted Cities: The Air Children Breathe

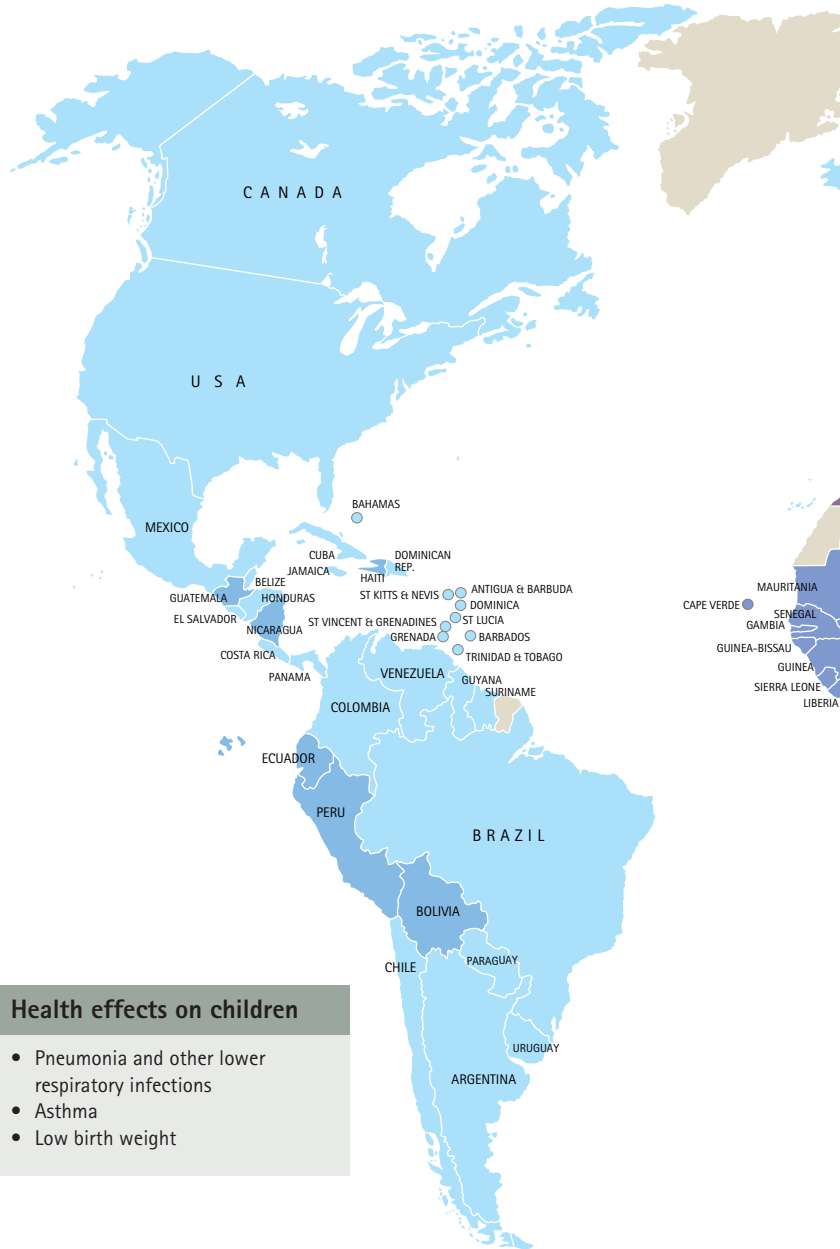
"The widespread exposure of large numbers of children to heavily polluted air in developing countries has skyrocketed."
World Resources Institute 1999

Power plants, factories and vehicles spew out harmful gases and small particles that can penetrate deep into children's lungs. In strong sunlight, oxides of nitrogen from vehicle exhaust fumes form ozone at ground level, which can trigger asthma attacks.

Air pollution does not respect national borders. Heavy metals and persistent organic pollutants are carried by winds, contaminating water and soil far from their origin. In the late 1990s, forest fires, mainly in Indonesia, caused a haze of smoke to hang for months over neighbouring South-East Asian countries. Schools and kindergartens were forced to close, while local hospitals reported large numbers of haze-related illnesses in young children.

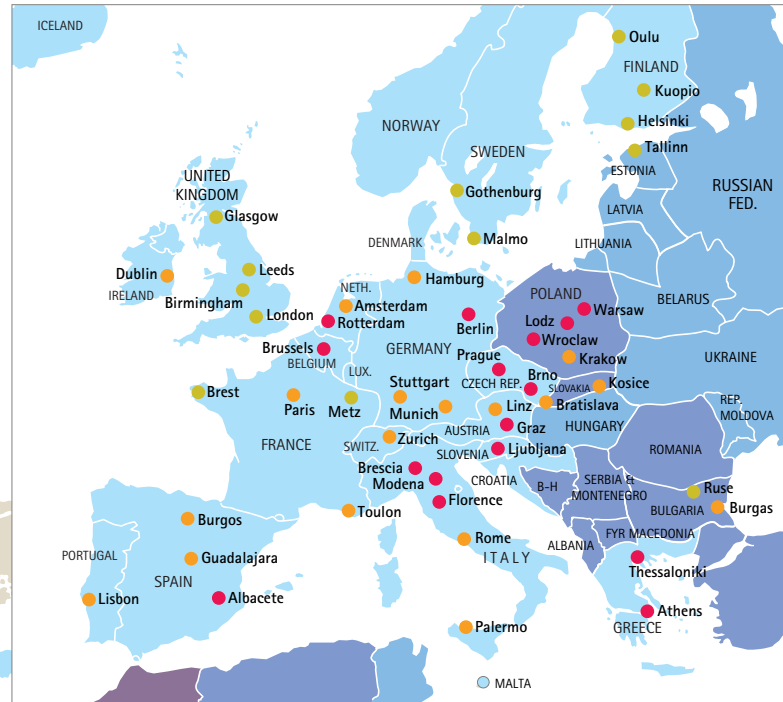
The Great London Smog of 1952 focused the world's attention on the problem of air pollution, and since then there has been a marked improvement in air quality in developed countries. Nevertheless, every year outdoor air pollution is responsible for the death of hundreds of children in Europe, and of more than 24 000 globally.

Industrial growth and rapid urbanization aggravate the problem, with the pressure felt most acutely in the megacities of the developing world. Use of cleaner fuels and technologies, refined motor engines, and public transport are crucial in ensuring that children breathe clean air.



Health effects on children

- Pneumonia and other lower respiratory infections
- Asthma
- Low birth weight



Dirty air: the silent killer

Average concentration of small particles (PM₁₀) in outdoor urban air by WHO sub-region 2000
micrograms per cubic metre (µg/m³)

- over 25
- 21 – 25
- 16 – 20
- 11 – 15
- no data

Average concentration of small particles (PM₁₀) in selected European cities 2001
micrograms per cubic metre (µg/m³)

- over 30
- 21 – 30
- 20 and under

PM₁₀ refers to particles less than 10 micrometres in diameter, which can penetrate deep into the lungs and cause adverse health effects. The European Union standard for 24-hour mean PM₁₀ levels is set at 50 µg/m³, not to be exceeded more than 35 days per year.

