

What you need to know

HOW HAZE AFFECTS THE BODY

Eye

Inflammation or conjunctivitis

Nose

Nasal irritation stimulates mucus production

Throat

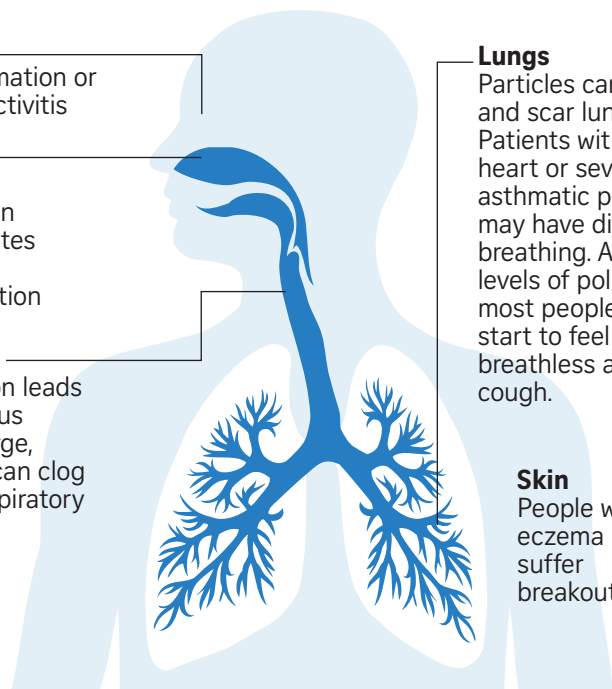
Irritation leads to mucus discharge, which can clog the respiratory tract

Lungs

Particles can inflame and scar lung tissue. Patients with lung, heart or severe asthmatic problems may have difficulty breathing. At higher levels of pollution, most people will start to feel breathless and cough.

Skin

People with eczema may suffer breakouts



WHAT'S IN HAZE

Larger particulate matter (PM₁₀)

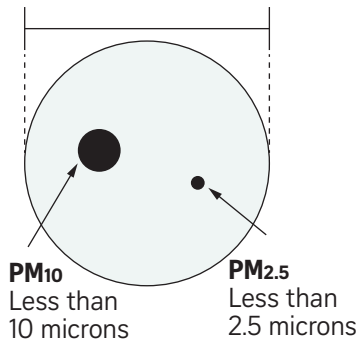
- These make up a major component of haze.
- They can occur naturally or are produced by burning wood and other vegetation.

Smaller particulate matter (PM_{2.5})

- These are more worrying because high levels have been found to be strongly associated with many types of respiratory illnesses.

Size comparison

Cross section of human hair
50-70 microns in diameter



Sulphur dioxide

- Produces a foul smell.
- Produced when fuels are burnt.

Carbon monoxide

- Odourless gas caused by incomplete burning.
- Usually released by car exhaust fumes and is fatal in large amounts.

Nitrogen dioxide

- Toxic gas emitted from car exhaust.
- High levels increase the risk of respiratory infections and impair lung function in asthmatics.

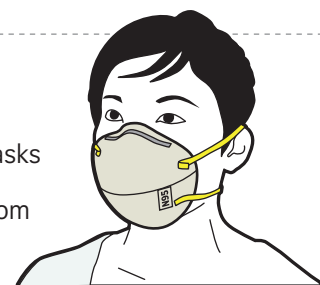
Ozone

- This greenhouse gas is formed when sunlight reacts with air rich in hydrocarbons and nitrogen oxides, common by-products of burning fossil fuels.

HAZE SURVIVAL GUIDE

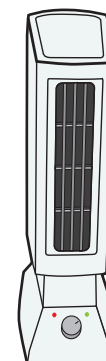
Masks

Surgical masks are not effective. "N95 masks are far superior," said respiratory expert Philip Eng. The mask protects the user from at least 95 per cent of smoke particles.



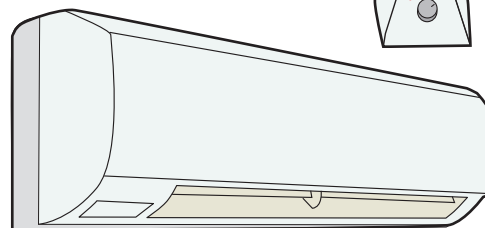
Ioniser

Air ionisers are useful but not as effective as high-efficiency particulate air (Hepa) purifiers, as ionisers do not keep out as much of the dust particles.



Air-purifier and air-conditioning

Air purifiers and air-conditioning are effective, said respiratory doctor Jim Teo Yeow Kwan. Both appliances have in-built air filtration mechanisms to filter the air. Hepa purifiers are recommended.



Wet or dry cloth

A wet cloth may filter out more dust particles than a dry one, noted Dr Teo, but both are not as effective as the N95 mask. Still, having your nose and mouth covered is "better than nothing".

HERE'S A SIX-STEP GUIDE ON WEARING AN N95 MASK FROM THE HEALTH PROMOTION BOARD:

1. Wash your hands
2. Make sure the mask fits well, as some N95 masks may come in different sizes.
3. Hold the mask in a cupped hand and place it firmly over your nose, mouth and chin.
4. Strap the top band high at the back of your head, and the bottom band under your ears.
5. Press the thin metal band on the edge of the mask against the bridge of your nose for a good fit.
6. Inhale and exhale to check the fit of the mask. While exhaling, check for air leakage around your face.