

# What impact does long-term exposure to air pollution in your city have on children's health?

New research by King's College London<sup>1</sup> has estimated how air pollution in nine English cities impact on people's health.

We've selected the statements from each city which relate to children's health to make it easy for you to show your election candidates why they should pledge to push for urgent and ambitious action to protect young lungs from illegal and harmful air pollution. More details about the report can be found <u>here</u>.

Don't forget that the <u>Clean Air Parents' Network General Election 2019 Toolkit</u> is full of ideas about how to make protecting young lungs an election issue.

**Please note:** The following statements relate specifically to long-term exposure to the average levels of air pollution in each city<sup>2</sup> as opposed to short-term exposure that people may be exposed to on particular high pollution days.

#### Birmingham

- 1. Roadside air pollution in Birmingham stunts lung growth in children by 7.7%.
- 2. Cutting air pollution in Birmingham by one fifth would increase children's lung capacity by around 2.6%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Birmingham being subject to a 6.7% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Birmingham by one fifth could contribute to 328 fewer asthmatic children with bronchitic symptoms each year.

## **Bristol**

- 1. Roadside air pollution in Bristol stunts lung growth in children by 5.3%.
- 2. Cutting air pollution in Bristol by one fifth would increase children's lung capacity by around 2.3%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Bristol being subject to a 4.5% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Bristol by one fifth could contribute to 94 fewer asthmatic children with bronchitic symptoms each year.

<sup>&</sup>lt;sup>1</sup> Personalising The Health Impacts Of Air Pollution: Summary For Decision Makers. Martin Williams, Dimitris Evangelopoulos, Klea Katsouyanni and Heather Walton Environmental Research Group King's College London <sup>2</sup> Based on the difference between long term average air pollution levels at roadsides compared to the long-term average at less polluted, quieter streets.





# Derby

1. Cutting air pollution in Derby by one fifth would increase children's lung capacity by around 3.1%.

## Liverpool

- 1. Roadside air pollution in Liverpool stunts lung growth in children by 4.6%.
- 2. Cutting air pollution in Liverpool by one fifth would increase children's lung capacity by around 2.1%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Liverpool being subject to a 3.8% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Liverpool by one fifth could contribute to 85 fewer asthmatic children with bronchitic symptoms each year.

#### London

- 1. Roadside air pollution in London stunts lung growth in children by 12.5%.
- 2. Cutting air pollution in London by one fifth would increase children's lung capacity by around 4.1%.
- 3. Cutting air pollution in London by one fifth could contribute to 3,685 fewer asthmatic children with bronchitic symptoms each year.

#### Manchester

- 1. Cutting air pollution in Manchester by one fifth would increase children's lung capacity by around 2.6%.
- 2. Cutting air pollution in Manchester by one fifth could contribute to 85 fewer asthmatic children with bronchitic symptoms each year.

#### Nottingham

- 1. Roadside air pollution in Nottingham stunts lung growth in children by 2.8%.
- 2. Cutting air pollution in Nottingham by one fifth would increase children's lung capacity by around 2.8%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Nottingham being subject to a 2.3% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Nottingham by one fifth could contribute to 134 fewer asthmatic children with bronchitic symptoms each year.



# Oxford

- 1. Roadside air pollution in Oxford stunts lung growth in children by 14.1%.
- 2. Cutting air pollution in Oxford by one fifth would increase children's lung capacity by around 2.8%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Oxford being subject to a 13.3% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Oxford by one fifth could contribute to 38 fewer asthmatic children with bronchitic symptoms each year.

### Southampton

- 1. Roadside air pollution in Southampton stunts lung growth in children by 3.8%.
- 2. Cutting air pollution in Southampton by one fifth would increase children's lung capacity by around 3.2%.
- 3. Air pollution may contribute to asthmatic children that live near busy roads in Southampton being subject to a 3.1% greater chance of developing bronchitic symptoms.
- 4. Cutting air pollution in Southampton by one fifth could contribute to 69 fewer asthmatic children with bronchitic symptoms each year.



The Clean Air Parents' Network is supported by the British Lung Foundation and ClientEarth. We are calling on all levels of government to take action to tackle illegal and harmful levels of air pollution to protect the health of people across the UK <u>www.cleanairparents.org.uk.</u>