



Burden of disease from road traffic noise and air pollution in Oslo, Norway

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ABSTRACT

Environmental noise is increasing and estimated as the second largest contributor to health burden due to environmental exposures, after air pollution. The aim of this project was to estimate the burden of disease from road traffic noise and air pollution in Oslo, Norway.

The burden of disease from noise and air pollution was estimated as Disability Adjusted Life Years (DALY). These estimations were conducted using standard environmental burden of disease methodology. For each exposure - outcome pair Population Attributable Fraction (PAF) was derived based on population exposure (Lden, Ln and annual mean of PM2.5) and scientifically based risk estimates. Data on deaths, causes of deaths and data on life expectancy were further used to estimate years of life lost (YLL) and years lived with disease (YLD), which sums up to DALYs attributable to environmental noise and air pollution.

Preliminary results suggest that sleep disturbances due to noise contribute considerably to the environmental health burden estimates for Oslo. The method, the estimated DALYs for air pollution and noise and the uncertainties will be presented and discussed at the conference.