

# Hearing Loss

An early World Trade Center (WTC) Health Registry study found that dust cloud exposure among survivors who evacuated damaged and destroyed buildings was associated with self-reported hearing issues.<sup>1</sup> Two recent publications from the WTC Health Registry reported that among enrollees who were rescue and recovery workers,<sup>2</sup> residents, passersby and area workers,<sup>3</sup> an increase in WTC exposure and being unable to hear in the dust cloud were associated with greater odds of hearing issues.

A study by the Fire Department of the City of New York (FDNY) found that workers who were most exposed to the WTC disaster had greater odds of constant ear symptoms.<sup>4</sup> An analysis of FDNY medical surveillance data found that FDNY responders with high levels of exposure were at greater risk of constant reductions in hearing sensitivity.<sup>5</sup>

Hearing loss is a condition that affects adults and children. It is usually caused by inner ear or nerve damage. Hearing loss is not currently recognized as a covered condition by the WTC Health Program. Other causes besides exposure to the 9/11 disaster include:

Exposure to loud noises (such as heavy machinery or loud music), which can result in sudden hearing loss



A punctured eardrum from objects inserted into the ear



Earwax (fluid) buildup

Certain medications, infections, allergies and childhood diseases such as chickenpox, measles and mumps, which can lead to permanent hearing loss



To learn more about hearing loss and other 9/11-related health conditions, visit [nyc.gov/911health](https://nyc.gov/911health) and click on the **Enrollees** tab, then **Health Conditions**.

NYC Well staff are available 24/7 to provide brief counseling and referrals to care in over 200 languages. For support, call 888-NYC-WELL (888-692-9355), text "WELL" to 65173 or chat at [nyc.gov/nycwell](https://nyc.gov/nycwell).

This material is provided by the NYC Department of Health and Mental Hygiene's WTC Health Registry. For questions, email [wtchr@health.nyc.gov](mailto:wtchr@health.nyc.gov).

1. Brackbill RM, Thorpe LE, DiGrande L, et al. Surveillance for World Trade Center disaster health effects among survivors of collapsed and damaged buildings. *MMWR Surveill Summ*. 2006;55(2):1–18. 2. Stein CR, Lee DJ, Flamme GA, et al. Persistent post-9/11 hearing problems among World Trade Center Health Registry rescue and recovery workers, 2001 to 2007. *J Occup Environ Med*. 2017;59(12):1229–1234. 3. Cone J, Stein CR, Lee DJ, et al. Persistent hearing loss among World Trade Center Health Registry residents, passersby and area workers, 2006–2007. *Int J Environ Res Public Health*. 2019;16(20):3864–75. 4. Colbeth HL, Zeig-Owens R, Liu Y, et al. Persistent self-reported ear and hearing problems among World Trade Center-exposed firefighters and emergency service workers, 2001–2007. *Am J Ind Med*. 2019;62(1):43–49. 5. Flamme GA, Goldfarb DG, Zeig-Owens R, et al. Hearing loss among World Trade Center firefighters and emergency medical service workers. *J Occup Environ Med*. 2019;61(12):996–1003.