

**Division of Occupational Safety and Health
North Carolina Department of Labor
Raleigh, North Carolina**

Standards Notice 57

Chapter 7
Subchapter 7D
NC-OSHA

Field Information System Part III

Recordability of Standard Threshold Shift

A. STANDARD

29 CFR 1910.95(g)(10), "Standard Threshold Shift (1) As used in this section, a Standard Threshold Shift is a change in hearing threshold relative to the baseline audiogram of an average of 10db or more at 2,000, 3,000, and 4,000 Hz in either ear".

B. DISCUSSION

It is the Division's policy, per federal OSHA guidance (attached), that when a comparison of an individual's baseline audiogram is made to the most recent audiogram, and the - comparison shows a Standard Threshold Shift (STS) as defined by 1910-95(g)(10), the loss of hearing is recordable. The STS is not recordable when the employer has substantial evidence that the entire shift in threshold of hearing was caused by a nonwork-related event or exposure off premises. A qualified physician's written opinion is necessary to support such a claim. A written opinion must incorporate a detailed explanation of why none of the hearing loss is work related. Also, if the annual audiogram shows that an employee has suffered a STS, the employer can retest for hearing loss within 30 days as permitted by 1910.95(g)(7)(ii). If a retest does not show a STS, the employer may line out the original entry on the OSHA Form 200.

C. FEDERAL OSHA POLICY

Federal OSHA has determined that a significant incidence of hearing loss occurs among employees exposed to "8-hour timeweighted average (TWA) sound levels" of noise exceeding 85 dB, and has developed a draft CPL, "Recording of Hearing Loss on OSHA 200", issued at 23 March 1990. The

draft CPL provides guidelines for enforcing the recording by employers on the OSHA Form 200 of occupational hearing loss. The federal OSHA position is that a Standard Threshold Shift (STS) of 10 dB or more is recordable on the OSHA 200 log. The draft CPL contains enforcement procedures for CSHO's to follow during an inspection.

D. CONCLUSION

The North Carolina Division of Occupational Safety and Health has determined that the policy, defined in Item B above, is appropriate for determining the recordability of standard threshold shifts (STS) as defined by 29 CFR 1910.95(g)(10).

Copies of the correspondence from Federal OSHA, and the draft CPL, "Recording of Hearing Loss on OSHA 200" are attached for guidance. Please place this North Carolina Standards Notice No. 57 in Part III of your Field Information System.

David C. Breeding, RPE, CSE
Chief, Bureau of Education Training and Technical Assistance

Dr. James A. Oppold, CSP
OSH Division Director

Signed on original

Date: 01 October 1990

U.S. Department of Labor Occupational Safety and Health Administration
1375 Peachtree Street, NE
Atlanta. Georgia 30367

May 1, 1990

Mr. Michael Ragland
Deputy Commissioner
Department of Labor

4 Edenton Street
Raleigh, North Carolina 27601

Dear Mr. Ragland:

Your letter dated April 6, 1990 requesting assistance in clarifying Federal OSHA policy regarding the recordability of standard threshold shift (STS) has been referred to the Bureau of Labor Statistic (BLS) for response. We will respond to your request as soon as we hear from BLS.

If you have any questions, please contact Benjamin Ross of my staff at (404) 347-2878.

Sincerely,

CYNTHIA P. WOLFE
Assistant Regional Administrator for Technical Support

Signed on original

U.S. Department of Labor Occupational Safety and Health Administration
1375 Peachtree Street, NE
Atlanta, Georgia 30367

Mr. Michael Ragland
Deputy Commissioner
Department of Labor
4 West Edenton Street
Raleigh, North Carolina 1-7601

Dear Mr. Ragland:

This is in response to your letter dated April 6, 1990, requesting assistance in clarifying Federal OSHA policy in regard to the recordability Of standard threshold shift [1910.95(g)(10): average of 10 dB in either ear at 2000, 3000, and 4000 Hz].

It is OSHA's policy that when a comparison of an individual's baseline audiogram is made to the most recent audiogram, and the comparison shows a standard threshold shift (STS) as defined by 1910.95 (g)(10), the hearing is

recordable. The STS is not recordable when the employer has substantial evidence that the entire shift in threshold of hearing was caused by a nonwork-related event or exposure off premises. A qualified physician's written opinion is necessary to support such a claim. The written opinion must incorporate a detailed explanation of why none of the hearing loss is work related. Also, if the annual audiogram shows that an employee has suffered a STS, the employer can retest for hearing loss within 3 days as permitted by 1910.95 (g)(7)(ii). If the retest does not show a STS, the employer may line out the original entry on the OSHA 200.

The National Office, Office of Field Programs has proposed a draft CPL that will address the recording of hearing loss on the OSHA 200. Attached for your information is a copy of the proposed draft. Any questions concerning the proposed draft CPL should be directed to the National office.

If you have any questions, please contact me or Sven Rundman of the Technical Support staff at (404) 347-2281.

Sincerely,

BENJAMIN ROSS
Acting Assistant Regional Administrator for Technical Support

Signed on original

Attachment

cc: WALTER HEMINGWAY, Acting Director
Raleigh Area Office

APR 13 1990

Region IV strongly supports the policy an the recording of hearing loss as delineated in the draft CPL. Listed below Are some additional comments regarding the draft.

1. Does Paragraph F.4.a.(1)(a) prohibit an audiologist from determining whether or not the hearing loss is due to non- occupational noise exposure? It is clear and rational that only a physician should be allowed to determine if the hearing lose is due to a medical cause or pathology. We feel that the audiologists conducting or reviewing the audiograms are in a such better position to make the determination regarding non-occupational noise exposure.
2. Paragraph F.5.(b) needs clarifying. It states that standard threshold shifts by virtue of medical pathology of the ear caused by hearing protection are not recordable. Then the paragraph appears to contradict this by requiring that a check mark be placed in column (7)(g) of the OSHA-200.
3. We Understand that Paragraph F.4.b. of the draft CPL requires a hearing loss to be recorded initially but not in future years. 29 CFR 1910.95(g)(9) allows the annual audiogram to be substituted for the baseline if the standard threshold shift is Persistent; or, if the annual audiogram indicates improvement. Would a new standard threshold shift, revealed when the annual audiogram is compared to the revised baseline, be required to be recorded? Polley is needed to clarify this issue.
4. The documentation that is encouraged in Paragraph F.7, should be mandatory for all noise cases to support violation of 1910.95.
5. Also, there should be some guidance for the handling of audiograms and other employees' medical records related to more detailed medical exams of the ear.

If you have any questions, please contact Russ Dugger or Sol Raines.

OSHA Instruction CPL

Office of Health Compliance Assistance

Subject: Recording of Hearing Loss on OSHA Form 200

- A. Purpose. This instruction provides guidelines for enforcing the recording by employers on the OSHA Form 200 of incidents of occupational hearing loss.
- B. Scope. This instruction applies OSHA-wide.
- C. Action. Regional Administrators and Area Directors shall ensure that the guidelines provided by this instruction are followed.
- D. Federal Program Change. This instruction describes a Federal change which affects state programs. Each Regional Administrator shall:
 - 1. Ensure that this change is forwarded to each State designee.
 - 2. Explain the technical content of the change to the State designee as requested.
 - 3. Ensure that State designees are asked to acknowledge receipt of this Federal program change in writing, within 30 days of notification, to the Regional Administrator. This acknowledgment should include a description either of the state's plan to implement the change or of the reasons why the change should not apply to that State.
 - 4. Review policies, instructions and guidelines issued by the State to determine that this change has been communicated to State program personnel. Routine monitoring activities shall also be used to determine if this change has been implemented by actual performance.
- E. Background.
 - 1. OSHA has determined that a significant incidence of hearing loss occurs among employees exposed to "8-hour time-weighted average (TWA) sound levels" of noise equaling or exceeding 85 dBA. see Appendix A to occupational noise exposure standard 29 CFR 1910.95 for OSHA's definition of an "8-hour TWA sound level."
 - 2. Because employees exposed to 8-hour TWA sound levels of noise equaling or exceeding 85 dBA may incur hearing loss, OSHA requires employers to make audiometric testing available to employees receiving such exposures for identifying any of them who are so affected.
 - 3. By the definition at 29 CFR 1910.95 (g)(10)(i), if any of the employees show a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear they have a standard threshold shift (STS) in their hearing ability. An STS denotes a deterioration of hearing substantial enough

to initiate followup procedures to prevent further hearing loss.

F. Enforcement Procedures.

1. For OSRA-200 recordkeeping purposes hearing loss resulting from an instantaneous noise exposure (such as an explosion) is classified as an injury. It is recordable if it involves- medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.
2. Hearing loss resulting from anything other than instantaneous exposure is considered an illness, and is recorded in column 7(f) of the OSHA 200, as every occupational illness must be recorded.
3. Recordable hearing loss deemed to be work related should be entered on the OSRA-200 within 6 working days after the employer learns of the injury or illness.
4. Hearing loss from noninstantaneous noise exposure is presumed to be work related when employee are exposed to 8-hour TWA sound levels of -noise equaling or exceeding 85 dBA.
 - a. Where employees are exposed to "such noise sound levels, any hearing loss meeting OSHA's definition of an STS must be recorded on the OSHA-200 by the employer unless:
 1. The employer has substantial evidence that the entire shift in the threshold of hearing was caused by nonwork-related event or exposure off premises.
 - a. A physician's written opinion is necessary to support such a claim. The written opinion must incorporate a detailed explanation of why none of the hearing loss is work related. Hearing loss due to ear infections not caused by hearing protectors, or due to colds and other pathologies unrelated to noise may be documented in the written opinion.
 - b. CSHO's shall review the written opinion when employers allege they did not record a hearing loss because

the physician determined it was not work related.

2. The employer chooses to retest for hearing loss within 30 days as permitted by 29 CFR 1910.95; (g)(7)(ii) and the retest does not show any STS. In this case the employer may line out the original entry.
3. An STS is not present after making allowance for presbycusis (aging) as set out in Appendix F to 29 CFR 1910.95.
- b. Only the initial STS in hearing in each ear from noninstantaneous noise exposure has to be recorded as an illness on the OSHA-200.
 1. If both ears show an initial STS at the same time, then one illness is recorded on the OSHA-200.
 2. If each ear shows an initial STS at a different time, then two illnesses are recorded on the OSHA-200.
5. OSHA will cite employers for a violation of 29 CFR 1904.2 for failing to record occupational hearing loss on the OSHA-200 as illness under the following circumstances:
 - a. An STS resulting from noninstantaneous exposure to noise is not recorded. Proper recording includes placing a check mark in column (7)(f) of the form.
 - b. An STS caused by a medical pathology of the ear related to wearing hearing protectors is not recorded. Proper recording of the incident includes placing a check mark in column (7)(g) of the form.
6. In order to support a violation, CSHOs must provide the following documentation:
 - a. The employer provided audiometric tests and obtained valid audiograms showing hearing threshold shifts meeting OSHA's definition of an STS. This applies to both the violations described under F.5. of this instruction.
 - b. Hearing threshold shifts still meet OSHA's definition of an STS after correcting for presbycusis. This documentation applies to both the violations described under F-5. of this instruction.

- c. The employer had no signed written opinion from a physician that the STS is not work related. This documentation applies only to the violation described at F.5.a. of this instruction.
- d. The affected employees are exposed to 8-hour TWA sound levels of noise equaling or exceeding 85 dBA when any use of personal hearing protection devices is disregarded- This documentation applies only to the violation described at F.5.a. of this instruction.
- e. A physician provided the employer a written opinion that the STS is due to medical pathology of the ear related to wearing hearing protectors. This documentation applies only to the violation described at F.5.b. of this instruction.

7. Although not necessary for supporting violations of 29 CFR 1904.2, to help create a fuller picture of the workplace conditions for employees having an STS, CSHOs are encouraged to document the following:

- a. Whether the employer required the employees to use hearing protectors.
- b. Whether the hearing protectors provided for the employees had sufficient protection factors.
- c. Whether the employees were provided with properly fitted hearing protectors.
- d. Whether the employees were trained on the use and care of hearing protectors.
- e. Whether the employees wore their hearing protectors properly.
- f. How well the employer enforces use of hearing protectors by employees. Documentation would be done by interviewing the employer and employees, and by personal observation of employee compliance with the employer's requirement to use hearing protectors.
- g. The length of time between the establishment of the baseline audiogram and the development of the STS.
- h. Whether the baseline was an original or a revised one because of a prior STS.
- i. The percentage of employees exposed to noise at or above an 8-hour TWA sound level of 85 dBA that have experienced an STS.

- j. The followup steps the employer has taken when STS's have occurred.

Gerard F. Scannell
Assistant Secretary

Distribution: National, Regional and Area Offices
All Compliance Officers
State Designees
7(c)(1) Project Managers
NIOSH Regional Program Directors

U.S. Department of Labor Occupational Safety and Health Administration
1375 Peachtree Street, NE
Atlanta, Georgia 30367

MAY 1, 1990

MEMORANDUM FOR: Donald M. Cruse
Regional Administrator for
Bureau of Labor Statistic
FROM: R. Davis Layne
Regional Administrator
SUBJECT: Interpretation for Recordability of
Threshold Shift (STS)

Attached for your information and response is a letter from Mr. Michael Ragland, Deputy commissioner for North Carolina Department of Labor, requesting assistance on the above mentioned subject matter. Please review Mr. Ragland's request and provide this office with your response. We have also attached copies of our previous responses to Mr. A. Lee Ivester concerning the recordability (STS) for your information.

If you have any questions, please contact Cynthia P. Wolf Assistant Regional Administrator for Technical Support at (FTS) 257-2281.

Attachments

JUL 31, 1989

Mr. A. Lee Ivester, Director
Safety and Industrial Hygiene
Fieldcrest Cannon, Inc.
Kannapolis, North Carolina 28081

Dear Mr. Ivester:

In response to your June 26, 1989, letter concerning Region IV's enforcement policy regarding the recordability of hearing losses, the following information is provided:

It is OSHA's current position that when a comparison of an individual's baseline audiogram is made to the most recent audiogram, and the comparison allows a standard threshold shift (STS) as defined by 1910.95(g)(10), the hearing loss is recordable. A qualified physician may determine that the STS is not work related or "aggravated" by occupational noise exposure. In this case, the STS is not recordable. Also, if the annual audiogram shows that an employee has suffered a STS, the employer may obtain a re-test within 30 days of the test as the annual audiogram. This policy is consistent with the Bureau of Labor Statistic's guidelines for recording hearing losses.

This office will not be able to provide you with data related to citations issued in Region IV for not recording hearing losses because recordkeeping violations are not indexed by injury and illness type. Thus, in order to satisfy your request, it would be necessary to examine all cases involving recordkeeping violations.

If you have any questions regarding this policy, please contact Sol Raines or Russ Digger.

Sincerely,

R. DAVIS LAYNE
Regional Administrator

U.S. Department of Labor Occupational Safety and Health Administration
Washington, DC 20210

MARCH 23, 1990

MEMORANDUM FOR: REGIONAL ADMINISTRATORS
FROM: LEO CAREY DIRECTOR
OFFICE OF FIELD PROGRAMS
SUBJECT: Draft CPL/ Recording of Hearing loss on
OSHA 200

The attached draft CPL provides guidelines for enforcing the recording by employers on the OSHA Form 200 of incidents or occupational hearing loss. The OSHA position is that a standard threshold shift (STS) of 10 db or more is recordable on the OSHA 200 lcg. The directive contains enforcement procedures for CSHO's to follow during an inspection. The Directorate of Compliance Programs needs a quick turnaround on this because they are under pressure from the SOL to get the directive issued ASAP, as it is essential in the settlement negotiations regarding the Budd Company egregious case.

The draft directive is being forwarded to you for comment. However, since it doesn't involve any programmatic change, other than providing the enforcement procedures for citing the recordkeeping violation, comments beyond the regional office may not be necessary.

Please review the draft directive and provide appropriate comments to Jim Roberts of my staff by close of business Tuesday, April 3. In your response, please reference OFP #5637.