

Vestibular schwannoma epidemiology

One of the most common [intracranial tumors](#), comprising 8–10% of tumors in most series ¹⁾.

Annual incidence is probably about 1.5 cases per 100,000 population – over the past couple decades this estimate has increased and the typical size at diagnosis has decreased as a result of the proliferation of MRI scans ²⁾.

In the US, annual incidence has been found to vary between 1.1 and 1.3 per 100,000 population between 2004 and 2007 ³⁾.

VSs typically become symptomatic after age 30. At least 95% are unilateral.

[Vestibular schwannomas](#) (VSs) are the most common [cerebellopontine angle tumors](#), accounting for 75% of all lesions in this location.

However, the incidence appears to be increasing, due at least in part to the incidental diagnosis of asymptomatic lesions with the widespread use of magnetic resonance imaging (MRI) and computed tomography.

The median age at diagnosis is approximately 50 years. The tumors are unilateral in more than 90 percent of cases, affecting the right and left sides with equal frequency.

Approximately 3,000 cases are diagnosed each year in the United States.

Studies in Denmark published in 2004 show the incidence is 17.4 per million. Most acoustic neuromas are diagnosed in patients between the ages of 30 and 60, and men and women appear to be affected equally ⁴⁾.

Neurofibromatosis Type 2

The incidence of vestibular schwannomas (VS) is increased in neurofibromatosis (NFT), with bilateral VS being pathognomonic of neurofibromatosis Type 2 (NFT2), see central NFT (p.605). Any patient <40 yrs old with unilateral VS should also be evaluated for NFT2. Cytologically, the VSs of NFT2 are identical to sporadic cases, however in NFT2 the tumors form grape-like clusters that may infiltrate the nerve fibers (unlike most sporadic VSs which displace the eighth nerve).

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Stangerup SE, Caye-Thomasen P, Tos M, Thomsen J. The natural history of vestibular schwannoma. Otol Neurotol. 2006; 27:547–552

³⁾

Lau T, Olivera R, Miller T, Jr, Downes K, Danner C, van Loveren HR, Agazzi S. Paradoxical trends in the

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