

Road traffic remains biggest source of noise pollution in Europe

The EEA briefing '[Managing exposure to noise in Europe](#)' provides updated estimates of the numbers of people exposed to noise in Europe. It also provides an update on the measures being taken by EU Member States in addressing noise issues.

Noise pollution remains a major environmental health problem in Europe, with the transport sector being a major cause. Road traffic noise is the dominant source affecting human exposure above the EU's threshold of 55 decibels (dB) for daily exposure and 50 dB for night exposure. Around 100 million people are exposed to road traffic noise above 55 dB in the 33 member countries of the EEA (Figure 1). Of these, 32 million are exposed to very high noise levels (above 65 dB). Railways is the second largest source, with 19 million people exposed above 55 dB. Aircraft noise, close to major airports, is the third main source, with more than 4.1 million people exposed, followed by industrial noise within urban areas, with 1.0 million people exposed.

Noise from road traffic alone is the second most harmful environmental stressor in Europe, behind air pollution, according to the World Health Organization (WHO). The harmful effects of noise arise mainly from the stress reaction it causes in the human body, which can also occur during sleep. These can potentially lead to premature death, cardiovascular disease, cognitive impairment, sleep disturbance, hypertension and, at the least, annoyance.

Figure 1. Number of people in the EEA-33 member countries exposed to noise levels above 55 dB L_{den} , 2012

Tackling noise pollution in the EU

The European Union has taken action to address the problem through the 2002 [Environmental Noise Directive](#) (END). The EU legislation requires Member States to prepare noise maps that inform the development of action plans designed to prevent and reduce harmful exposure. The briefing also presents an updated summary of the different types of measures used by countries to reduce noise. These range from actions that control noise at source, such as introducing low noise road surfaces, quieter aircraft and railway stock, through to measures such as improving urban design to reduce traffic volumes and restricting housing developments in high noise areas.

The briefing is a follow-up to the EEA's [Noise in Europe 2014 report](#) and its release coincides with the [Noise in Europe conference](#) held in Brussels on 24 April and International Noise Awareness Day on 26 April. The briefing is based on the latest data reported to the EEA by its member countries in accordance with the EU's Environmental Noise Directive (END). Accompanying the briefing are [updated country factsheets](#) and a [new web-viewer](#) which shows updated data on noise pollution across Europe.