Particulate Matter in Air

What is the issue?

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- Festivals, crop stubble burning, industrial & transportation smoke will soon increase the level of particulate matter in air.
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- This is increase will be sustained due to reduced wind speed as winter sets in.
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What does the statistics say?

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- ‘Global Burden of Disease’ study estimates that, in India, ambient air pollution is responsible for 3,283 premature deaths every day.
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- India also recorded the largest deaths due to pollution during the past 25 years.
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- Half of the top 20 polluted cities in the world are in India.
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What are the long term health effects?

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- Till now, almost all air pollution-related deaths were thought to be due to lung diseases.
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- However, evidence of pollution aggravating other diseases like heart attacks, stroke, diabetes, chronic kidney disease and cancer is coming up.
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- Especially deaths related to ‘particulate matter’ may not be because of

diseases of lungs, but due to these other conditions.
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- Ultrafine particulate matter emitted by road traffic, rapidly enters the bloodstream after being inhaled.
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- These particles then interfere with the normal reactivity of blood vessels, and are distributed to many organs including the kidneys.
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What is the way ahead?

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- Remedial measures have shown reduction in adverse outcomes effects and improved life expectancy in several parts of the world.
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- Better urban planning with proper land-use assessment and environment consciousness needs to be done.
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- Inter-disciplinary groups to evaluate the full range of impacts of air pollution on human health are needed.
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- Tools need to be developed to identify pollutants, find origin of particles, and develop culturally-appropriate solutions.
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Source: The Hindu

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