AIR QUALITY: A SHORT GLOSSARY OF TERMS



What is Air Pollution?

Air pollution can simply be described as anything that's in the air we breathe that can cause harm. You may have heard of *carbon monoxide, nitrogen dioxide, ozone, particulates, sulphur dioxide, hydrocarbons and lead*. Each of these have different sources, health effects and chemical behaviours, making the task of understanding and controlling air pollution as a whole very complex. Particulate Matter and Nitrogen Dioxide are commonly seen as the most dangerous forms of air pollution due to their high concentrations and their negative health impacts

What are particulates?

Particulate matter is all solid and liquid particles suspended in the air. These are both humanmade (such as diesel, soot) and natural (such as sea spray, dust and pollen).

The size of particles in the air varies. PM 10 has a diameter of 10 micrometers or less, whereas PM 2.5 has a diameter of 2.5 micrometers or less – and is often described as 'fine particles'. These finer particles are the biggest concern, because they're small enough to be breathed deep into our lungs.

By way of comparison, a human hair is about 100 micrometres, so roughly 40 fine particles make up the width of one strand of hair!

What is Nitrogen Dioxide?

Nitrogen dioxide is produced by diesel vehicles and heating systems, and is known to cause harm when breathed as a gas – exacerbating and causing respiratory and cardiac problems.

What is Ozone?

Ozone is formed when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources react chemically in the presence of sunlight. It can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma.

See also:

Kings College London – London Air Quality Network: FAQs