



Better Air quality for Child friendly cities

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Some recent evidence





PROTECTING CHILDREN FROM THE ENVIRONMENT

Each year 1.7 million deaths of children under 5 are linked to the environment.

570,000 deaths



Respiratory infections, including pneumonia

360,000 deaths



Diarrhoea

270,000 deaths



Neonatal conditions, including prematurity

200,000 deaths



Unintentional injuries, such as burns, drowning

200,000 deaths



Malaria

26%



World Health Organization

Reducing environmental risks could prevent a quarter of these deaths.

AIR POLLUTION IS A GLOBAL CHILDREN'S HEALTH ISSUE

Globally **93%** of all children and **630 million** children under 5 years are exposed to air pollution levels* above the WHO air quality guidelines

*fine particulate matter 2.5 micrometers or less in diameter (PM2.5)



THE BURDEN OF DISEASE FROM POLLUTED AIR IS HEAVIEST IN LOW- AND MIDDLE-INCOME COUNTRIES

Percentage of children under 5 years exposed to PM2.5* levels higher than the WHO air quality guideline are:



100%

Africa & Eastern Mediterranean



99%

South-East Asia



98%

Western Pacific



87%

Americas

98% Low- and middle-income countries

52% High-income countries

Key Findings (1)

- Air pollution affects neurodevelopment, leading to lower cognitive test outcomes, negatively affecting mental and motor development.
- Air pollution is damaging children's lung function, even at lower levels of exposures
- Globally, 93% of the world's children under 15 years of age are exposed to ambient fine particulate matter (PM_{2.5}) levels above WHO air quality guidelines, which include the 630 million of children under 5 years of age, and 1.8 billion of children under 15 years
- In low- and middle-income countries around the world, 98% of all children under 5 are exposed to PM_{2.5} levels above WHO air quality guidelines. In comparison, in high-income countries, 52% of children under 5 are exposed to levels above WHO air quality guidelines.

Air pollution is stunting our children's brains

IMPACT OF AIR POLLUTION ON CHILDREN'S HEALTH

A child who is exposed to unsafe levels of pollution can face a lifetime of health impacts. Exposure in the womb or in early childhood can lead to:



Stunted lung growth
Reduced lung function
Increased risk of developing asthma
Acute lower respiratory infections



Impaired mental and motor development
Behavioral disorders



Low birth weight
Premature birth
Infant mortality



Childhood cancers



Increased risk of heart disease, diabetes and stroke in adulthood



Key Findings (2)

- More than 40% of the world's population – which includes 1 billion children under 15 - is exposed to high levels of household air pollution from mainly cooking with polluting technologies and fuels.
- About 600'000 deaths in children under 15 years of age were attributed to the joint effects of ambient and household air pollution in 2016.
- Together, household air pollution from cooking and ambient (outside) air pollution cause more than 50% of acute lower respiratory infections in children under 5 years of age in low- and middle-income countries.
- Air pollution is one of the leading threats to child health, accounting for almost 1 in 10 deaths in children under five years of age.

WE ALL HAVE A PART TO PLAY IN PROTECTING CHILDREN FROM DIRTY AIR

Air pollution can be fought on many fronts

HOUSES

Use of clean
cook stoves
for cooking



CLINICS



MUNICIPALITIES



INSTITUTIONS

NATIONAL GOVERNMENT



GLOBAL COMMUNITY



SCHOOLS

HEALTH PROFESSIONALS ARE UNIQUELY PLACED TO TAKE ACTION ON AIR POLLUTION



Be informed



Recognize exposure
and related health
conditions



Prescribe solutions,
and educate families,
communities,
colleagues and
students



Advocate solutions
to other sectors,
policy- and
decision-makers



Research, publish
and disseminate
knowledge

The broader health sector must become more engaged



Actions required...continued

- Implementation of policies to reduce air pollution: All countries should work towards meeting WHO global air quality guidelines to enhance the health and safety of children.
- Steps to minimize children's exposure to polluted air: Schools and playgrounds should be located away from major sources of air pollution like busy roads, factories and power plants.

Thanks