

Climate change poses 'lifelong' child health risk

November 14 2019



The Lancet warning follows a year of global youth climate strikes inspired by Greta Thunberg

Climate change will damage the health of an entire generation unless there are immediate cuts to fossil fuel emissions, from a rise in deadly

infectious diseases to surging malnutrition, experts warned Thursday.

Children across the world were already suffering the ill effects of air pollution and extreme weather events, said The Lancet Countdown in its annual report on the impact of climate change on human health.

And far worse is to come for future generations, it warned: air-borne diseases, malnutrition due to mass crop failures, and even mental and physical trauma from increased flash flooding and wildfires.

The Lancet Countdown is a coalition of 35 institutions including the World Health Organization and the World Bank.

Their warning comes as some of Australia's worst wildfires in living memory continue to burn across its eastern seaboard, and after a global youth strike inspired by Swedish schoolgirl Greta Thunberg.

August was the hottest month ever recorded and Earth has already warmed one degree Celsius (1.8 Fahrenheit) since industrialisation.

The Paris Climate treaty of 2015 enjoins nations to limit temperature rises to 2C, or preferably to 1.5C if possible.

Yet emissions continue to rise year on year, putting Earth on a path that could lead to a 4C temperature rise by the end of the century—bringing peril for human health.

The report said "nothing short" of a 7.4 percent year-on-year cut in CO₂ emissions until 2050 would limit global warming to 1.5C.

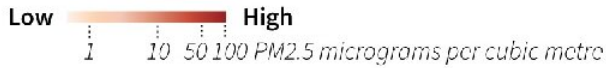
Breathing toxic air

Globally, 93% of all children live in environments with air pollution levels above the WHO guidelines

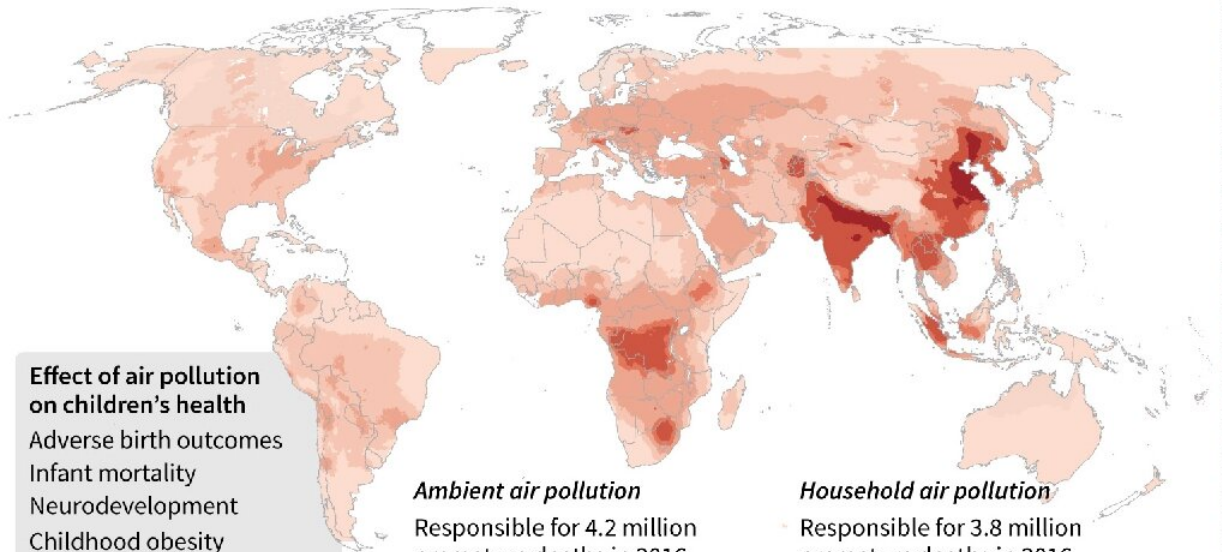
PM 2.5 level

derived from satellite imagery

Global annual mean, 2015



WHO's recommended safe level for PM2.5 is 10 micrograms per cubic metre of air, as an annual average



Effect of air pollution on children's health

- Adverse birth outcomes
- Infant mortality
- Neurodevelopment
- Childhood obesity
- Lung function
- Respiratory infections, including pneumonia
- Asthma
- Ear infections
- Childhood cancers

Ambient air pollution

Responsible for 4.2 million premature deaths in 2016; of these, almost 300 000 were children under 5

Sources:

Fossil fuel combustion, industrial processes, waste incineration, agriculture, wildfires, dust storms, volcanic eruptions

Household air pollution

Responsible for 3.8 million premature deaths in 2016, including over 400 000 deaths of children under 5

Sources:

Cooking with polluting fuels and technologies. Residential cooking also contributes as much as 12% of global PM2.5

Source: WHO/Columbia University/NCBI

© AFP

World map showing the levels of ambient (PM2.5) air pollution and the primary sources of it.

Disease, malnutrition, pollution

"A kid born today has an average global life expectancy of 71 years so that brings them to 2090. That means that kid will experience a 4C

world," Nick Watts, executive director of The Lancet Countdown, told AFP.

The report, compiled by 120 experts, used the latest available data and climate modelling to predict global health trends as the mercury climbs throughout the decades.

In parts of the world already, the health effects from climate change start in the first weeks of a baby's life.

In the last 30 years, the global yield potential of staple crops such as maize, winter wheat and rice, have all declined, putting infants and small children at heightened risk of malnutrition.

Infant malnutrition impacts every stage of a child's life, stunting growth, weakening the immune system and throwing up long-term developmental problems.

More children will also be susceptible to infectious disease outbreaks.

In three just three decades, the number of days worldwide of prime infectiousness for the *Vibrio* bacteria—which causes much of child diarrhoeal disease worldwide—has doubled.

This not only increases the likelihood of children contracting diseases such as cholera in at-risk regions, it also enlarges their spread.

The report found that mosquito-borne diseases such as dengue and malaria were also on the march, putting half of the world's current population at risk.

And people in cities are already suffering premature disease and death from air pollution—coal plants alone contributed a likely one million

premature deaths worldwide in 2016.



Some experts say wildfires such as the one currently raging in California will become more frequent because of climate change

'Climate change = public health'

Extreme weather events are likely to proliferate as temperatures climb, posing increasingly frequent economic disruption.

For example, in 2018, 45 billion hours of work were lost due to extreme heat globally compared with 2000.

"Climate change is not about 2100, climate change is about Wednesday, November 13, 2019," said Watts, speaking on the day.

"Populations around the world are migrating, growing and ageing in the areas that are worst affected by climate change."

He said even lawmakers in developed, temperate nations "ought to be already extremely concerned" about heatwaves; temperature records were smashed across Europe this year in a string of deadly heatwaves.

The study found that last year an additional 220 million over-65s were exposed to extreme heat, compared with the historical average.

Reacting to the report, The Lancet's editor-in-chief Richard Horton said climate change was "one of the greatest threats to the health of humanity today".

"But the world has yet to see a response from governments," he added. "We can't afford this level of disengagement."

More information: Nick Watts et al, The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate, *The Lancet* (2019). [DOI: 10.1016/S0140-6736\(19\)32596-6](https://doi.org/10.1016/S0140-6736(19)32596-6)

© 2019 AFP

Citation: Climate change poses 'lifelong' child health risk (2019, November 14) retrieved 23 April 2024 from <https://phys.org/news/2019-11-climate-poses-lifelong-child-health.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is

provided for information purposes only.