



Tiny particles of air pollution could have a BIG impact on your health.

# AN INVISIBLE THREAT

## WHAT CAUSES AIR POLLUTION?

Burning coal, natural gas and petrol releases all sorts of **nasty substances** into the air. Coal-burning power plants and factories are the main source of air pollution in China. On the first day of 2017, air pollution in the capital Beijing was 24 times higher than the healthy level. The toxic smog was thick enough to make driving and flying impossible.



## I DON'T LIVE IN CHINA. DO I NEED TO WORRY?

In many parts of the world, industry is cleaner and greener than it used to be. But air pollution caused by petrol and diesel engines is getting worse all around the world. This winter, air pollution in London shot up to its highest level in five years.

- OZONE
- CARBON MONOXIDE
- NITROGEN OXIDES
- VOLATILE ORGANIC COMPOUNDS
- PARTICULATE MATTER

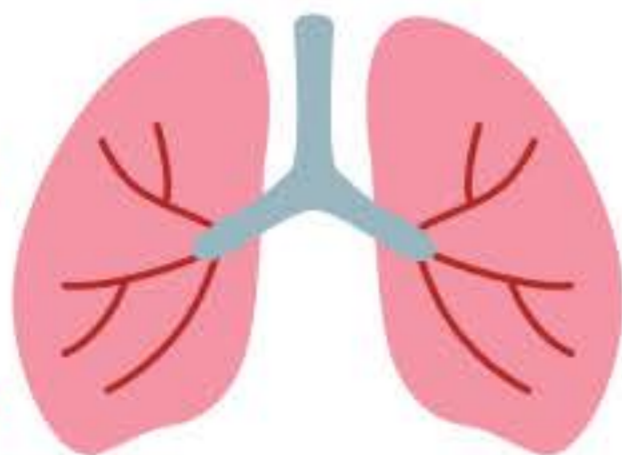


Minuscule particles of dust, soot, smoke and liquid in the air are known as **particulate matter**. The smaller the particles, the more dangerous they are. When you breathe these particles in, they get lodged deep in your lungs. Some even make it into your bloodstream.

You could line up **30** of the smallest polluting particles on a **single human hair**.

## HOW AIR POLLUTION AFFECTS YOUR HEALTH

In January, a United Nations report warned that air pollution plagues the UK – and children are the most at risk. These are some of the main ways air pollution affects our health:



Can stop our lungs growing and developing properly



Makes allergies worse



Aggravates asthma



Makes coughs, bronchitis and lung infections more likely



Can stop our brains and nervous system developing properly, affecting behaviour and learning



# HOW CAN I PROTECT MY LUNGS?

Air pollution is monitored hourly to let us know how bad it is, and how well we are controlling it. You can check the air pollution forecast for your area at [goo.gl/EqUHu7](http://goo.gl/EqUHu7)



**7 MILLION**  
EARLY DEATHS AROUND  
THE WORLD EACH YEAR  
DUE TO AIR POLLUTION

<b>LOW</b>	<b>Enjoy being outdoors as usual</b>
<b>MODERATE</b>	<b>People with lung problems may need to reduce strenuous physical activities outdoors</b>
<b>HIGH</b>	<b>Anyone with sore eyes, a cough or sore throat should consider reducing activity, especially outdoors. People with asthma may need to use their inhaler more often. Older people should exercise less.</b>
<b>VERY HIGH</b>	<b>Reduce physical activity, especially outdoors. People with lung or heart problems should avoid it altogether.</b>

## CAN SCIENCE HELP?

New technology promises to help us do the things we want to do more cleanly. Improved catalytic converters make car exhaust fumes less toxic. But with more cars on the road than ever before, greener technology can only go so far. The best solution is to change our behaviour.

**30-40,000**

EARLY DEATHS IN THE UK CAUSED BY BREATHING POLLUTED AIR OVER A LONG PERIOD

## WHAT CAN I DO TO HELP?

If you're worried about air pollution near your home or school, here are six things you can do.

- 1** Write to your MP and let them know. 
- 2** Ask your school to run bikeability classes. 
- 3** Walk, bike or scoot to school. 
- 4** Ask friends to share lifts to parties, sports matches and clubs. 
- 5** Plant a tree. Leaves help clean the air by giving tiny particles a place to settle. Then they get washed away by the rain. 
- 6** If your school is next to a busy road, start a campaign to plant a wall of trees between the road and your playground. 