

# Low heritability of tinnitus

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The relative importance of genetic factors in tinnitus is low, according to new research from the Norwegian Institute of Public Health. This is the first large population-based study to measure the heritability of tinnitus.

The study looked at prevalence of tinnitus and to what degree it is hereditary. Prevalence of tinnitus was 15.1 percent, which correlates well with findings from other countries.

Tinnitus is a symptom with a variety of underlying causes, such as impaired hearing or exposure to noise and medicines.

## Surprisingly low heritability

The new study shows that only 11 percent of the variance of tinnitus in the population are caused by [genetic](#) effects, whereas environmental factors account for the remaining 89 percent.

"Such a low heritability is a surprising find because most other diseases studied earlier have been more or less hereditary. We had expected that genetics and the environment would be roughly as important as each other," said Dr Ellen Kvestad at the Division for [Mental Health](#) at the Norwegian Institute of Public Health.

The article "Low heritability of tinnitus" was recently published in *Archives of Otolaryngology - Head and Neck Surgery*.

## Sub-groups of tinnitus can have higher heredity

In this study it was not possible to differentiate between different clinical forms of tinnitus.

"Our findings do not mean that genes are not important for some forms of tinnitus. Some sub-groups of tinnitus with certain underlying causes can have higher heritability. From our findings alone, resources cannot be allocated to find specific [genes](#) that code for [tinnitus](#) in general," added Kvestad.

Provided by Norwegian Institute of Public Health

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