How invisible pollution may be damaging your health

EXPERTS OUTLINE THE POTENTIAL EFFECTS OF ENVIRONMENTAL TOXINS ON THE BODY. BY

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A NEW report revealed that most of the world has polluted air, with only 17% of cities globally meeting the World Health Organization's air quality guidelines.



IQAir, a Switzerland-based air quality monitoring platform, looked at data from 40,000 sites across 138 countries, and identified Chad, Congo, Bangladesh, Pakistan, and India as having the most polluted air.

Experts suggest that the actual levels of air pollution may be even higher, as many regions lack the necessary monitoring needed to provide more accurate data.

But how exactly does air pollution affect our health?

LUNGS

"Air pollution has both immediate and long-term impacts on health, causing inflammation and irritation of the airways, which can lead to symptoms like coughing and breathing difficulties," explains Jonathan Blades, head of policy at Asthma + Lung UK.

"Air pollution can also worsen symptoms for the millions of people living with lung conditions, triggering asthma attacks or chronic obstructive pulmonary disease (COPD) flare-ups, some-

times resulting in hospitalisation."

The lungs of younger people are particularly vulnerable.

"Harmful air pollution particles can penetrate deeply into the lungs of children, and these deeply embedded toxins can stunt lung growth," explains Jonathan. "They also breathe faster, which means they take in more polluted air.

"Longer-term, being exposed to pollution as a child increases the risk of developing asthma and COPD as an adult, meaning the effects can take many years to fully manifest themselves."

Asthma + Lung's website recommends checking pollution levels in your area on Defra's UKwide pollution forecast if you suffer with any of these issues.

The charity advises affected individuals to go out earlier when air quality is better, to use quieter streets, and keep car windows closed.

HEART

Air pollution can have a significant effect on heart health.

"Pollutants such as fine particles (PM2.5) and nitrogen dioxide (NO2) can cause inflammation in the body, making blood vessels stiffer and less able to function properly," explains Dr Oliver Guttmann, consultant cardiologist at The Wellington Hospital, part of HCA Healthcare UK.

"This can lead to higher blood pressure and strain on the heart, increasing the risk of heart disease, heart attacks, and strokes."

For those with existing heart conditions, pollution can worsen symptoms.

"It can cause chest pain or shortness of breath, and can make it harder to manage conditions like high blood pressure," explains Dr Guttmann. "To protect your heart, try to avoid outdoor exercise when pollution levels are high, and consider using an air purifier indoors.

"A healthy diet, regular exercise, and managing stress can also help keep your heart strong."

SKIN

"One of the most significant ways pollution affects the skin is by weakening its natural barrier," says Dr Ross Perry, GP and medical director of Cosmedics skin clinics. "This damage can lead to dehydration, congestion, and a dull, lacklustre complexion.

"Over time, prolonged exposure to pollutants can accelerate signs of ageing, contribute to inflammation, and make the skin more sensitive and prone to breakouts."

Dr Perry recommends double cleansing in the morning and at night to prevent this.

"This makes sure dirt is removed from the skin, including pollutants which are invisible to the naked eye," explains Dr Perry.

"Moisturise twice a day and look
for ingredients like ceramides, hyaluronic acid, and squalane to keep the skin hydrated and resilient," recommends Dr Perry. "Also, keep skin hydrated by drinking plenty of water to flush out toxins."

BRAIN

"Pollution triggers inflammation in the brain, disrupting neural connections and reducing oxygen supply," says Dr Steven Allder, consultant neurologist at Re:Cognition Health. "Over time, this can impair memory, attention and decision-making abilities."

"Increased exposure to polluted air has been associated with higher rates of anxiety and depression," highlights Dr Allder. "The stress response triggered by pollution-related inflam-

mation may play a role in these effects."

The neurologist recommends reducing exposure to pollution by using things such as air purifiers. "Wearing masks in high-traffic areas can also help protect brain health and lower the risk of pollution-related neurological damage," adds Dr Allder.

EYES

"When walking outside we are confronted with pollution from road traffic and industry, including particulate matter, carbon monoxide (CO), nitrogen dioxide (NO) and sulphur dioxide (SO2)," says optometrist Francesca Marchetti. "When allergens affect the eyes, the body releases histamine and blood vessels in the conjunctiva (the lining of the eye) enlarge and swell. This will leave eyes puffy and red, feeling itchy and they may become more watery."

It's important to manage these eye symptoms and not simply overlook them, stresses the optometrist. "If you have a minor eye health problem, the pharmacy should be your first port of call," she adds.