

**Clinical Studies:** Tympanograms: B pattern for right ear and C pattern for left ear. Speech discrimination score: 95% for right ear; 80% for left ear. Acoustic immittance: reveals normal external auditory canal volumes for both ears. Pure tone audiometry reveals the following threshold levels in decibels (dB):

	Right Ear (thousands)							Left Ear (thousands)						
Frequency, Hz	0.5	1	2	3	4	6	8	0.5	1	2	3	4	6	8
Air Conduction	40	55	60	70	80	95	NR	25	30	30	40	40	60	70
Bone Conduction	20	30	15	—	35	—	—	Not tested in left ear						

**Diagnosis:** Mixed (sensorineural + conductive) hearing impairment, right ear. Mild sensorineural hearing impairment, left ear.

**Impairment Rating:** 5% impairment of the whole person.

**Comment:** The decimal sum of hearing threshold levels (DSHL) for the right ear is 225 (40 + 55 + 60 + 70), and the DSHL for the left ear is 125 (25 + 30 + 30 + 40). Combine 225 (worse ear) and 125 (better ear) using Table 11-2 for a binaural hearing impairment rating (BI) of 15.6%. Use Table 11-3 to obtain the 5% whole person impairment rating.

#### Example 11-2

##### 8% Impairment Due to Hearing Loss

**Subject:** 65-year-old woman.

**History:** Repeated ear infections for many years. Hearing loss in both ears and roaring, pulsing, rushing-water tinnitus in both ears. No history of dizziness. Tympanoplasty, left ear, 4 months ago.

**Current Symptoms:** Difficulty hearing in both ears, but hearing much improved in left ear since tympanoplasty. Still has tinnitus in both ears, which impacts some activities of daily living.

**Physical Exam:** Retracted right tympanic membrane.

**Clinical Studies:** Left tympanic membrane shows well-healed graft. Tympanograms: B pattern for right ear. Tympanometry was not performed for left ear due to recent otologic surgery. Speech discrimination scores: 80% for right ear; 85% for left ear. Pure tone audiometry reveals the following threshold levels in decibels (dB):

	Right Ear (thousands)							Left Ear (thousands)						
Frequency, Hz	0.5	1	2	3	4	6	8	0.5	1	2	3	4	6	8
Air Conduction	50	50	55	55	60	85	NR	25	30	40	40	40	60	85
Bone Conduction	15	35	35	—	20	—	—	0	5	25	—	15	—	—

**Diagnosis:** Mixed (sensorineural + conductive) hearing impairment, bilaterally.

**Impairment Rating:** 8% impairment of the whole person.

**Comment:** The DSHL for the right ear is 210 (50 + 50 + 55 + 55), and the DSHL for the left ear is 135 (25 + 30 + 40 + 40). Combine 210 (worse ear) and 135 (better ear) using Table 11-2 for a BI of 17.8%. Add 5% for the presence of tinnitus, giving a BI of 22.8%. Use Table 11-3 to obtain the 8% whole person impairment.

#### Example 11-3

##### 8% Impairment Due to Hearing Loss

**Subject:** 64-year-old man.

**History:** Progressive hearing loss for 13 years.

Worked in several noisy environments; used hearing protectors fairly regularly. Exposure to gunfire during 4 years of service in the Marines. General health good. No history of tinnitus or vertigo.

**Current Symptoms:** Difficulty with communication at home, in restaurants, driving a car, and in noisy environments.

**Physical Exam:** No abnormalities.

**Clinical Studies:** Audiologic tests: speech reception threshold of 20 dB. Pure tone audiometry reveals the following threshold levels in decibels (dB):

	Right Ear (thousands)							Left Ear (thousands)						
Frequency, Hz	0.5	1	2	3	4	6	8	0.5	1	2	3	4	6	8
	20	15	60	80	85	85	70	25	15	60	60	65	65	60

**Diagnosis:** Sensorineural hearing impairment, bilateral.

**Impairment Rating:** 8% impairment of the whole person.

**Comment:** The impairment calculated from this audiogram is based on the DSHL. The DSHL for the right ear is 175 (20 + 15 + 60 + 80), and the DSHL for the left ear is 160 (25 + 15 + 60 + 60). Combine 175 (worse ear) and 160 (better ear) using Table 11-2 for a binaural hearing impairment of 23.4%. Use Table 11-3 to obtain the 8% whole person impairment.