

WSR 22-15-090
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed July 19, 2022, 8:32 a.m., effective August 19, 2022]

Effective Date of Rule: Thirty-one days after filing.

Purpose: This rule making aligns WAC 296-27-01113 with the language in Occupational Safety and Health Administration's (OSHA) rule in 29 C.F.R. 1904.10, Recording criteria for cases involving occupational hearing loss. OSHA updated its requirements in 2003. The OSHA rule requires recording hearing loss discovered under an employer's hearing conservation program. OSHA also requires employers to record every standard threshold shift (STS) identified with thresholds above the 25 dB average.

No requirements are being changed during this rule making, only updating language in WAC 296-27-01113 to be at-least-as-effective-as 29 C.F.R. 1904.10, Recording criteria for cases involving occupational hearing loss, and correcting images in WAC 296-817-30015 so they are easily read.

Amended Sections:

WAC 296-27-01113 Recording criteria for occupational hearing loss cases.

- Updated "recordable threshold shift (RTS)" in subsection (1) to "work-related standard threshold shift (STS)."
- Added new sentence to end of subsection (1) that states "Audiometric testing is required by chapter 296-817 WAC, Hearing loss prevention (noise)."
- Removed original language from subsection (2), as well as the note below the subsection, and added new language that states "Minimum recordable hearing thresholds. It is not required to record an STS when the average threshold level for the employee's current audiogram at 2000 Hz, 3000 Hz, and 4000 Hz average less than 25 dB. No age adjustment is allowed for this determination."
- Updated "To determine whether RTS has occurred" at the beginning of subsection (3) to "Age related hearing loss."
- Updated the language in subsection (3) which allows employers to use age adjustment tables during reviews of STSs. The previous rule language required additional hearing loss record reviews to use age adjustment.
- Updated multiple uses of "RTS" in subsection (4) to "STS."
- Added "Work-relatedness" to the beginning of subsection (5).
- Added subdivision letter (a) before the first sentence of subsection (5).
- Added subdivision letter (b) in place of subsection number (6) and added new reference about following the rules set out in WAC 296-27-01103 Determination of work-relatedness.

WAC 296-817-30015 Use these equations when estimating full-day noise.

- Updated image of equation only.

Citation of Rules Affected by this Order: Amending WAC 296-27-01113 and 296-817-30015.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, and 49.17.050.

Other Authority: Chapter 49.17 RCW.

Adopted under notice filed as WSR 22-10-106 on May 4, 2022.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 1, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 2, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: July 19, 2022.

Joel Sacks
Director

OTS-3502.1

AMENDATORY SECTION (Amending WSR 19-17-068, filed 8/20/19, effective 1/1/20)

WAC 296-27-01113 Recording criteria for occupational hearing loss cases. (1) The employer must record a hearing loss case on the OSHA 300 Log (~~(by checking)~~) and check the column for hearing loss if an employee's hearing test (audiogram) reveals that a (~~recordable~~) work-related standard threshold shift ((RTS)) (STS) has occurred in one or both ears (~~has occurred~~). Audiometric testing is required by chapter 296-817 WAC, Hearing loss prevention (noise).

(2) (~~The employer must evaluate the employee's current audiogram with their baseline audiogram to determine whether a RTS has occurred. If the employee has previously experienced a recorded hearing loss, you must compare the employee's current audiogram with the audiogram reflecting the employee's previously recorded hearing loss case.~~)

Note: Audiometric test results reflect the employee's overall hearing ability in comparison to audiometric zero. Therefore, using the employee's current audiogram, you must use the average hearing level at 2000, 3000, and 4000 Hz to determine whether or not the employee's total hearing level is 25 dB or more.

(~~3) To determine whether RTS has occurred,~~) Minimum recordable hearing thresholds. It is not required to record an STS when the average threshold level for the employee's current audiogram at 2000 Hz, 3000 Hz, and 4000 Hz average less than 25 dB. No age adjustment is allowed for this determination.

(3) Age related hearing loss. The employer may age adjust the employee's current audiogram results by using Tables A-1 or A-2 in Appendix A of this chapter (. The employer may not use an age adjustment when determining whether the employee's total hearing level is 25 dB or more above audiometric zero) to determine if it must be recorded (evaluations from WAC 296-817-20035(3) are still required). Compare the age-adjusted audiogram to the employee's original baseline audiogram or the last audiogram that resulted in a recordable STS (do not

age adjust the baseline or previously recorded audiogram). If the average threshold shift at 2000, 3000, and 4000 Hz from the original baseline or previously recorded audiogram to the current age adjusted audiogram is less than 10 dB, the hearing loss case is not required to be recorded.

(4) The employer is not required to record the hearing loss case on the OSHA 300 Log if they retest the employee's hearing within thirty days of the first test, and the retest does not confirm the ((RTS)) STS. If the retest confirms the ((RTS)) STS, the employer must record the hearing loss illness within seven calendar days of the retest. If subsequent audiometric testing indicates that an ((RTS)) STS is not persistent, the employer may erase or line-out the recorded entry.

(5) Work-relatedness.

(a) The employer must consider the case to be work-related if an event or exposure in the work environment either caused or contributed to the hearing loss or significantly aggravated a preexisting hearing loss.

((+6)) (b) The employer is not required to consider the case work-related or recordable if a physician or other licensed health care professional determines, following the rules set out in WAC 296-27-01103 Determination of work-relatedness, that the hearing loss is not work-related or has not been significantly aggravated by occupational noise exposure.

[Statutory Authority: RCW 49.17.010, 49.17.040, and 49.17.050. WSR 19-17-068, § 296-27-01113, filed 8/20/19, effective 1/1/20; WSR 15-11-066, § 296-27-01113, filed 5/19/15, effective 7/1/15. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 07-03-163, § 296-27-01113, filed 1/24/07, effective 4/1/07; WSR 03-24-085, § 296-27-01113, filed 12/2/03, effective 1/1/04; WSR 02-22-029, § 296-27-01113, filed 10/28/02, effective 1/1/03. Statutory Authority: RCW 49.17.010, [49.17].040, and [49.17].050. WSR 02-01-064, § 296-27-01113, filed 12/14/01, effective 1/1/02.]

OTS-3503.1

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-817-30015 Use these equations when estimating full-day noise exposure from sound level measurements. You must compute employee's full-day noise exposure by using the appropriate equations from Table 2 "Noise Dose Computation" **when** using a sound level meter to estimate noise dose.

Table 2
Noise Dose Computation

Description	Equation
Compute the noise dose based on several time periods of constant noise during the shift	<p>The total noise dose over the work day, as a percentage, is given by the following equation where C_n indicates the total time of exposure at a specific noise level, and T_n indicates the reference duration for that level.</p> $D = 100 \times \left(\frac{C_1}{T_1} + \frac{C_2}{T_2} + \frac{C_3}{T_3} + \dots + \frac{C_n}{T_n} \right)$
The reference duration is equal to the time of exposure to continuous noise at a specific sound level that will result in a one hundred percent dose	<p>The reference duration, T, for sound level, L, is given in hours by the equation:</p> $T = \frac{8}{2^{(L-90)/5}}$
Given a noise dose as a percentage, compute the equivalent eight-hour time weighted average noise level	<p>The equivalent eight-hour time weighted average, TWA_8, is computed from the dose, D, by the equation:</p> $TWA_8 = 16.61 \times \log_{10} \left(\frac{D}{100} \right) + 90$

Description	Equation
<u>Compute the noise dose based on several time periods of constant noise during the shift.</u>	<p>The total noise dose over the work day, as a percentage, is given by the following equation where C_n indicates the total time of exposure at a specific noise level, and T_n indicates the reference duration for that level.</p> $D = 100 * ((C_1/T_1) + (C_2/T_2) + (C_3/T_3) + \dots + (C_n/T_n))$
<u>The reference duration is equal to the amount of time of exposure to continuous noise at a specific sound level that will result in a one hundred percent dose.</u>	<p>The reference duration, T, for sound level, L, is given in hours by the equation:</p> $T = 8 / (2^{((L - 90) / 5)})$
<u>Given a noise dose as a percentage, compute the equivalent eight hour time weighted average noise level.</u>	<p>The equivalent eight-hour time weighted average, TWA_8, is computed from the dose, D, by the equation:</p> $TWA_8 = 16.61 * \text{Log}_{10}(D/100) + 90$

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050. WSR 15-23-086, § 296-817-30015, 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, § 296-817-30015, filed 5/19/03, effective 8/1/03.]