

Hearing loss

General recommendation
Survivors treated with cisplatin (level B evidence), with or without high-dose carboplatin (>1500 mg/m ²), or head or brain radiotherapy ≥30 Gy (expert opinion*) and their healthcare providers should be aware of the risk of hearing loss.
Who needs surveillance and how often should surveillance be performed?
Surveillance for hearing loss <i>is recommended</i> for survivors treated with cisplatin (level A and B evidence), with or without high-dose carboplatin (>1500 mg/m ²), or head or brain radiotherapy ≥30 Gy (expert opinion*) to begin no later than the end of treatment and to be performed annually for children younger than 6 years of age, every other year for children 6–12 years of age, and every 5 years for adolescents and young adults older than 12 years of age (level C evidence and expert opinion).
Hearing loss surveillance <i>may be reasonable</i> for survivors who had placement of cerebrospinal fluid shunts (level B evidence) to begin no later than the end of treatment and repeated every 5 years thereafter (level C evidence and expert opinion).
What surveillance modality should be used?
Pure tone conventional audiometry testing <i>is recommended</i> for survivors ≥6 years of age at 1000–8000 Hz, and additional testing with high frequency audiometry at >8000 Hz <i>is recommended</i> whenever equipment is available (evidence-based guidelines and expert opinion). Referral to an audiologist for more extensive testing <i>is recommended</i> for survivors <6 years of age (evidence-based guidelines and expert opinion).
What should be done when abnormalities are identified?
Referral to an audiologist or auditory clinic <i>is recommended</i> for any survivor who has symptoms suggesting hearing loss or abnormal audiological test results showing a loss of more than 15 dB absolute threshold level (1000–8000 Hz) (expert opinion*).

Tinnitus

General recommendation
Survivors treated with cisplatin, with or without high-dose carboplatin (>1500 mg/m ²) (level C evidence), or head or brain radiotherapy ≥30 Gy (expert opinion) and their healthcare providers should be aware of the risk of tinnitus. Referral to an audiologist is recommended for survivors who have symptoms of tinnitus (expert opinion*).

*Based on evidence that does not meet the inclusion criteria.

Publication

Clemens E, van den Heuvel-Eibrink MM, Mulder RL, Kremer LCM, Hudson MM, Skinner R, Constone LS, Bass JK, Kuehni CE, Langer T, van Dalen EC, Bardi E, Bonne NX, Brock PR, Brooks B, Carleton B, Caron E, Chang KW, Johnston K, Knight K, Nathan PC, Orgel E, Prasad PK, Rottenberg J, Scheinmann K, de Vries ACH, Walwyn T, Weiss A, Am Zehnhoff-Dinnesen A, Cohn RJ, Landier W; International Guideline Harmonization Group ototoxicity group. Recommendations for ototoxicity surveillance for childhood, adolescent, and young adult cancer survivors: a report from the International Late Effects of Childhood Cancer Guideline Harmonization Group in collaboration with the PanCare Consortium. *The Lancet Oncology* 2019;20:e29-e41.