

# Study uncovers link between air pollution and intellectual disabilities in children

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British children with intellectual disabilities are more likely than their peers to live in areas with high outdoor air pollution, according to a new *Journal of Intellectual Disability Research* study funded by Public Health England.

The findings come from an analysis of data extracted from the UK's Millennium Cohort Study, a nationally [representative sample](#) of more than 18,000 UK [children](#) born in 2000 to 2002.

Averaging across ages, children with intellectual disabilities were 33 percent more likely to live in areas with high levels of diesel particulate matter, 30 percent more likely to live in areas with high levels of nitrogen dioxide, 30 percent more likely to live in areas with high levels of carbon monoxide, and 17 percent more likely to live in areas with high levels of sulphur dioxide.

The authors note that [intellectual disability](#) is more common among children living in more socio-economically deprived areas, which tend to have higher levels of air pollution; however, exposure to outdoor air pollution may impede [cognitive development](#), thereby increasing the risk of intellectual disability.

"We know that people with intellectual disabilities in the UK have poorer health and die earlier than they should. This research adds another piece to the jigsaw of understanding why that is the case and what needs to be done about it," said lead author Dr. Eric Emerson, of

The University of Sydney, in Australia.

**More information:** *Journal of Intellectual Disability Research*, [DOI: 10.1111/jir.12561](https://doi.org/10.1111/jir.12561)

Provided by Wiley

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