

Managing common concerns in hearing conservation

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Opening Points

- This presentation is based on selected current national requirements. Other country or local requirements may be different. Always consult User Instructions and follow local laws and regulations.
 - This presentation contains an overview of general information and should not be relied upon to make specific decisions. Completing this program does not certify proficiency in safety and health.
 - Information is current as of the date listed for this presentation, and requirements can change in the future.
 - This presentation should not be relied upon in isolation, as the content is often accompanied by additional and/or clarifying information or discussion.
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- This June 17, 2019 webinar was created for RAECO RENTS webinar series. Intended audience is safety professionals.

Learning objectives:



By the end of this webinar, the participant will be able to:

- Identify 3 common reasons managing hearing conservation programs (HCPs) can be ineffective,
- Discuss a best practice in hearing loss prevention known to improve hearing protection use,
- Describe at least one tool to help manage a HCP.

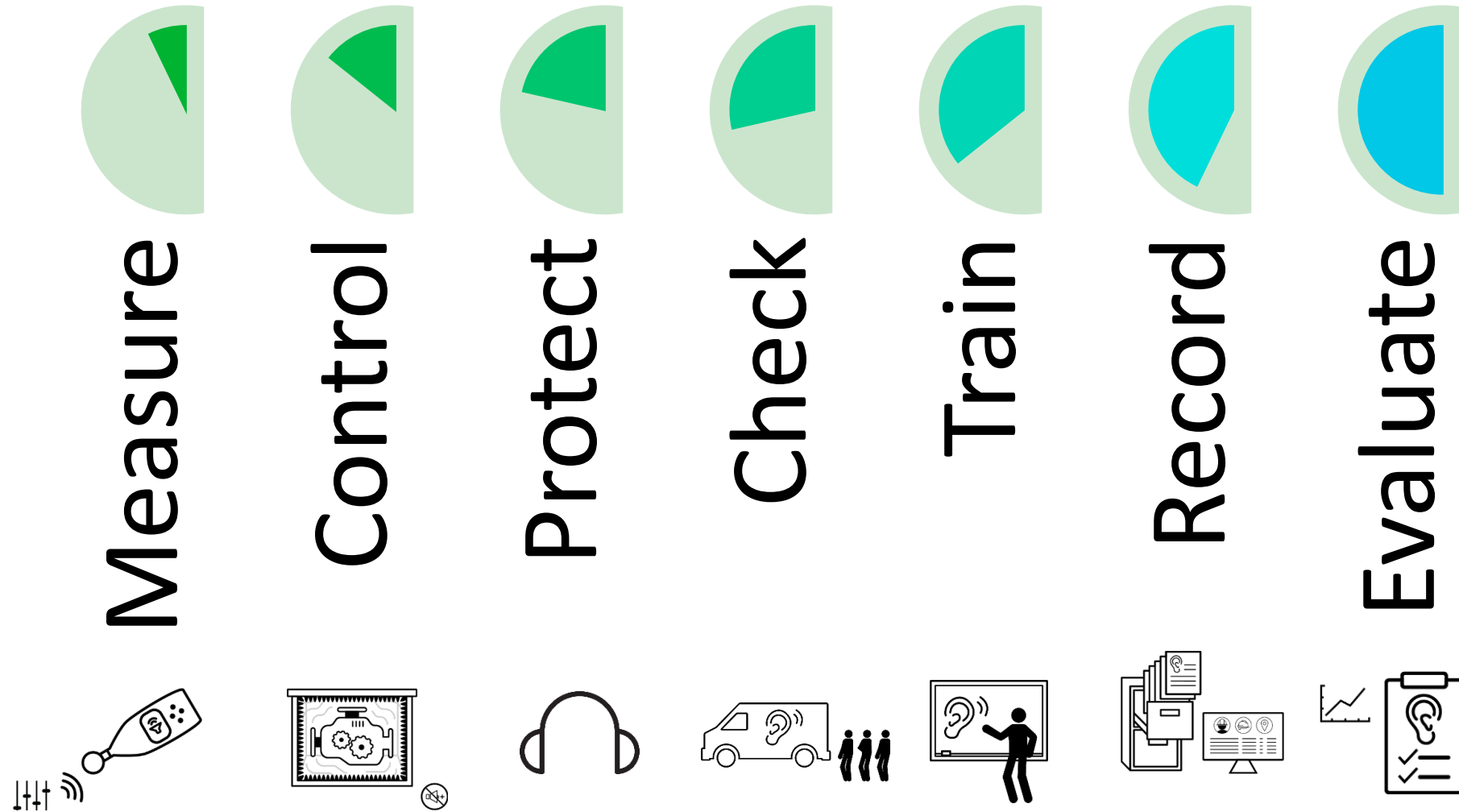
Selected U.S. Federal Regulations: Hearing Conservation Program (HCP)



Federal Agency	Acronym	Regulation
Department of Defense	DoD	Instruction No. 6055.12
Occupational Safety & Health Administration	OSHA	
Mine Safety & Health Administration	MSHA	30 CFR Part 62 MSHA
Federal Railroad Administration	FRA	49 CFR 227 and 229

Employers must implement a *continuous, effective*, hearing conservation program...

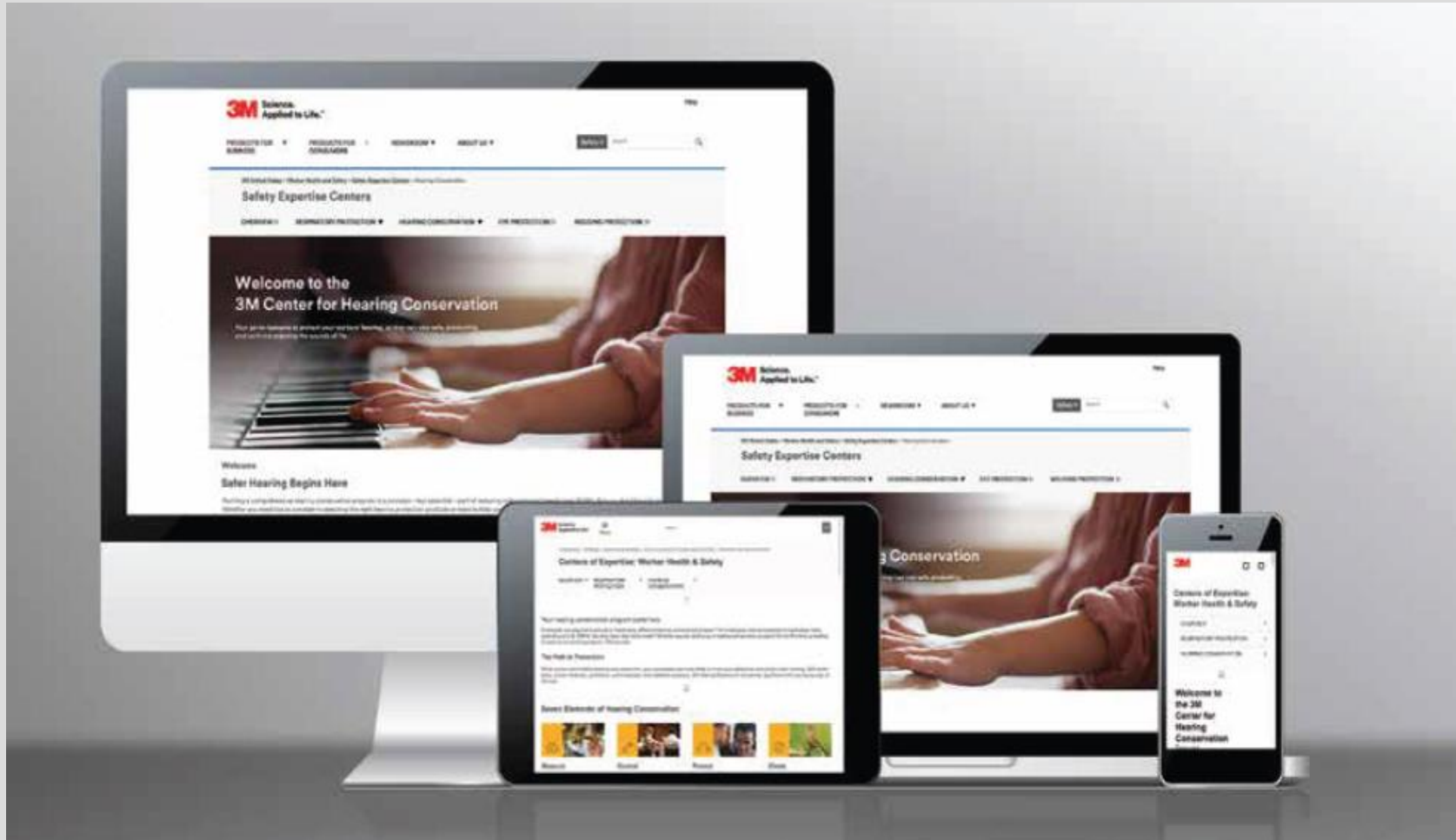
7 Elements of Hearing Conservation Program



Hearing Loss Prevention—Simple, *But Not Always Easy*



3M Center for Hearing Conservation



www.3M.com/CHC

Seven Elements of Hearing Conservation



Measure

Accurate measurement of employee exposure to hazardous noise is essential. Conducting noise surveys using 3M Detection Solutions can help you identify who is at risk, determine who needs to be included in your program and select the proper controls and protective equipment to help reduce the risks.

[Learn About Noise Measurement](#)



Control

Certain operations and machinery create high noise levels. But do they have to? Equipment and processes can be designed or altered to be quieter, reducing the number of employees in your conservation program.

[Learn About Noise Control](#)



Protect

Hearing protectors play an important role in hearing conservation. They must be comfortable, fit properly and provide adequate protection for the environment. Compatibility with other PPE and the workers' ability to communicate must also be considered. Including individual fit testing of earplugs and earmuffs in your program can help you educate your employees on the importance of hearing protection and validate the Personal Attenuation Rating (PAR) achieved by each worker.

[Learn About Hearing Protection](#)

[Hearing Protector Selection](#)

[Hearing Protector Use & Care](#)



Check

Are your employees showing symptoms of noise-induced hearing loss? It's important to routinely use standardized measurement procedures to check their hearing to detect and record changes, so you can take steps to prevent permanent hearing loss.

[Learn About Hearing Checks](#)

[Audiometric Testing Basics](#)



Train

Because noise-induced hearing loss usually happens gradually and the symptoms are not always apparent, it is vital to educate employees on the effects of exposure to loud noise and train them to properly use hearing protection. You may be able to improve the success of your hearing loss prevention efforts by strengthening worker training and motivation programs.

[Learn About Training Programs](#)



Record

Keeping confidential, accurate and up-to-date records of noise surveys, actions taken, instrument calibrations, audiometric tests, attenuation ratings and training helps you manage and audit your program. And helps protect your company and your employees in the long run.

[Learn About Recordkeeping](#)



Evaluate

Make sure your hearing conservation program is working with regular program evaluations that include employee feedback, responsibility reviews and cost analysis. This will identify trends, magnify problem areas and drive improvement.

[Learn About Program Evaluations](#)



Center for Hearing Conservation Glossary

To access the full list of Hearing Conservation Key Terms that are covered across the Center for Hearing Conservation, download the 3M Center for Hearing Conservation Glossary.

[Download Glossary \(PDF, 369.50 KB\)](#)

Common reasons HCPs can be ineffective

- Inadequate communication and coordination among personnel involved in the Hearing Conservation Program (HCP)
- Lack of emphasis on noise control
- No meaningful training for Hearing Protector Device (HPD) fitters and re-issuers
- Inadequate or inappropriate selection of HPDs in stock
- Over-reliance on the Noise Reduction Rating (NRR) in choosing HPDs
- Failure to individually fit and train each HPD wearer
- Over-reliance on contractors to provide HCP services
- Failure to use the audiometric monitoring results to educate and motivate employees
- Insufficient or erroneous information used to make HCP decisions

Concern:

- Inadequate communication and coordination among personnel involved in the Hearing Conservation Program (HCP)

Royster & Royster, 1989

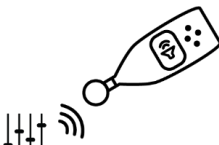


Identify team members by learning who is responsible for what...

Who is Responsible?

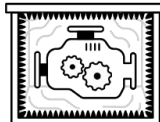

Table of HLPP tasks and responsible team members.

Complete to identify HLPP team.

Component	Hearing Loss Prevention Program Task	Responsible Team Member
 Measure	Conduct area noise level survey	Laurie Wells
	Routine update of area noise level survey	Laurie Wells
	Inform workers in advance of noise survey	Laurie Wells
	Inform workers' representative in advance of noise survey	Laurie Wells
	Conduct noise dosimetry for jobs/workers with variable noise or changing locations	Laurie Wells
	Communicate noise survey information to workers	???
	Integrate noise survey information into audiometric database	
	Calibrate and maintain noise survey equipment	
	Identify which jobs/workers are required to be in the HLPP based on noise monitoring results	


Wells, AIHA Noise
Manual 6th Ed. in press

Identify team members by learning who is responsible for what...

<div>Control</div> 	Identify and <u>make arrangements</u> for the person or contractor to conduct noise control survey		
	<div>Protect</div> 	Select variety of HPD (earplugs and earmuffs) appropriate for noise at the workplace.	
		Conduct HPD fit testing and/or fitting of HPD for newly hired workers	
		Conduct HPD fit testing and/or refitting of HPD for workers annually	
		Conduct daily or periodic PPE checks	
		Enforce HPD use policy	
		Purchase and maintain supply of HPD	
		Replace deteriorated, damaged, or missing HPD	
		Assist workers in solving problems related to HPD	
		Re-evaluate need for new or additional HPD offerings	<i>Wells, AIHA Noise Manual 6th Ed. in press</i>

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Identify team members by learning who is responsible for what...

 Check	Perform role of the Professional Supervisor (PS) of the audiometric database (must be audiologist or physician)	
	Schedule routine audiometry for workers in the HLPP	
	Conduct baseline audiometry	
	Conduct annual audiometry	
	Perform otoscopy	
	Determine audiogram validity and discuss results of audiometry with worker	
	Identify problem audiograms to be reviewed by the PS	
	Complete follow-up actions according to PS recommendations	
	Arrange appointments and actions needed for occupational medical	

Identify team members by learning who is responsible for what...

Possible team members:

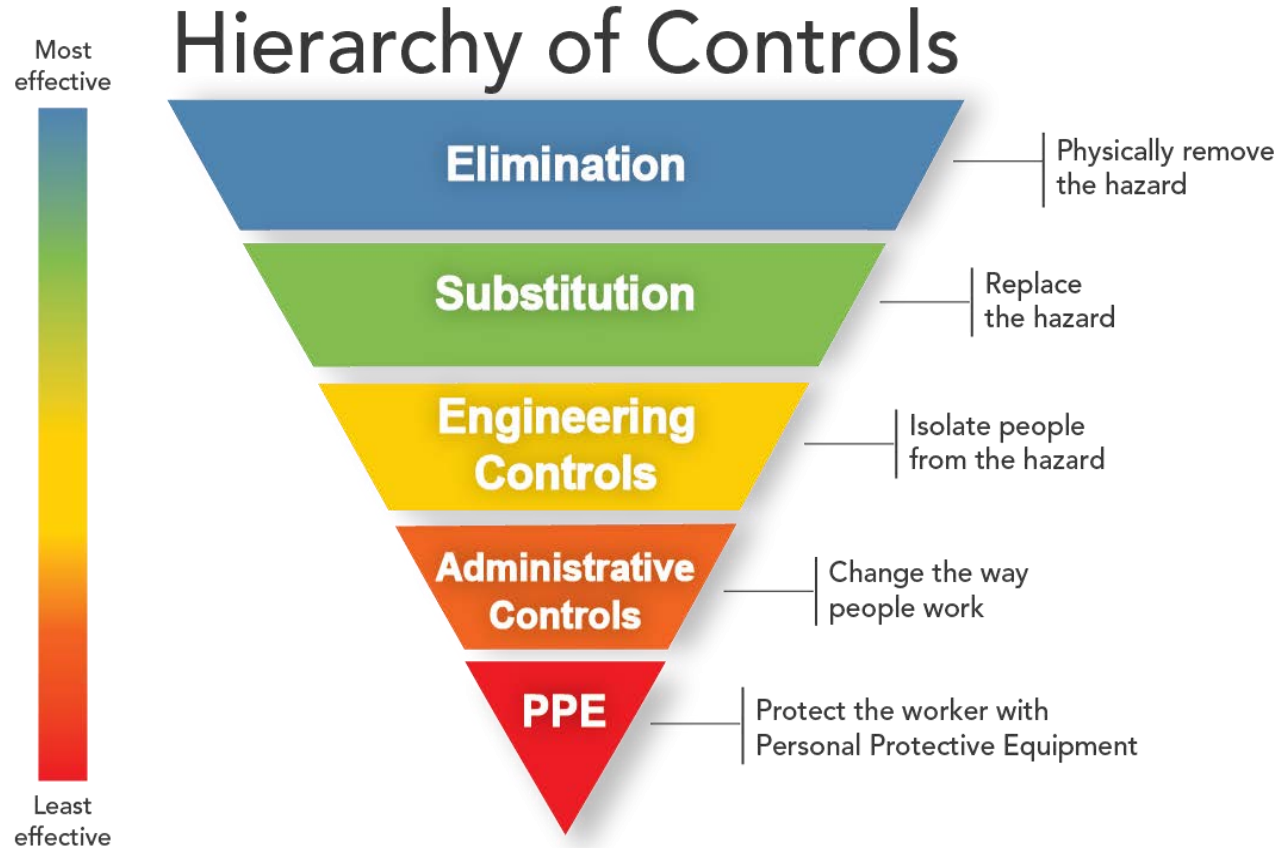
- Audiologist
- Business leader/Management
- Certified Occupational Hearing Conservationist
- Certified Safety Professional
- Human Resources personnel
- Industrial hygienist
- Noise control engineer
- Noise survey technician
- Nurse
- Physician
- Purchasing agent
- Supplier
- Trainer
- Worker



Concern:

- Lack of emphasis on noise control

Royster & Royster, 1989



<http://www.cdc.gov/niosh/topics/hierarchy/default.html>

Manage

Lead with planning noise control projects and expecting results



<http://www.safeinsound.us>



Barb Menard, CIH, accepting the 2013 Safe In Sound Award on behalf of Johns Manville.

Concern:



- No meaningful training for Hearing Protector Device (HPD) fitters and re-issuers
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Royster & Royster, 1989

Implement hearing protection fit testing

Key Benefits of Fit Testing

- Identify At-Risk Population
- Train & Motivate
- Selection Tool
- Verify Performance
- Train-the Trainer
- Provides Documentation
- STS follow up
- Audit hearing conservation areas



What Does OSHA Say About Fit Testing?

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BEST PRACTICE BULLETIN:

Hearing Protection-Emerging Trends: Individual Fit Testing

Much has been learned on the efficacy of hearing protection for individual users since the Occupational Safety and Health Administration (OSHA) Hearing Conservation Standard (29 CFR 1910.95) was issued in 1983. The Standard requires employers to select one of the methods listed in Appendix B: to evaluate the adequacy of hearing protector attenuation (29 CFR 1910.95 (j)(1)). One of the methods for evaluating hearing protector attenuation is the Noise Reduction Rating (NRR) developed by the U.S. Environmental Protection Agency (EPA). The NRR is a single number intended to represent the amount of attenuation a given hearing protector will provide. The EPA requires the NRR to be listed as a label on the package of each hearing protector (40 CFR 211 Subpart B). The NRR is a laboratory based method for calculating the amount of attenuation provided by hearing protection.

OSHA, NIOSH, and National Hearing Conservation Association (NHCA) published a Best Practice Bulletin recognizing the benefits of fit testing in 2008.

Alliance Recommendation for Fit Testing_Final 2008.05.13

<https://www.osha.gov/laws-regs/standardinterpretations/2017-10-20>

What Does OSHA Say About Fit Testing?

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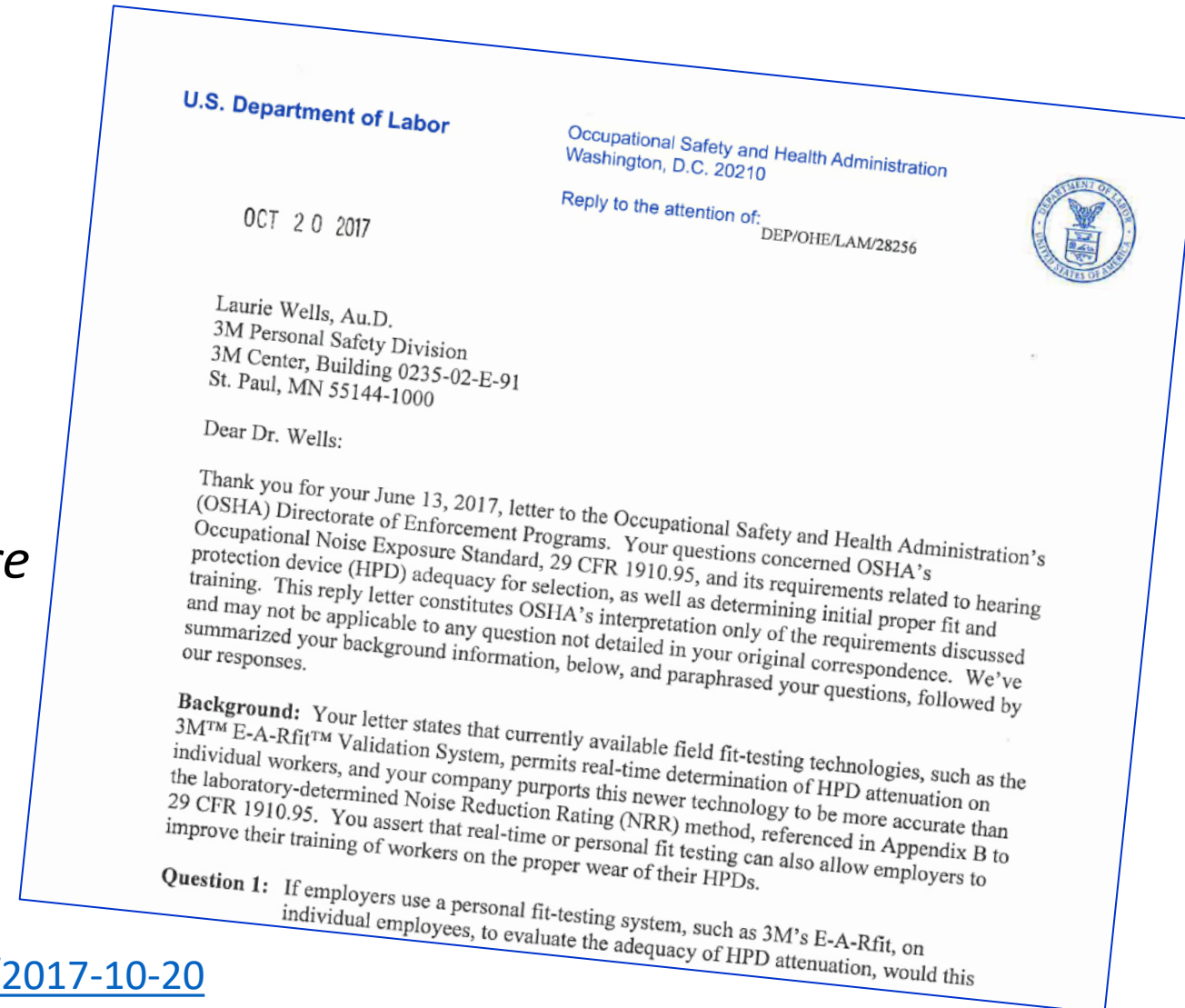
Letter of Interpretation
October 20, 2017

1910.95(i)(5)

The employer shall *ensure proper initial fitting and supervise the correct use* of all hearing protectors.

“Employers may use any means that are most suitable and effective, which may include the use of a personal fit-testing system.”

<https://www.osha.gov/laws-regs/standardinterpretations/2017-10-20>



Implement hearing protection fit testing

Fit test results help to manage

- Appropriate HPD offerings
- Improved training outcomes
- Attenuation using the Personal Attenuation Rating, rather than NRR
- Meeting compliance requirements for ensuring proper initial fit and correct use of HPD*

*OSHA Letter of interpretation October 20, 2017



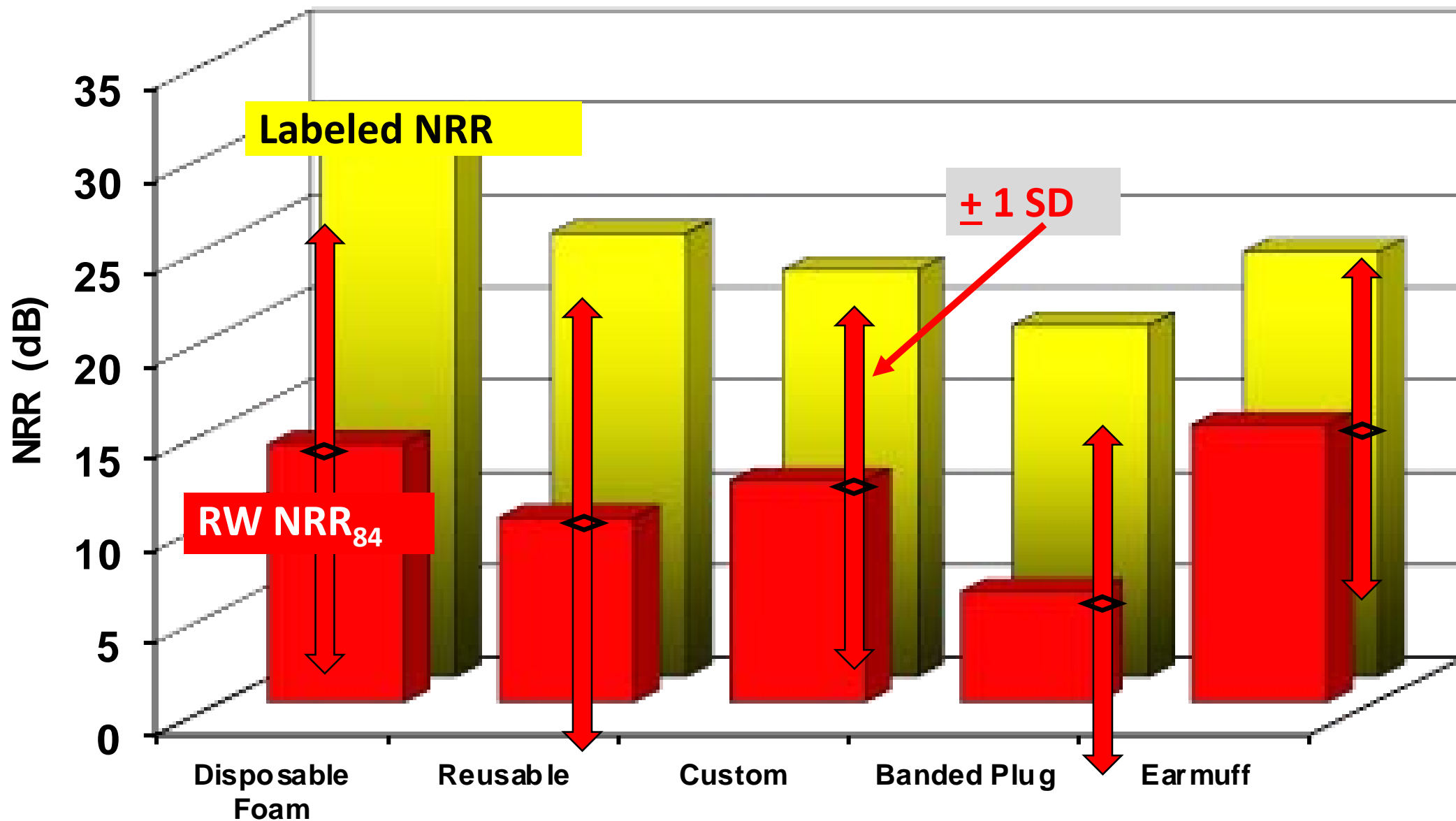
Concern:

- Insufficient or erroneous information used to make HCP decisions

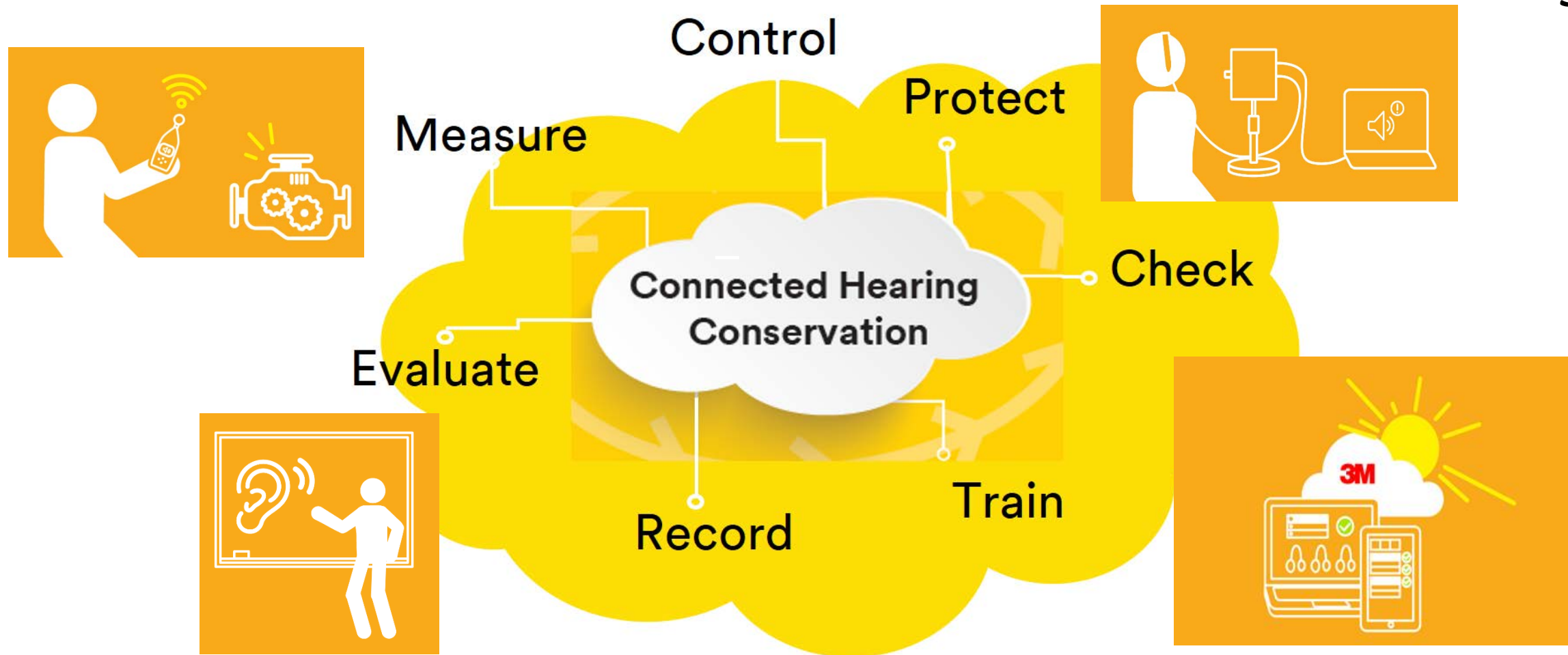
Royster & Royster, 1989



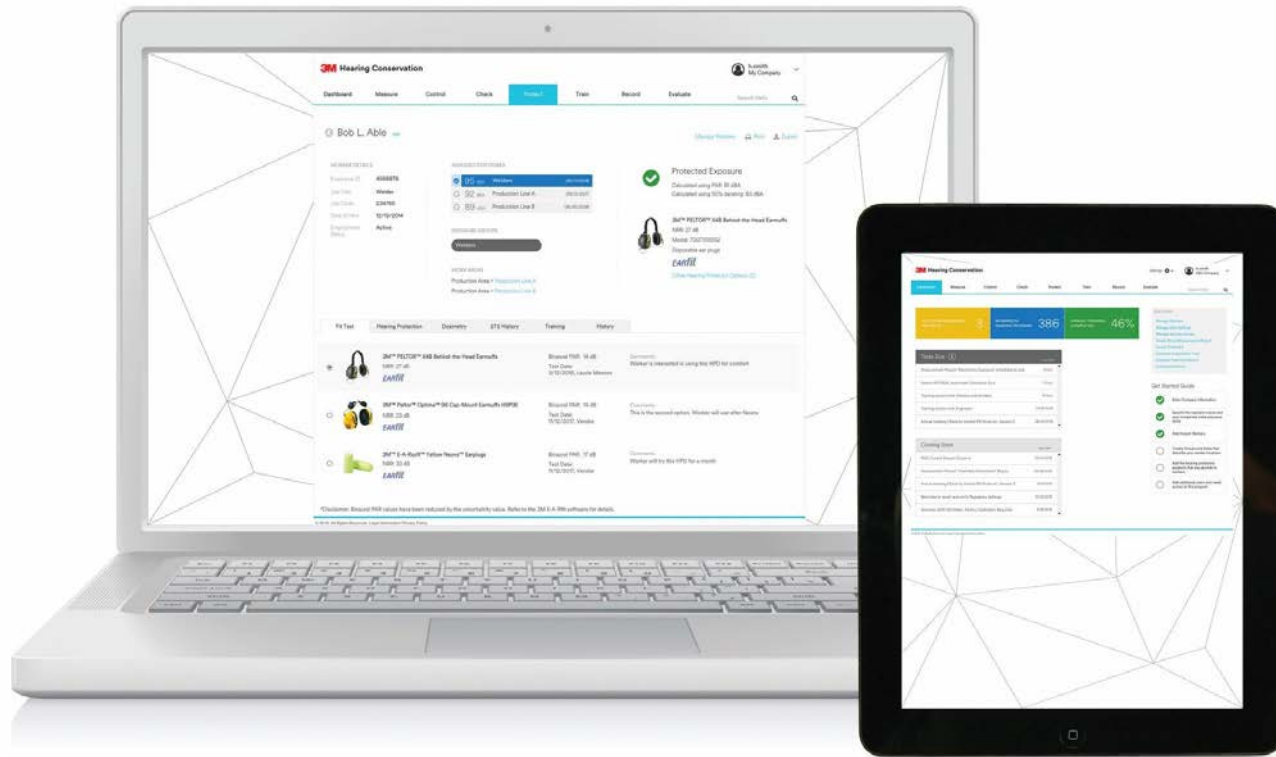
Noise Reduction Rating (NRR) Compared to Field Performance



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3M™ Hearing Conservation Program Manager



- Designed to make hearing conservation program management easier.
- Keeps records in one place.
- Provide alerts and notifications to help keep you in compliance.

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Selected references

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OSHA (2008). “Best Practice Bulletin: Hearing Protection - Emerging Trends: Individual Fit Testing,” OSHA.NIOSH/NHCA/OSHA Alliance. https://www.hearingconservation.org/assets/docs/AllianceRecommendationForFitTesting_Final.pdf

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