

# Exposed to noise (NC) - 2011, per cent

Source of noise	Road traffic	Railways	Air traffic
Geography			
Nordland	16	0	5
Troms	16	0	3
Rogaland	29	1	2
Østfold	34	1	1
Nord-Trøndelag	20	1	1
Hordaland	33	0	1
Møre og Romsdal	16	0	1
Norway	25	2	1
Finnmark	16	0	1
Sogn og Fjordane	16	0	0
Sør-Trøndelag	21	1	0
Akershus	20	3	0
Vest-Agder	28	1	0
Vestfold	31	1	0
Aust-Agder	25	0	-
Telemark	17	1	-
Buskerud	27	3	-
Oppland	24	1	0
Hedmark	20	2	0
Oslo	32	4	-

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## Description

Persons exposed to noise from roads, railways and air traffic, of more than 55 dB outside their home.

To change the table, open the "change selection of...".

Three measures are available. Use the Measure button to select:

1 Number of persons.

2 per cent = Percentage.

3 Ratio (Norway = 100) = Ratio between the county's proportion and the national proportion for a given year. Examples; ratio = 130 means that the county's proportion is 30% higher than the national level. A ratio of 87 means that the county's proportion is 13% lower than the national level.

## Rationale for indicator

Around 1.5 million Norwegians are exposed to noise of more than 55 decibel outside their home. This level of noise is the recommended maximum to avoid serious noise nuisance. The proportion of exposed persons is increasing. The most important sources of noise are transport and industrial activity. Road traffic causes more than 80 % of the noise nuisance in Norway.

Noise can disturb conversations, rest and sleep. Insufficient sleep affects both mental and somatic health. Lack of sleep has been related to anxiety, depression, obesity and cardiovascular disease.

Noise can be prevented i.a. by traffic regulation, location of living and industrial areas and noise abatement measures. It is especially important to protect living areas from noise at night. Quiet is of great value to the public, and to preserve quiet areas is in itself a public health measure.

## Source

Statistics Norway

## Collection

Statistics Norway calculates the figures in the national noise model.

For surveillance of the noise nuisance in Norway, a national noise model is established by Statistics Norway in cooperation with the Norwegian Environment Agency, the Norwegian Public Roads Administration, the Norwegian National Rail Administration, Avinor and the Norwegian Defence Estates Agency. The model is based on existing mappings of noise, and performs calculations only where none have been done previously. The model estimates figures for noise exposure (number of persons exposed to different levels of noise) and the level of distress (estimated as an index).

For each source of noise, Statistics Norway has developed models for noise emission, spreading and level of distress. The estimated noise in the terrain around the source is connected to address and population data, and the number of persons exposed to different levels of noise is estimated. The feeling of distress from different kinds of noise is taken into consideration when calculating the distress index.

Exposure and distress index estimates are calculated as if all persons stayed at their registered home address all the time. Noise in the workplace, in recreational areas etc. is not taken into consideration.

More information (in Norwegian) can be found here:

[https://www.ssb.no/a/publikasjoner/pdf/notat\\_201133/notat\\_201133.pdf](https://www.ssb.no/a/publikasjoner/pdf/notat_201133/notat_201133.pdf)

## Time periods

2011

## Geographical level

Norway, counties

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## Gender

No subdivision

## Age groups

All ages

## Frequency of updates

It is not known whether these figures will be updated.

## Last updated

3/24/14

## Keywords

Click on a keyword to search for similar indicators.

- Noise
- Exposure
- Distress

## Fact sheets

Below are links to relevant fact sheets, articles and reports. These may describe trends over time in the Norwegian population or differences by sex, age group, geographical region or socioeconomic status:

- [Public health report: Noise and health problems in Norway \(in Norwegian only\)](#)
- [Public health report: Sleep problems in Norway](#)
- [Rapport 2013:10: Nattstøy og søvnforstyrrelser \(in Norwegian only\)](#)