

The Environmental Noise Directive (END) requires EU member states to assess exposure to noise from key transport and industrial sources with two initial reporting phases: 2007 and 2012. Where the recommended thresholds for day and night indicators are exceeded, action plans are to be implemented. This country fiche presents data related to END assessments as reported to EEA by 15th April 2016 for the two key END indicators: L_{den} (day evening and night exposure) and L_{night} (night time exposure). 2012 strategic noise maps reported are presented, as well as HIA calculations for annoyance and sleep disturbance, hospital admissions and mortality. Trends are presented as the change in exposure from 2007 to 2012, for comparable sources only.

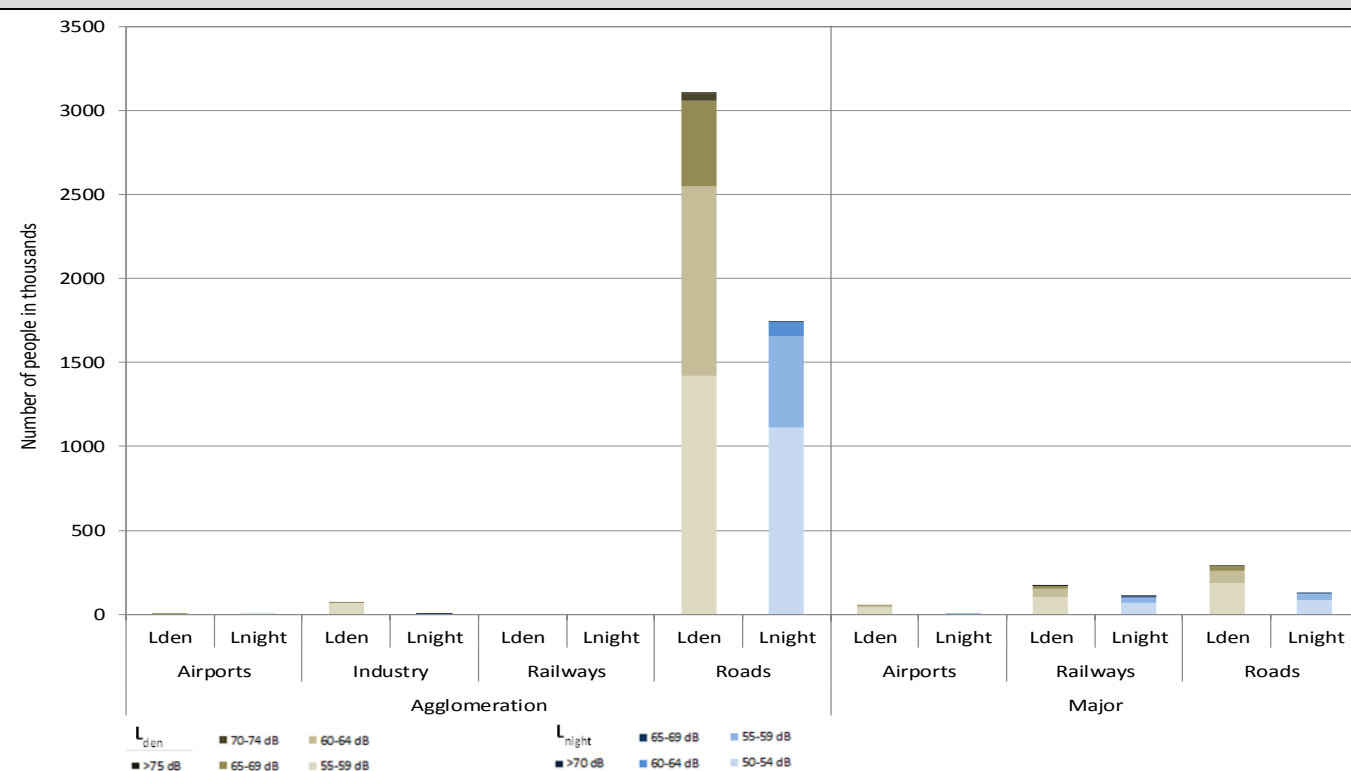


NETHERLANDS

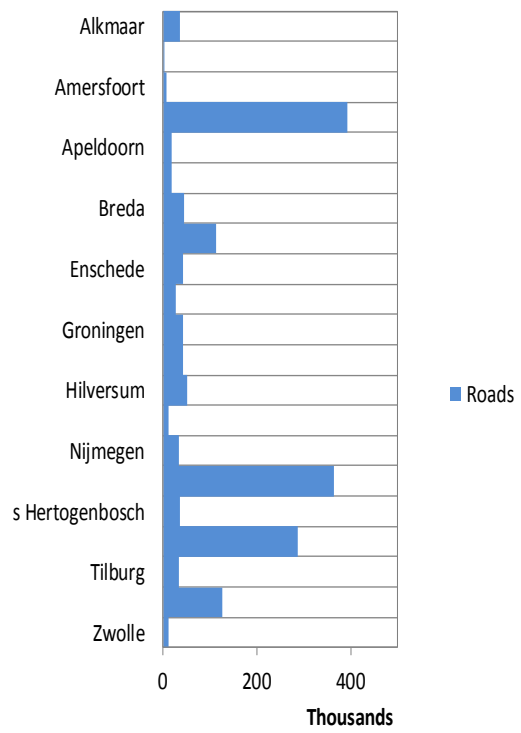
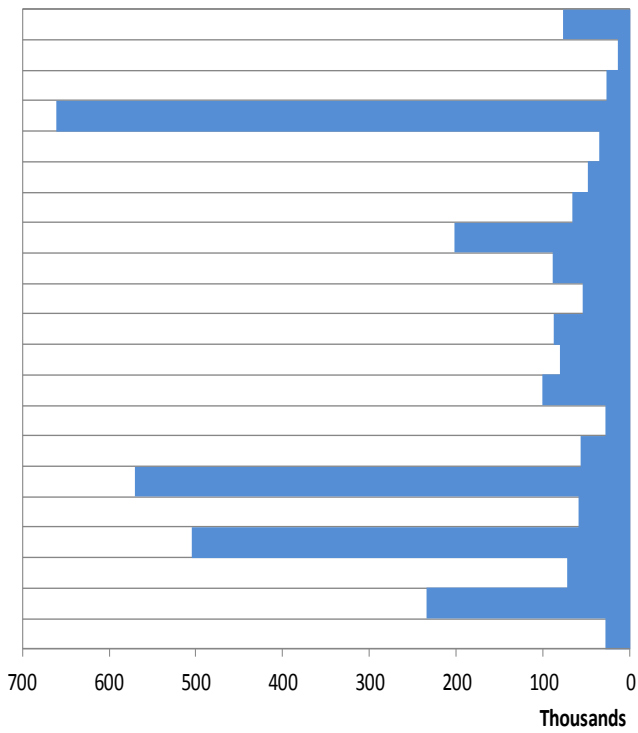
Noise sources covered by this assessment

Agglomerations > 100.000 inhabitants	Alkmaar, Almere, Amersfoort, Amsterdam, Apeldoorn, Arnhem, Breda, Eindhoven, Enschede, Gouda, Groningen, Heerlen, Hilversum, Maastricht, Nijmegen, Rotterdam, s Hertogenbosch, The Hague, Tilburg, Utrecht, Zwolle 21 agglomerations in total, covering 8.067.259 inhabitants
Major airports > 50.000 movements per year	Amsterdam Airport Schiphol 1 major airport in total
Major roads > 3 million vehicles per year	3181 km in total
Major railways > 30.000 train passages per year	854 km in total (length includes only major railways > 60000 train passages/year)

Number of people exposed to different noise bands per L_{den} and L_{night} (2012)



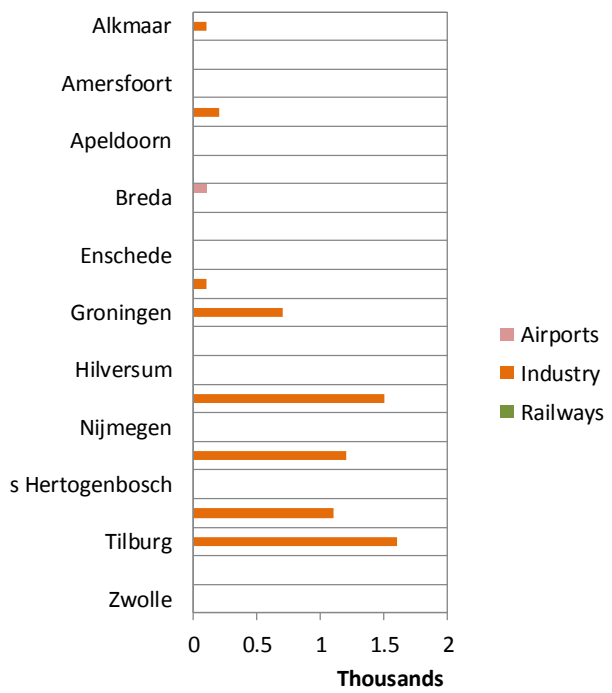
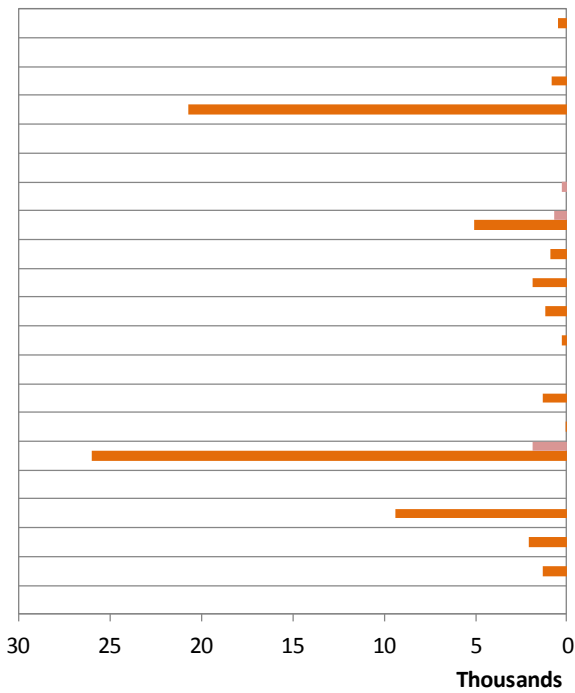
Total number of people exposed to road noise inside agglomerations (2012)



Number of people exposed to Lden > 55 dB

Number of people exposed to Lnight > 50 dB

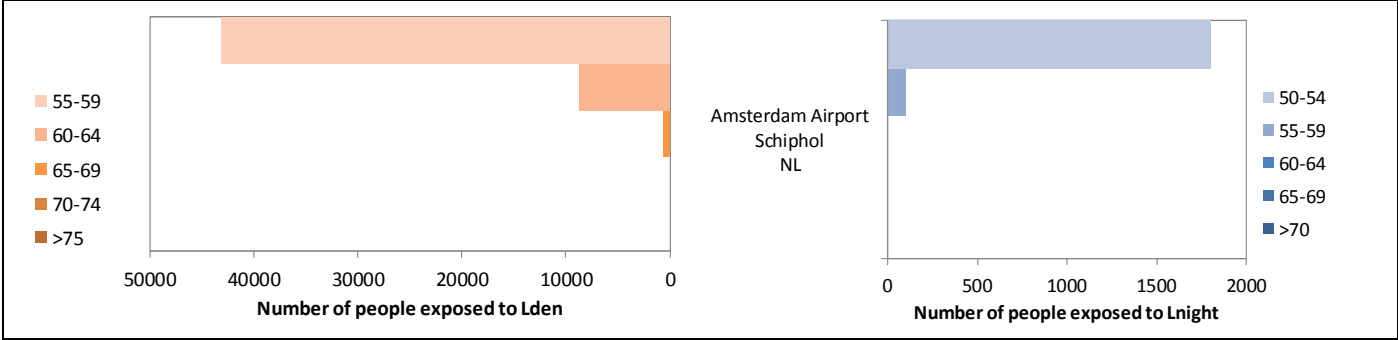
Total number of people exposed to railway, aircraft and industrial noise inside agglomerations (2012)



Number of people exposed to Lden > 55 dB

Number of people exposed to Lnight > 50 dB

Total number of people exposed to Major Airports outside agglomerations (2012)

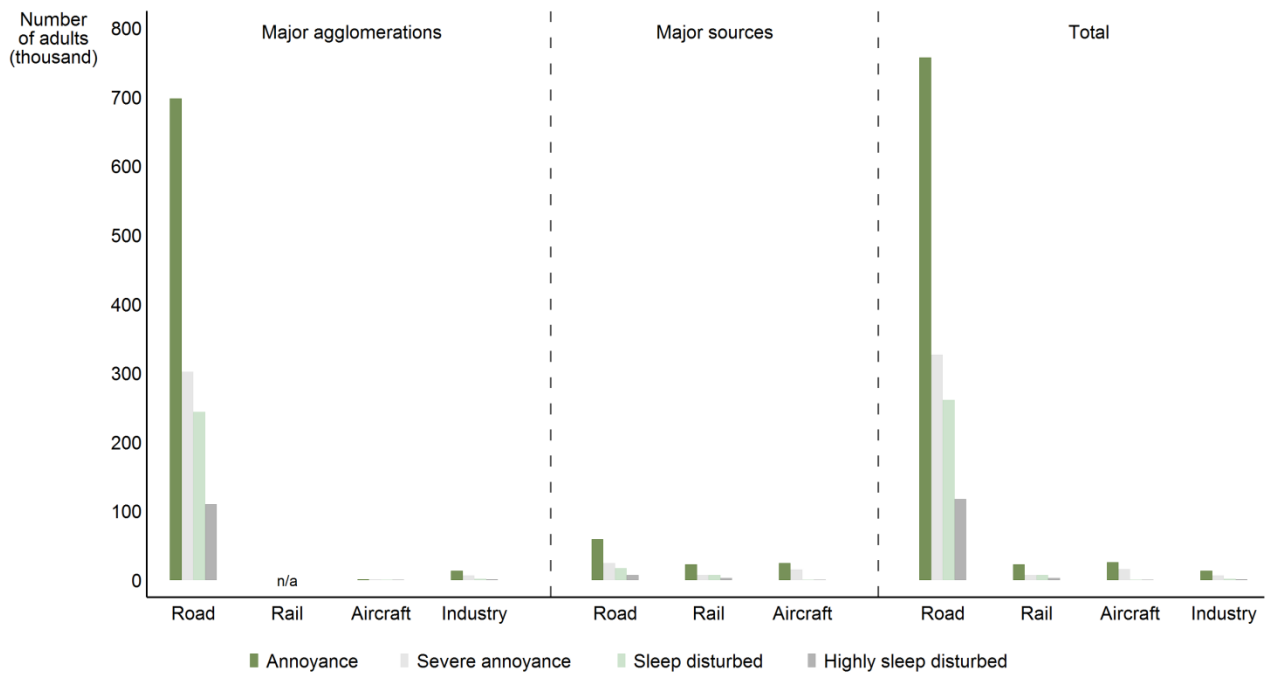


Noise contour maps (2012)

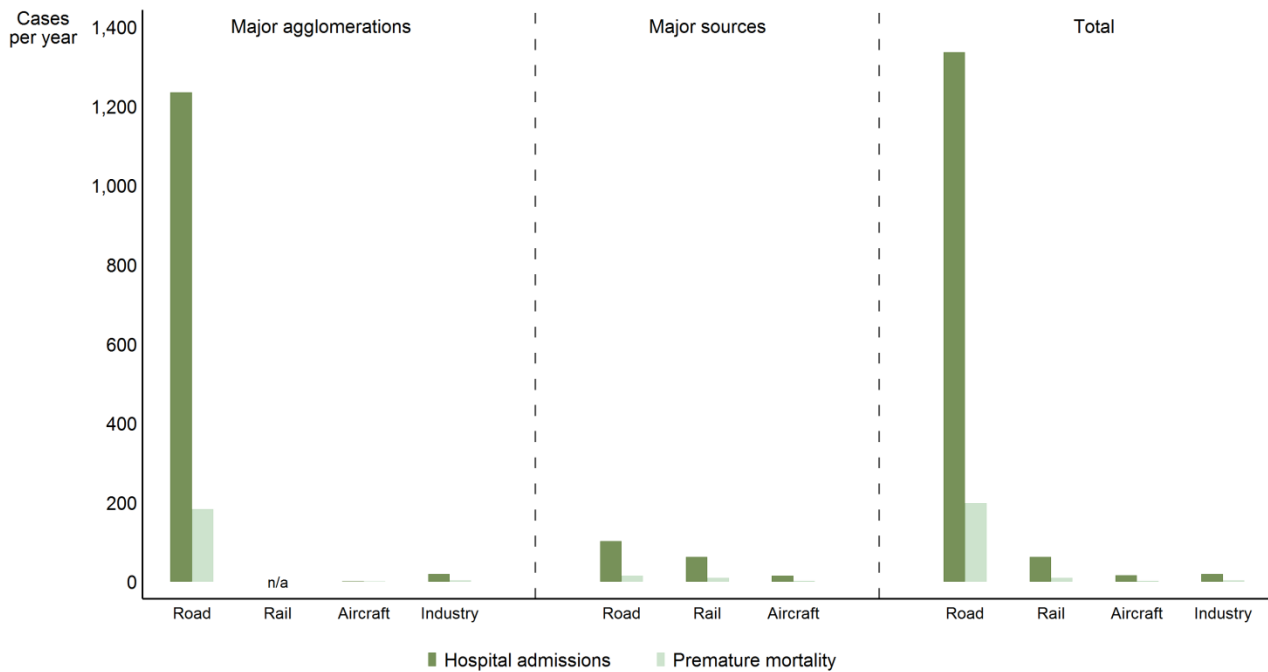
Major roads	Major railways
No contour maps delivered in spatial format	No contour maps delivered in spatial format
Major airports	
No contour maps delivered in spatial format	

Health impact assessment

Annoyance and sleep disturbance



Hospital admissions and mortality



Trends on noise exposure 2007 - 2012

Trends on noise exposure are shown only in those cases where data is available for both implementation rounds:

- For major airports: total number of people exposed to more than 55 dB Lden and to more than 50 dB Lnight outside agglomerations.
- For agglomerations: percentage of population exposed to more than 55 dB Lden and to more than 50 dB Lnight due to different noise sources.


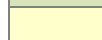

Major airports:

	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Amsterdam Airport Schiphol	1000	52500	0	1900

Agglomerations:

Air (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Amsterdam	4	0	1	0
Eindhoven	0	0	0	0
Heerlen	0	0	0	0
Rotterdam	0	0	0	0
The Hague (*)	0	0	0	0
Utrecht (*)	0	0	0	0

Industry (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Amsterdam	1	1	0	0
Eindhoven	1	1	0	0
Heerlen	0	0	0	0
Rotterdam	5	2	1	0
The Hague (*)	1	1	0	0
Utrecht (*)	0	0	0	0

	Decrease in population exposed
	No change
	Increase in population exposed

Railway (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Amsterdam	5	0	3	0
Eindhoven	5	0	8	0
Heerlen	1	0	1	0
Rotterdam	4	0	2	0
The Hague (*)	3	0	2	0
Utrecht (*)	9	0	5	0

Road (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Amsterdam	35	41	20	24
Eindhoven	29	46	13	26
Heerlen	36	35	19	18
Rotterdam	38	44	23	28
The Hague (*)	43	39	24	22
Utrecht (*)	42	45	23	24

(*) Increase of the number of inhabitants bigger than 10% between 2005 and 2010

For further information about environmental noise in Europe please consult <http://www.eea.europa.eu/themes/human/noise> or visit the Noise Observation & Information Service for Europe at <http://noise.eionet.europa.eu/> and EEA Data Service <http://www.eea.europa.eu/data-and-maps/data/data-on-noise-exposure-2>.