

WAC 296-817-20015 Make sure employees use hearing protection when their noise exposure equals or exceeds 85 dBA TWA₈. (1) You must make sure employees wear hearing protectors that will provide sufficient protection when exposure equals or exceeds:

- (a) 85 dBA TWA₈ (noise dosimetry, providing an average exposure over an eight-hour time period);
- (b) 115 dBA (slow response sound level meter, identifying short-term noise exposures);
- (c) 140 dBC (fast response sound level meter, identifying almost instantaneous noise exposures).

(2) You must provide employees with an appropriate selection of hearing protectors:

- (a) The selection must include at least two distinct types (such as molded earplugs, foam earplugs, custom-molded earplugs, earcaps, or earmuffs) for each exposed employee and must be sufficient to cover:
 - (i) Different levels of hearing protection needed in order to reduce all employee exposures to a level below 85 dBA TWA₈;
 - (ii) Different sizes;
 - (iii) Different working conditions.
- (b) Consider requests of the employees regarding:
 - (i) Physical comfort;
 - (ii) Environmental conditions;
 - (iii) Medical needs;
 - (iv) Communication requirements.

Note: Hearing protector selection should include earplugs, earcaps and earmuffs.

- (3) You must provide hearing protection at no cost to employees.
- (4) You must supervise employees to make sure that hearing protection is used correctly.
- (5) You must make sure hearing protectors are:
 - (a) Properly chosen for fit;
 - (b) Replaced as necessary.
- (6) You must make sure all hearing protection is sufficient to reduce the employee's equivalent eight-hour noise exposure to 85 dBA or less. When using the A-weighted exposure measurements, reported as "dBA TWA₈," the reduction in noise exposure by hearing protectors is given by Table 2:

**Table 2
Effective Protection of Hearing Protectors**

Type of hearing protection	Effective protection
Single hearing protection (earplugs, earcaps or earmuffs)	7 dB less than the manufacturer assigned noise reduction rating (NRR); for example, earplugs with an NRR of 20 dB are considered to reduce employee exposures of 95 dBA TWA ₈ to 82 dBA TWA ₈

Type of hearing protection	Effective protection
Dual hearing protection (earplug and earmuff worn together)	2dB less than the higher NRR of the two protectors; for example, earplugs with an NRR of 20 dB and earmuffs with an NRR of 12 dB are considered to reduce employee exposures of 100 dBA TWA ₈ to 82 dBA TWA ₈

(7) In addition to protection based on daily noise dose, make sure hearing protection has an NRR of at least 20 dB when exposures involve noise that equals or exceeds 115 dBA (slow response sound level meter) or 140 dBC (fast response sound level meter).

Note:

1. You may also evaluate hearing protection by using the other methods given in the NIOSH *Compendium of Hearing Protection* (NIOSH Publication No. 95-105).
2. These methods require additional monitoring and are more complex, but provide a more thorough evaluation of protection.
3. This may be useful in cases where communication is critical or for evaluating hearing protection for employees with hearing impairment.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050. WSR 15-23-086, § 296-817-20015, filed 11/17/15, effective 12/18/15. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 03-11-060, § 296-817-20015, filed 5/19/03, effective 8/1/03.]