

Tinnitus and COVID vaccines: Cases grow prompting calls for more research

It's now known that [tinnitus](#) may be an unexpected side effect of SARS-CoV-2 vaccination, and there is an urgent need to understand the precise mechanisms and best treatment for vaccine-associated tinnitus, researchers say.

As of mid-September 2021, 12,247 cases of tinnitus, or ringing in the ears, following COVID-19 vaccination have been reported to the Vaccine Adverse Event Reporting System of the US Centers for Disease Control and Prevention.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

The researchers review what is known and unknown about SARS-CoV-2 vaccine-associated tinnitus in an [article published online February 11 in Annals of Medicine and Surgery](#).

The researchers say cross-reactivity between anti-spike SARS-CoV-2 antibodies and otologic antigens is one possibility, based on the mechanisms behind other COVID-19 vaccine-induced disorders and the phenomenon of molecular mimicry.

"The heptapeptide resemblance between coronavirus spike glycoprotein and numerous human proteins further supports molecular mimicry as a potential mechanism behind such vaccine-induced disorders," they write.

Anti-spike antibodies may react with antigens anywhere along the auditory pathway and fuel an inflammatory reaction, they point out.

...

Genetic predispositions and associated conditions may also play a significant role in determining whether an individual develops vaccine-induced tinnitus.

[This is an excerpt. Read the original post here.](#)