



[Home](#) → [Medical Encyclopedia](#) → Fusion of the ear bones

URL of this page: [//medlineplus.gov/ency/article/001633.htm](https://medlineplus.gov/ency/article/001633.htm)

Fusion of the ear bones

Fusion of the ear bones is an abnormal joining of the three bones of the middle ear. These are the incus, malleus, and stapes bones. Fusion or fixation of the bones leads to hearing loss because the bones are not moving and vibrating in reaction to sound waves.

Treatment options include hearing aids to amplify the sound and surgery to improve the middle ear conduction of sound.

Related topics include:

- Chronic ear infection
- Otosclerosis
- Middle ear malformations

References

House JW, Cunningham CD. Otosclerosis. In: Flint PW, Francis HW, Haughey BH, et al, eds. *Cummings Otolaryngology: Head & Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:chap 146.

O'Handley JG, Tobin EJ, Shah AR. Otorhinolaryngology. In: Rakel RE, Rakel DP, eds. *Textbook of Family Medicine*. 9th ed. Philadelphia, PA: Elsevier; 2016:chap 18.

Prueter JC, Teasley RA, Backous DD. Clinical assessment and surgical treatment of conductive hearing loss. In: Flint PW, Francis HW, Haughey BH, et al, eds. *Cummings Otolaryngology: Head & Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:chap 145.

Rivero A, Yoshikawa N. Otosclerosis. In: Myers EN, Snyderman CH, eds. *Operative Otolaryngology Head and Neck Surgery*. 3rd ed. Philadelphia, PA: Elsevier; 2018:chap 133.

Review Date 5/2/2024

Updated by: Josef Shargorodsky, MD, MPH, Johns Hopkins University School of Medicine, Baltimore, MD. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.



Health Content
Provider
06/01/2028

A.D.A.M., Inc. is accredited by [URAC](http://www.urac.org), for Health Content Provider (www.urac.org). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.



National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894 U.S. Department of Health and Human Services
National Institutes of Health