

For average noise exposure, the GDG **strongly** recommends reducing noise levels produced by aircraft below **45 dB L_{den}** , as aircraft noise above this level is associated with adverse health effects.

For night noise exposure, the GDG **strongly** recommends reducing noise levels produced by aircraft during night time below **40 dB L_{night}** , as aircraft noise above this level is associated with adverse effects on sleep.

To reduce health effects, the GDG strongly recommends that policy-makers implement suitable measures to reduce noise exposure from aircraft in the population exposed to levels above the guideline values for average and night noise exposure. For specific interventions the GDG recommends implementing suitable changes in infrastructure.

- WHO "strongly" recommends
 - 45 dB Lden is associated with adverse health effects
- BUT!?!
 - Evidence is of low quality!
 - Relevant risk from 52,6 dB Lden

Summary of priority health outcome evidence	Benchmark level	Evidence quality
Incidence of IHD A relevant risk increase from exposure to aircraft noise occurs at 52.6 dB L_{den} . The weighted average of the lowest noise levels measured in the studies was 47 dB L_{den} and the corresponding RR in the meta-analysis was 1.09 per 10 dB.	5% increase of RR	Very low quality
Incidence of hypertension One study met the inclusion criteria. There was no significant increase of risk associated with increased noise exposure in this study.	10% increase of RR	Low quality
Prevalence of highly annoyed population There was an absolute risk of 10% at a noise exposure level of 45.4 dB L_{den} .	10% absolute risk	Moderate quality
Permanent hearing impairment	No increase	No studies met the inclusion criteria
Reading skills and oral comprehension in children A relevant risk increase was found at 55 dB L_{den} .	One-month delay	Moderate quality