

## HEARING LOSS RECORDABILITY ISSUES



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### Purpose of Illness and Injury Reporting

- To track work-related injuries and illness for statistical purposes.
- The recordability determination process is not the same as hearing loss prevention strategies.

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### Purpose of Illness and Injury Reporting

- Compliance with recordkeeping rules is important to the ultimate goal of tracking incidence of work-related hearing loss however there are also best practices to work toward preventing noise induced hearing loss.

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## Recording Criteria

OSHA and FRA:

- STS, 10dB average shift from baseline at 2k, 3k, and 4k (age correction allowed) **AND**
- 25dB average thresholds on current test at 2k, 3k, and 4k (hearing loss)
- IN THE **SAME** EAR

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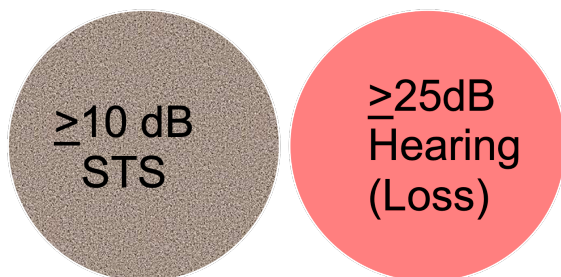
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## OSHA/FRA Recordable Shifts – 2 required components



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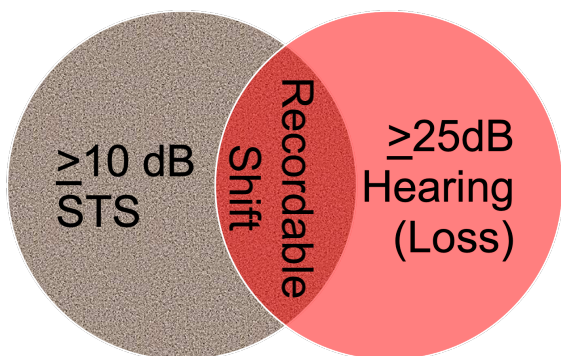
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## OSHA/FRA Recordable Shifts



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## Reporting Criteria

MSHA:

25dB average shift  
from STS baseline at  
2k, 3k, and 4k (age  
correction allowed)




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### OSHA/FRA # 1

	2k	3k	4k	Avg Shift	Current test Avg	OSHA/FRA (10 dB) STS?	OSHA/FRA Recordable ?
Baseline	10	15	15				
Current	10	25	25	6.67	20	No	No

$$0 + 10 + 10$$

$$20/3 = 6.67$$

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### OSHA/FRA # 2

	2k	3k	4k	Avg Shift	Current test Avg	OSHA/FRA (10 dB) STS?	OSHA/FRA Recordable ?
Baseline	0	10	15				
Current	10	25	25	11.67	20	Yes	No

$$10 + 15 + 10$$

$$35/3 = 11.67$$

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### OSHA/FRA # 3

	2k	3k	4k	Avg Shift	Current test Avg	OSHA FRA (10 dB) STS?	OSHA/FRA Recordable ?
Baseline	15	15	20	15	31.67	Yes	Yes
Current	25	30	40				

$$10 + 15 + 20$$

$$45/3 = 15$$

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### MSHA # 1

	2k	3k	4k	Avg Shift	MSHA (10 dB) STS?	MSHA (25dB STS) reportable?
Baseline	15	20	20	5	No	No
Current	15	25	30			

$$0 + 5 + 10$$

$$15/3 = 5$$

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### MSHA # 2

	2k	3k	4k	Avg Shift	MSHA (10 dB) STS?	MSHA (25 dB STS) reportable?
Baseline	0	10	15	11.67	Yes	No
Current	10	25	25			

$$10 + 15 + 10$$

$$35/3 = 11.67$$

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### MSHA # 3

	2k	3k	4k	Avg Shift	MSHA (10 dB) STS?	MSHA (25 dB STS) reportable?
Baseline	0	0	0	26.67	Yes	Yes
Current	30	25	25			

$$30 + 25 + 25$$

$$80/3 = 26.67$$

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### Reference Audiogram

- Original baseline, or revised baseline
- OSHA baseline revision requirements
  - Audiologist or physician authorization only for
    - “persistent” worsening in hearing, or
    - “significant” improvement in hearing from the original baseline
  - Each ear must be revised separately

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### Optional 30 Day Retests

- Retest(s) may be performed within 30 days. *Optional.* If retest for OSHA:
  - Does **not** confirm: don't record
  - **Confirms**: record within 7 days of the retest
  - **Not conducted**: record within 7 days of annual test
- If subsequent testing indicates that an STS is not persistent, you may erase or line-out the recorded entry.

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## Work - Relatedness

Only work-related shifts need to be recorded/  
reported.

If a workplace event/exposure:

- caused hearing loss
- contributed to an existing hearing loss
- significantly aggravated an existing hearing loss

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## Recordkeeping Policies and Procedures Manual (OSHA Instruction CPL 02-00-135)

**Question 10-4.** What rules must an employer ensure that a physician or other licensed health care professional use to make a determination that a hearing loss case is not work-related under section 1904.10(b)(6)?

*Physician or other licensed health care professional (PLHCP) must follow the rules set out in 1904.5 to determine if the hearing loss is work-related.* If an event or exposure in the work environment either **caused** or **contributed to** the hearing loss, or significantly aggravated a pre-existing hearing loss, the physician or licensed health care professional must consider the case to be work related. It is not necessary for work to be the sole cause, or the predominant cause, or even a substantial cause of the hearing loss; any contribution from work makes the case work-related. *The employer is responsible for ensuring that the PLHCP applies the analysis in Section 1904.5 when evaluating work-related hearing loss,* if the employer chooses to rely on the PLHCP's opinion in determining recordability.

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## Determining Cause

- ☞ Determined by the professional's (audiologist, physician or other licensed healthcare provider) discretion.
- ☞ Case-by-case review
- ☞ NHCA guidelines for recording hearing loss-  
Approved by NHCA EC April 26, 2011
- ☞ CAOHC update articles
- ☞ ACOEM and AAA position statements

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## Resources

AMERICAN ACADEMY OF AUDIOLOGY   
*How's your hearing? Ask an Audiologist!*

AAA: Position Statement- NIHL (2003)

[http://audiology-  
web.s3.amazonaws.com/migrated/nihlprevention.pdf\\_53996fb4c1ca13.  
61907521.pdf](http://audiology-<br/>web.s3.amazonaws.com/migrated/nihlprevention.pdf_53996fb4c1ca13.<br/>61907521.pdf)

American College of Occupational and  
Environmental Medicine: Role of the  
Professional Supervisor Position Statement (2012)



[http://www.acoem.org/uploadedFiles/Public\\_Affairs/Policies\\_And\\_Position  
Statements/Occupational%20Noise-Induced%20Hearing%20Loss.pdf](http://www.acoem.org/uploadedFiles/Public_Affairs/Policies_And_Position<br/>Statements/Occupational%20Noise-Induced%20Hearing%20Loss.pdf)

CAOHC

<http://www.caohc.org>



**NHCA**  
NATIONAL HEARING CONSERVATION ASSOCIATION

NHCA: Position Statement (2011)

[https://www.hearingconservation.org/assets/docs/Guidelinesforworkrelated  
nessdraft.pdf](https://www.hearingconservation.org/assets/docs/Guidelinesforworkrelated<br/>nessdraft.pdf)

## Determining Cause

Case-by-case review:

Ⓢ Audiometric data

Ⓢ Noise exposure

Ⓢ Other environmental  
exposure

Ⓢ Nonoccupational noise  
exposure

Ⓢ Hearing Protection

Ⓢ Medical case history



## CASE-BY-CASE REVIEW

Q: Has hearing loss been established?

Q: Commensurate with occupational  
noise exposure?

Q: Was hearing protection properly fitted  
and used?

Q: Are symptoms claimed plausible?

Is it likely, or not, that the workplace noise has  
contributed to the hearing change?

Q: Has hearing loss been established?

- Ⓢ Must have *reliable* audiometric data to identify hearing loss and hearing shifts.
- Ⓢ Does the audiogram “look like noise exposure”?
  - Is there a written diagnosis of a medical problem causing the hearing loss?
  - Noise configuration
  - Progression/trajectory of the loss
  - Symmetry of the loss




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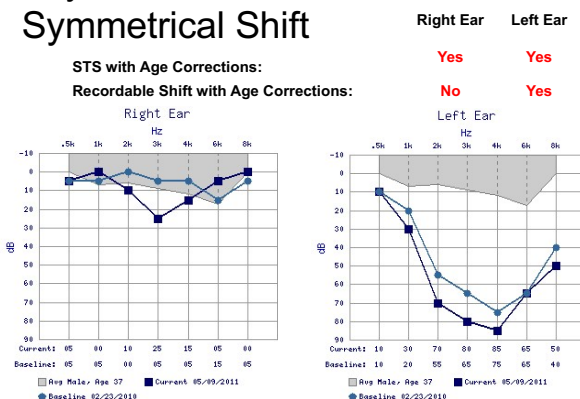
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## Asymmetrical Loss / Symmetrical Shift




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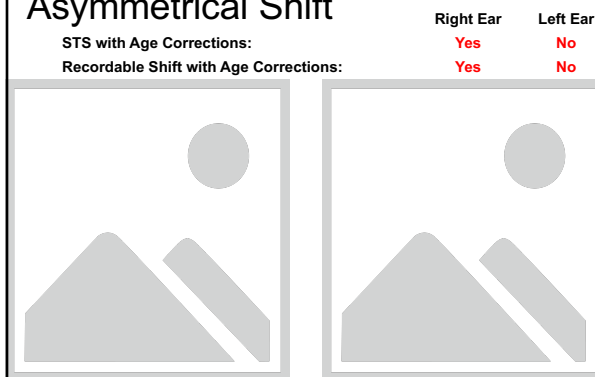
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## Symmetrical Loss / Asymmetrical Shift




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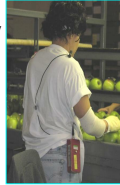
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Q: Commensurate with occupational noise exposure?

- ☞ Over the tenure of employment
  - Job history, noise exposure data
  - Is there noise exposure (>80dBA)?
- ☞ Area measurements, noise dosimetry
  - Consider noise control efforts
  - Extended work shifts > 8 hours
- ☞ Other environmental exposures
  - solvents, heavy metals, tobacco smoke



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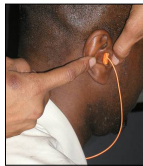
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Q: Was hearing protection properly fitted and used?

- ☞ worn consistently and correctly,
- ☞ fitted properly, well-sealed
- ☞ routinely replaced as needed,
- ☞ Not removed periodically for communication or other purposes.
- ☞ Attenuation- is it sufficient for the employee's noise exposures w/o causing overexposure (objectively measured?)



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**1904.5(b)(2): Are there situations where an injury or illness occurs in the work environment and is not considered work-related?** Yes, an injury or illness occurring in the work environment that falls under one of the following exceptions is not work-related, and therefore is not recordable.

- |      |   |
|------|---|
| (ii) | The injury or illness involves signs or symptoms that surface at work but result <b>solely</b> from a non-work-related event or exposure that <u>occurs outside</u> the work environment. |
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## OSHA Recordability: Step-by-Step

1. Is there STS and hearing loss in the same ear? If yes, then
2. Does a 30-day retest confirm the shift & loss (or no retest conducted)? If yes, then
3. Can the contribution of workplace noise be completely ruled-out out? If not, then
4. Record case on OSHA 300 Log (within 7 days)

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## Be Proactive!

- The recordability determination process is unrelated to hearing loss prevention strategies
- Conduct annual tests during the work shift. Retest (“on rested ears”) to identify TTS
- Hearing protection use at work
  - Consistent use?
  - Correct use?
  - Correct product?
- Training – are employees “taking it home”?
- Other interventions: “Imminent” STS, non-age corrected STS

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