

Traffic-Related Air Pollution: Fact Sheet

Traffic-related air pollution is one of the principal causes of poor air quality in Ireland

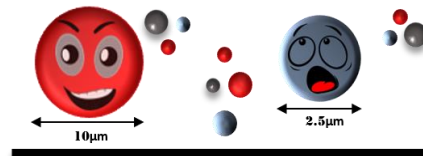
What is traffic-related air pollution?



- Nitrogen Dioxide (NO₂)



- Particulate Matter (PM)



Traffic-related air pollution is a complex mix of many pollutants. The main two pollutants are: **nitrogen dioxide (NO₂)** and **particulate matter (PM)** but concentrations of ground-level ozone, and sulphur dioxide, are commonly associated with traffic-related pollution too.

Nitrogen dioxide (NO₂) is an air pollutant associated with heavily trafficked areas. It originates from vehicle exhaust emissions, the highest levels of NO₂ are found closest to busy roads.

Particulate matter (PM) is very small particles (measured in microns – PM_{2.5} and PM₁₀) which can be solid or liquid and are suspended in the air. In vehicles, PM originates from incomplete fuel combustion, tyre and brake wear and tear and other sources.



Traffic-related air pollution is mainly a problem in **urban areas** such as city centres and along heavily trafficked routes such as Dublin's M50 motorway (EPA Urban Environmental Indicators, 2019)

Why do we care about traffic-related air pollution?

Traffic-related air pollutants can have **serious impact on human health**, especially in vulnerable groups such as children, elderly, and people with respiratory conditions. In the short-term poor air can cause illnesses like headache, breathing difficulty or eye irritation and in the long-term it can worsen some conditions e.g. asthma, and cause reduced lung function, liver function or cardiovascular disease (European Environmental Agency).