AIR POLLUTION AND HEALTH
FACTS & MYTHS

**MYTH: THE NUMBERS OF DEATHS CAUSED BY EXPOSURE TO AIR POLLUTION ARE MISCALCULATED**

**FACT:** The methods used to calculate the number of deaths attributed to exposure to air pollution are reputable and reliable. They are currently used by institutions such as the World Health Organization, the European Environment Agency, and by the Institute for Health Metrics and Evaluation, which are responsible for the Global Burden of Disease Project. Regardless of the method used to calculate the numbers, any number of deaths and years of healthy-life lost that results from exposure to air pollution is unacceptable because it is avoidable.

**MYTH: LEVELS OF NITROGEN DIOXIDES (NO\textsubscript{2}) AND PARTICULATE MATTER (PM) IN THE AIR ARE HARMLESS AT TODAY’S CONCENTRATIONS**

**FACT:** This is not true. Many studies have shown that persistent daily and yearly exposure to these pollutants at today’s concentrations is linked to: increased hospital admissions for lung or heart conditions; an increased risk of developing a lung or heart related disease; an increased risk of developing diabetes, and premature death. Exposure to pollutants is especially harmful to people who already have a lung condition, such as asthma and Chronic Obstructive Pulmonary Disease (COPD), among others.

**MYTH: THE NITROGEN DIOXIDE LIMITS IN THE US ARE OVER TWICE AS HIGH, SO NITROGEN DIOXIDE CANNOT BE ALL THAT BAD**

**FACT:** The nitrogen dioxide limit in the US (100 μg/m\textsuperscript{3}) is considerably higher than the limit in the EU (40μg/m\textsuperscript{3}), but the US has much stricter regulations on emissions, i.e., the level of nitrogen oxides in vehicle exhaust. Furthermore, the US has adopted much stricter limit values on particulate matter at just 12 μg/m\textsuperscript{3} versus the EU’s limit of 25 μg/m\textsuperscript{3}, which thereby protects the American population more effectively.

**MYTH: IT DOES NOT MATTER IF LIMIT VALUES FOR AIR POLLUTION ARE EXCEEDED AS LONG AS AVERAGE MEASUREMENTS ARE OK**

**FACT:** There is a risk of harm to human health wherever and whenever the limit values are exceeded, and there are even risks to human health when people are exposed to air pollution at levels that are far below the current limit values. Appropriate measures must be taken to ensure that air pollution values do not exceed the recommended limits, in order to prevent harmful effects to human health.
The European Respiratory Society (ERS) is an international organisation that brings together physicians, healthcare professionals and other experts working in the field of respiratory medicine. The mission of ERS is to promote lung health in order to alleviate suffering from respiratory diseases and drive standards for respiratory medicine globally through science, education and advocacy.

ERS Environment and Health Committee supports strengthening limits for air pollution, stricter enforcement of EU legislation and notes the need for further research to understand fully the impact of particular factors on human health.

ABOUT
ERS

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