

# Noise in Europe

2017 overview of policy-related data



Switzerland 

April 2017

Photo: © Matthias Hintzsche

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 15<sup>th</sup> 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.

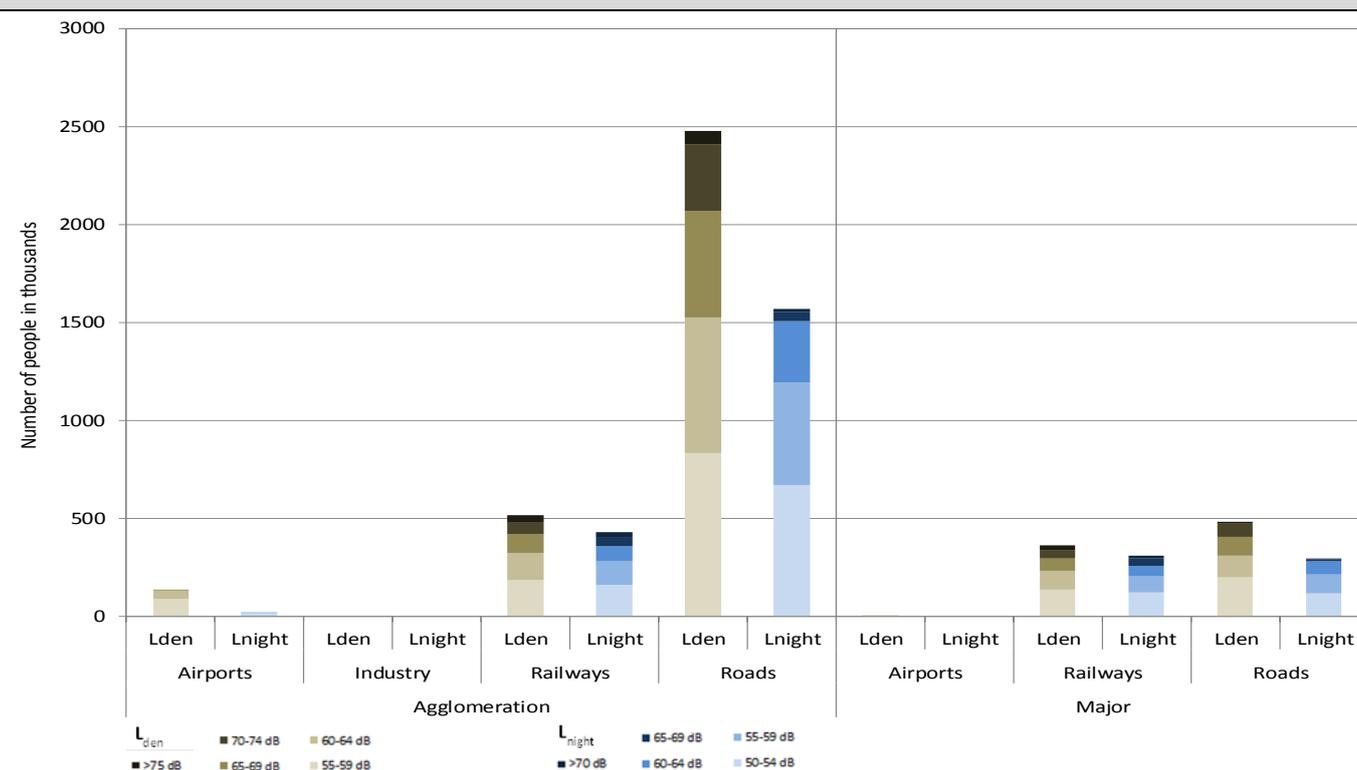


## SWITZERLAND

### Noise sources covered by this assessment

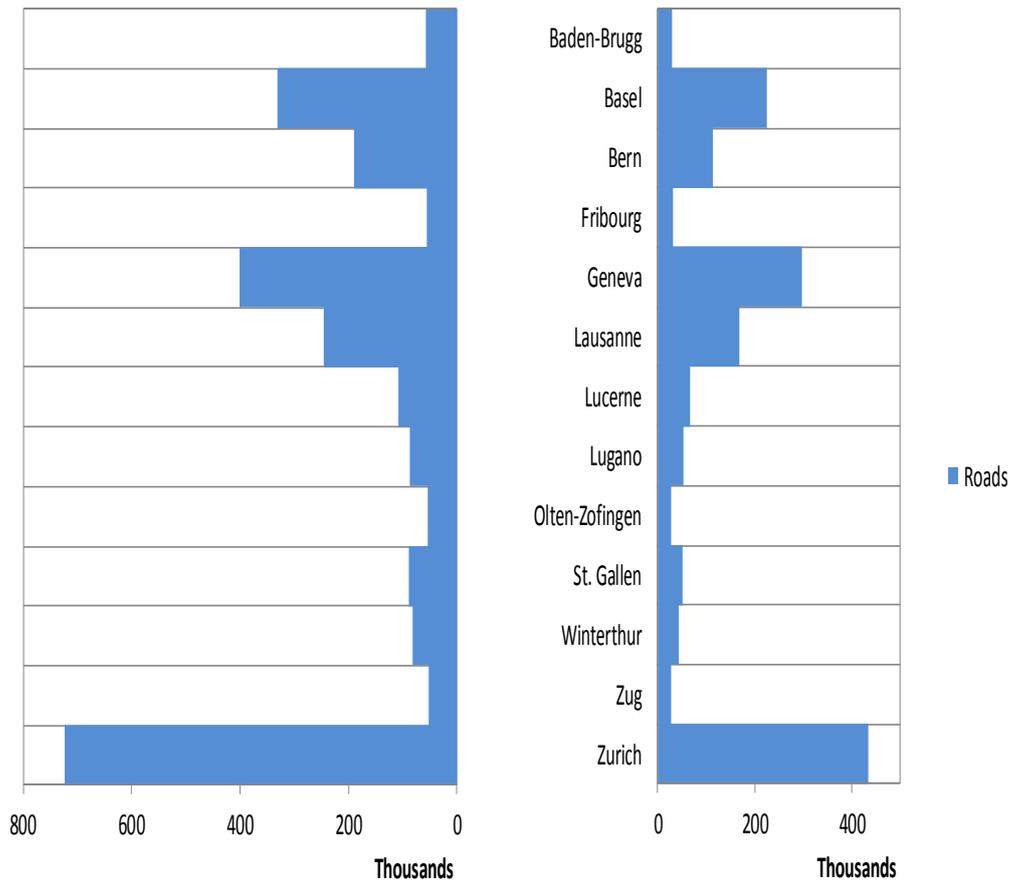
<b>Agglomerations &gt; 100.000 inhabitants</b>	Baden-Brugg, Basel, Bern, Fribourg, Geneva, Lausanne, Lucerne, Lugano, Olten-Zofingen, St. Gallen, Winterthur, Zug, Zurich  <b>13 agglomerations in total, covering 3.934.753 inhabitants</b>
<b>Major airports &gt; 50.000 movements per year</b>	Geneva Cointrin Airport, Zurich Airport  <b>2 major airports in total</b>
<b>Major roads &gt; 3 million vehicles per year</b>	5926 km in total
<b>Major railways &gt; 30.000 train passages per year</b>	2377 km in total

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

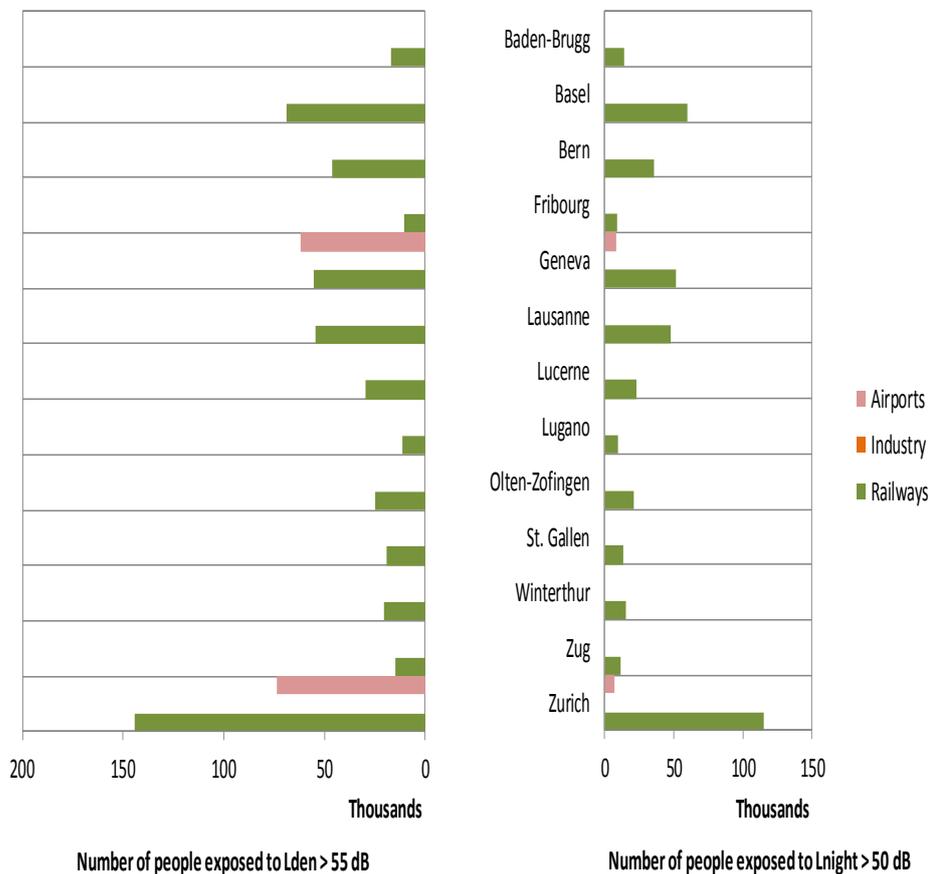


Data not provided in 13 agglomerations for industrial noise, out of 13 agglomerations.

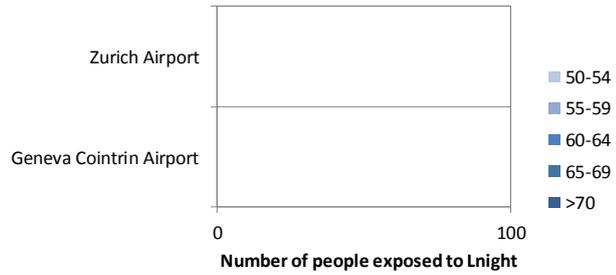
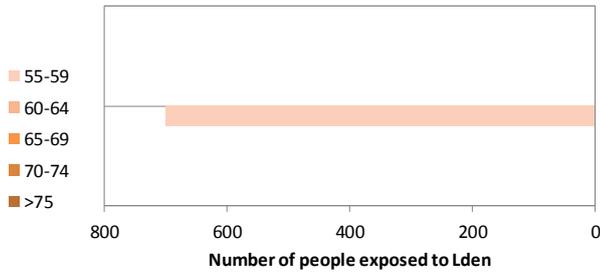
### Total number of people exposed to road noise inside agglomerations (2012)



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

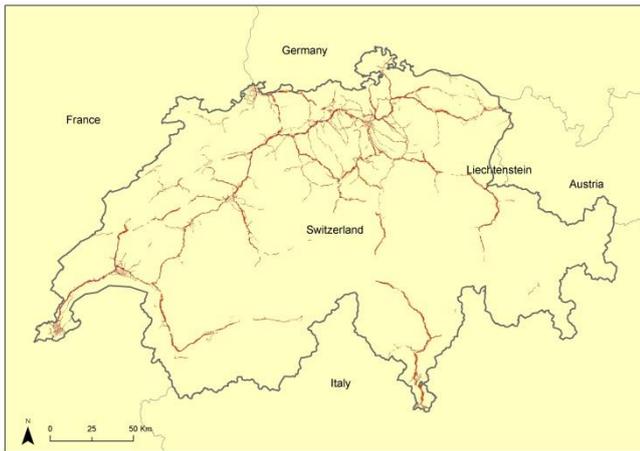


## Total number of people exposed to Major Airports outside agglomerations (2012)

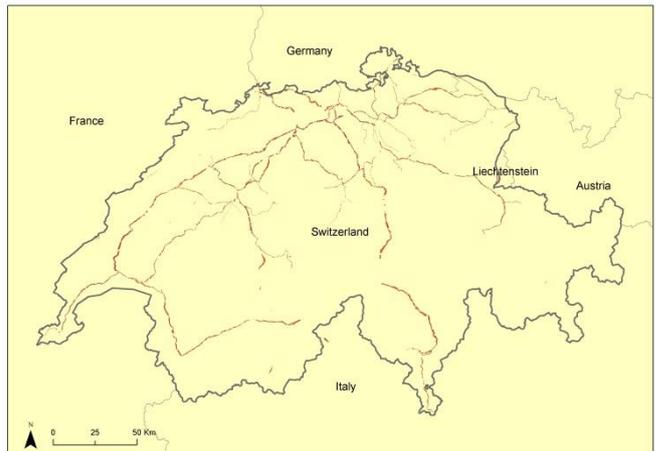


## Noise contour maps (2012)

### Major roads

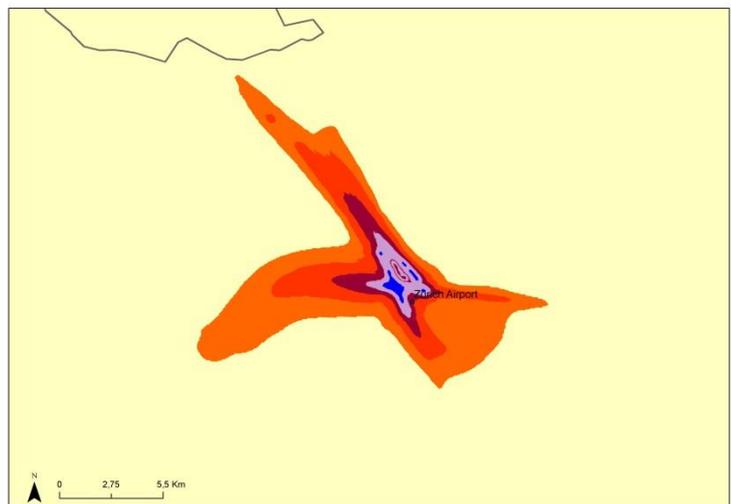
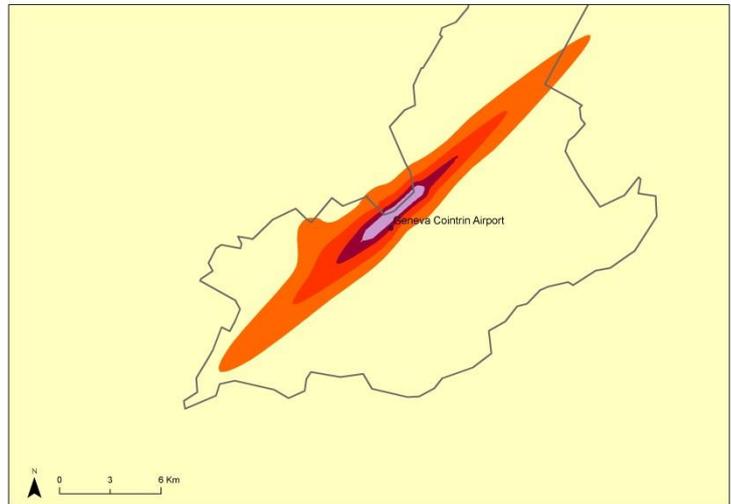
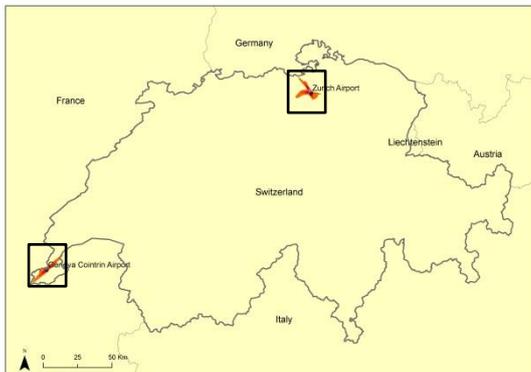


### Major railways



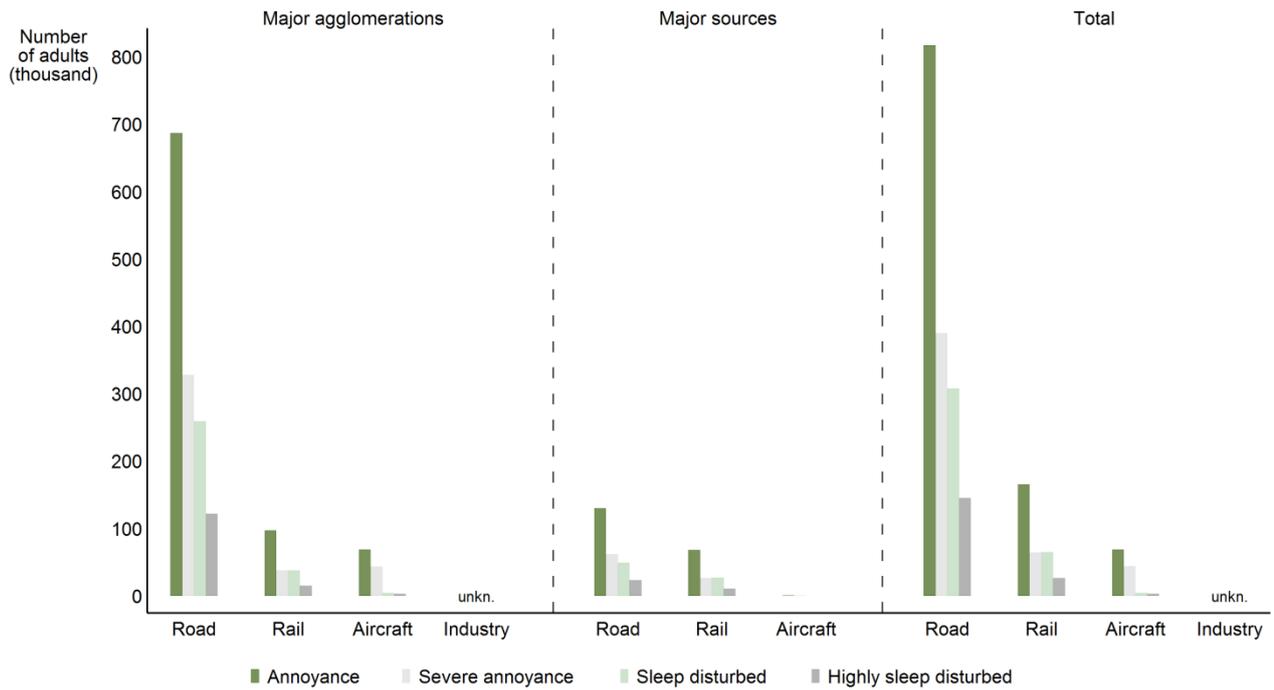
## Major airports

Airport	ICAO	Annual traffic
Geneva Cointrin Airport	LSGG	127909
Zurich Airport	LSZH	223830

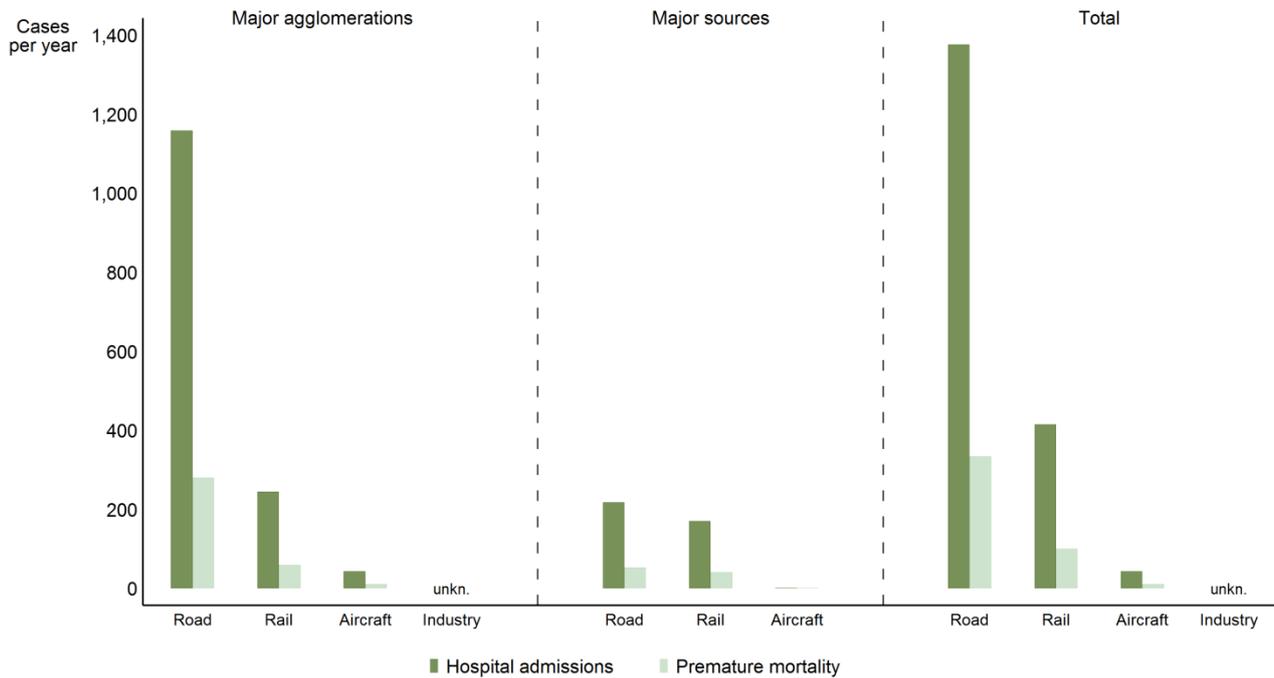


## Health impact assessment

### 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 <sub>den</sub>		L <sub>night</sub>	
First Round	Second Round	First Round	Second Round
Data not provided or unsuitable for deriving trends			

### Agglomerations:

Air (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First Round	Second Round	First Round	Second Round
Data not provided or unsuitable for deriving trends				

Industry (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First Round	Second Round	First Round	Second Round
Data not provided or unsuitable for deriving trends				

	Decrease in population exposed
	No change
	Increase in population exposed

Railway (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First Round	Second Round	First Round	Second Round
Data not provided or unsuitable for deriving trends				

Road (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First Round	Second Round	First Round	Second Round
Data not provided or unsuitable for deriving trends				

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>.