

THE STAR  
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# Environmental impact on health

THE World Health Organization (WHO) defines the environment in relation to health as "all the physical, chemical, and biological factors external to a person, and all the related behaviours".

There's no avoiding interaction with the environment as we go about our daily business of living. And as the world changes and gets more polluted, these environmental factors will inevitably affect our health.

## Air quality

Air pollution has become a major cause of death and disease worldwide.

Pollutants in the air that have been identified as major culprits include particulate matter (PM), ozone (O3), nitrogen dioxide (NO2) and sulphur dioxide (SO2).

WHO has estimated that approximately 4.2 million deaths worldwide are linked to air pollution, mainly from heart disease, stroke, lung disease, lung cancer and acute lung infections in children.

The estimated figures:

- 29% of all deaths and disease from lung cancer
- 24% of all deaths from stroke
- 25% of all deaths and disease from ischaemic heart disease
- 43% of all deaths and disease from chronic obstructive pulmonary disease

## Water quality

This applies to both drinking and "other" water.

Contamination of such waters can potentially cause mild to severe illness. The source of contaminants are myriad, and could include biological contaminants, discharge of waste, industrial and radioactive waste, excessive use of pesticides, fertilisers and leak-



Air pollution can increase the risk of lung diseases, heart diseases, adverse pregnancy outcomes (such as preterm birth), diabetes and even death. — AFP

age from water tanks.

Biological contaminants include bacterial, viral, fungal and parasitic sources, and could cause diseases like typhoid, cholera, encephalitis, hepatitis and gastrointestinal diseases.

Chemical sources are myriad, and depends on the type of chemicals as well as location of the leaks.

## The built environment

Even this has a major impact on health. Consider the implications of high-rise buildings with high density occupation and the effects on inhabitants.

Add to this the issues of drainage, waste disposal, transport access, physical activity patterns and access to resources, and it becomes a potential cauldron of trouble.

## Climate change

Despite some prominent naysayers, climate change has a huge impact on health.

The phenomenon not only impacts sea level, it can influence the pattern and spread of infectious diseases and air quality.

And no surprise, the severity of natural disasters such as floods, droughts and storms will worsen with climate change.

All this points to the issue of preparedness. Are we planning for healthy environments to nurture and protect health?

Are we prepared to change to lessen the impact of climate change on the world?

Are we prepared for anything that nature throws at us, including flood and disaster preparedness?