



GOVERNMENT SECTOR



Comhshóil, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government

Department of the Environment, Heritage & Local Government - Air Quality and Climate Change Section.

www.environ.ie/en/Environment/Atmosphere



The Radiological Protection Institute of Ireland

Radon is a naturally occurring radioactive gas which originates from the decay of uranium in rocks and soils. It is colourless, odourless and tasteless and can only be measured using special equipment.

www.rpii.ie/radon

CARBON MONOXIDE The facts...

Carbon Monoxide is highly dangerous. You can't see it or smell it and is often called "the silent killer".

www.carbonmonoxide.ie



SEI offers a website to help consumers make an informed choice when buying a new car.

It lists the fuel consumption, CO₂, and other performance figures of cars made since 2000.

www.sei.ie

NGO SECTOR



An Taisce Green-Schools Travel is the fourth theme in the Green-Schools programme. The theme is seeking to increase the number of pupils walking, cycling or using public transport, and so ease congestion by reducing the number of private cars arriving at the school gates.

www.greenschoolsireland.org

Some things to think about

In a recent study it was discovered that air pollution is robbing flowers of their scent.

40 per cent of car owners in Ireland don't consider any transport options other than the car.

Air pollution is estimated to cause approximately 2 million premature deaths worldwide per year.

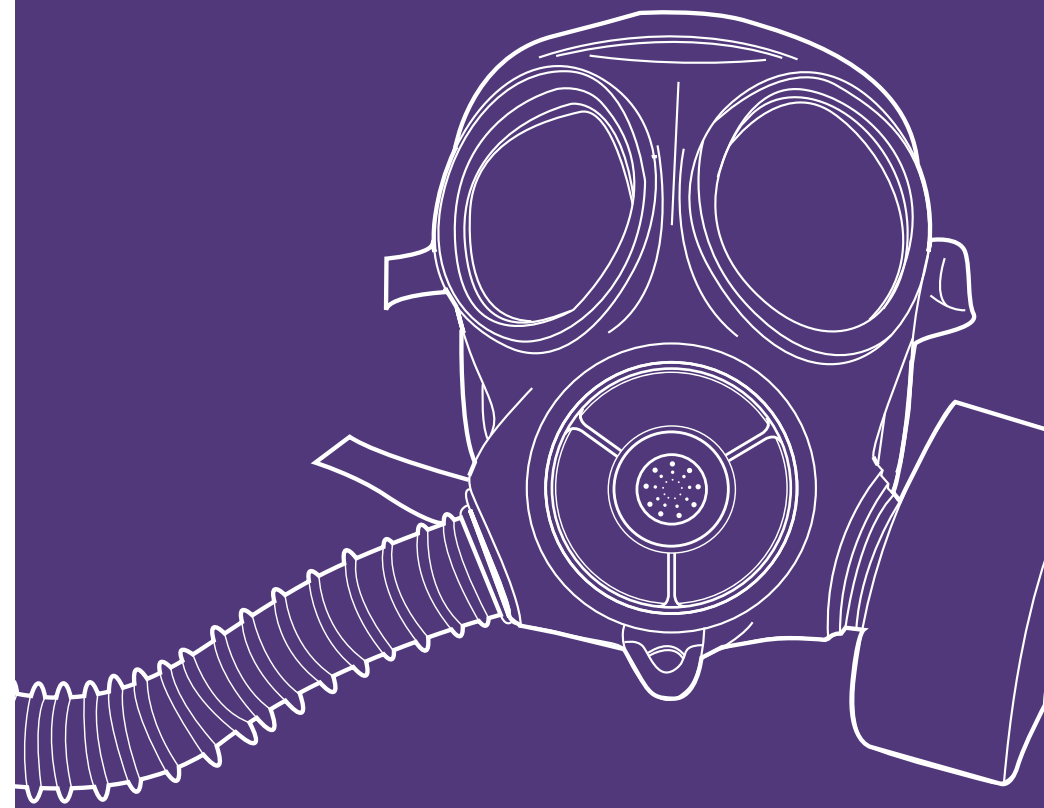
WHO research states that health is affected even at low Particulate Matter and ozone levels

ENFO 17 St. Andrew Street / Dublin 2 / Ireland

Phone 01 888 3910/3911 **Lo Call** 1890 200 191 **E-mail** info@enfo.ie **Web** www.enfo.ie

Air Quality

Unlimited and free access to clean air of acceptable quality is a fundamental human necessity and right. - World Health Organisation



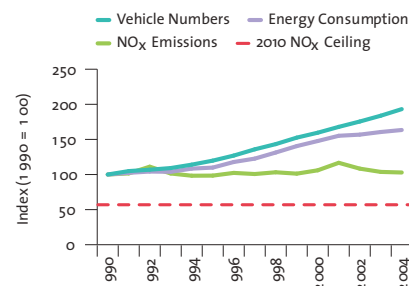
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We all share the air that we breathe

The average adult takes around 17,000 breaths, breathing in over 11,000 litres of air, every day. In order to protect our health, and the health of our environment, it is essential to protect the quality of this air.

In Ireland the Environmental Protection Agency holds overall responsibility for the co-ordination and monitoring of air quality in accordance with EU air quality directives.

The European Commission estimates that air pollution is responsible for the premature death of almost 370,000 EU citizens every year and has been found to reduce average life expectancy by some nine months. In a national survey of public perceptions, attitudes and values on the environment, 12% of Irish people listed air quality, global warming and factory emissions as their greatest environmental concern. In Ireland outdoor air quality has no serious problems. This is largely due to the eradication of the burning of coal in many urban areas during the 1980s and the early 1990s. However, traffic pollution problems



are worsening. Reducing the combustion of fossil fuels is key to improving our overall air quality as well as reducing national greenhouse gas emissions.

Recent findings have also shown that our indoor air quality is often poorer than air outdoors, although largely different pollutants are involved. These include radon, allergens and microbial contaminants. Carbon monoxide can be found in significant concentrations indoors as a result of heating appliances which are not functioning properly.

Particulate Matter

Sources of particulate matter can be either man made or naturally occurring and are classified according to the size of the particle being studied. For the purpose of monitoring PM in the air there are two common notations used.

These are PM₁₀ and PM_{2.5}.

PM₁₀ is used to describe particles of 10

micrometres or less and PM_{2.5} are smaller particles less than 2.5 micrometers. Scientific studies have linked PM, especially the very small particles, with a series of significant health problems.

Monitoring

Real-time air quality information is available on the EPA website

www.epa.ie/whatwedo/monitoring/air/data

Air pollution in Ireland is monitored by both the Environmental Protection Agency (EPA) and local authorities. Air quality is recorded in 24 monitoring stations located throughout the country. The stations measure the concentration of the following pollutants in the air: particulate matter (both PM₁₀ and PM_{2.5}), ozone, oxides of nitrogen, sulphur dioxide, lead, carbon monoxide

and benzene. Measurements are taken every hour and results are expressed using an agreed quality index of simple terms. The five quality bands used in Ireland are Very good, Good, Fair, Poor and Very poor.

Particulate Matter (PM) are tiny pieces of solid and liquid particles and droplets held in the air.

These include:

- increased respiratory problems such as coughing, wheezing and difficulty in breathing.
- asthma.
- chronic bronchitis.
- irregular heartbeat.
- premature death in people with heart or lung disease.

