

Guidelines for Audiometric Baseline Revision

NOTE: These guidelines were published prior to the OSHA record keeping rule change in 2003, and were updated by NHCA in 2013. See the February 2013 guidelines (also available under position statements) for the most current version.

[Download these guidelines](#) as they were printed in the April 1996 edition of Spectrum

Recommended by the National Hearing Conservation Association These guidelines are meant to be employed by a professional reviewer (audiologist or physician). Although the guidelines can be programmed by computer to identify records for potential revision, the final decision for revision rests with a human being. Because the goal of the guidelines is to foster consistency among different professional reviewers, human override of the guidelines must be justified by specific concrete reasons.

These guidelines do not apply to the identification of significant threshold shifts other than OSHA STS, or to the calculation of the 25-dB average shifts which are recordable on the OSHA 200 log in many states.

Initially the baseline is the latest audiogram obtained before entry into the hearing conservation program. If no appropriate pre-entry audiogram exists, the baseline is the first audiogram obtained after entry into the HCP. Each subsequent audiogram is reviewed to detect improvement in the "OSHA average" (average of thresholds at 2, 3, and 4 kHz), and to detect OSHA STS. The two ears are examined separately and independently for improvement and for worsening. If one ear meets the criteria for revision of baseline, then the baseline is revised for that ear only. Therefore, if the two ears show different hearing trends, the baseline for the left ear may be from one test date, while the baseline for the right ear may be from a different test date.

Age corrections do not apply in considering revisions for improvement. OSHA-allowed age corrections from Appendix F of the Hearing Conservation Amendment may be used, if desired, before considering revision for persistent OSHA STS. Rule 2 operates in the same way whether age corrections are used or not.

Rule 1

Revision for Persistent Improvement

If the average of thresholds for 2,3, and 4 kHz for either ear shows an improvement of 5dB or more from the baseline value, and the improvement is present on one test and persistent on the next test, then the record should be identified for review by the audiologist or physician for potential revision of the baseline for persistent improvement. The baseline for that ear should be revised to the test which shows the lower (more sensitive) value for the average of thresholds at 2,3 and 4 kHz unless the audiologist or physician determines and documents specific reasons for not revising. If the values of the three-frequency OSHA average are identical for the two tests, then the earlier test becomes the revised baseline.

Rule 2

Revision for Persistent OSHA Standard Threshold Shift

If the average of thresholds for 2,3 and 4 kHz for either ear shows a worsening of 10 dB or more from the baseline value (OSHA, STS), and the STS persists on the next annual test (or the next test given at least 6 months later), then the record should be identified for review by the audiologist or physician for potential revision of the baseline for persistent worsening. Unless the audiologist or physician determines and documents specific reasons for not revising, the baseline for that ear should be revised to the test which shows the lower (more sensitive) value for the average of thresholds at 2,3, and 4 kHz. If both tests show the same numerical value for the average of 2,3, and 4 kHz, then the audiologist or physician should revise the baseline to the earlier of the two tests, unless the later test shows better (more sensitive) thresholds for other test frequencies.

Following an STS, a retest within 30 days of the annual test may be substituted for the annual test if the retest shows better (more sensitive) results for the average threshold at 2, 3, and 4 kHz.

If the retest is used in place of the annual test, then the annual test is retained in the record, but it is marked in such a way that it is no longer considered in baseline revision evaluations. If a retest within 30 days of an annual test confirms an OSHA STS shown on the annual test, the baseline will not be revised at that point because the required six-month interval between tests showing STS persistence has not been met. The purpose of the six-month requirement is to prevent premature baseline revision when STS is the result of temporary medical conditions affecting hearing.

Although a special retest after six months could be given if desired to assess whether the STS is persistent, it is the understanding of the committee that in most cases the next annual audiogram would be used to evaluate persistence of the STS.

Approved by the Executive Council on February 24, 1996.