



Self-managed Hearing Health eTool

An integration of FDA, OSHA, NIOSH directives*

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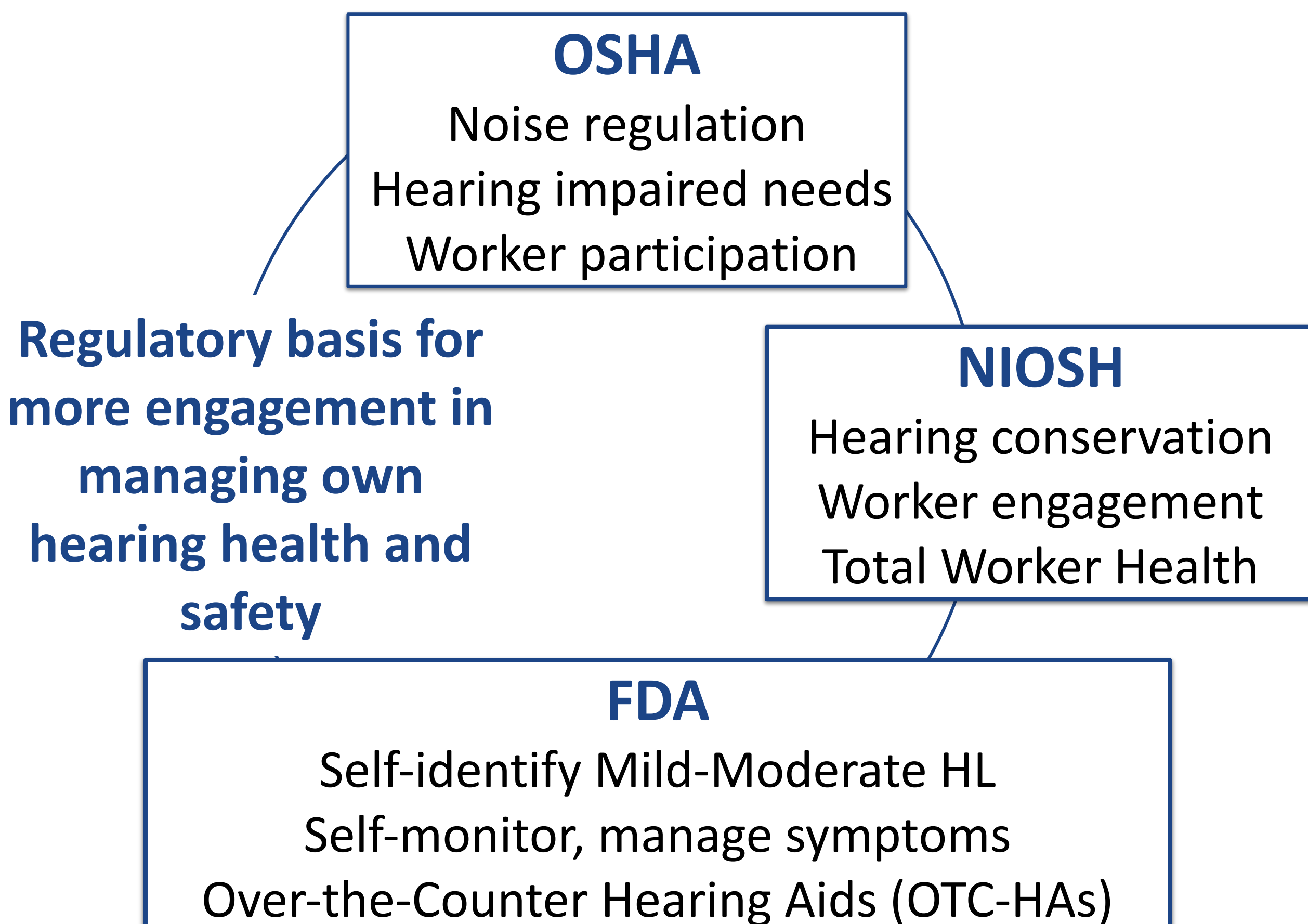
*Content updated per FDA OTC Hearing Aid Final Rule that was published after abstract submission

Critical Public Health Need

- ~30M** US adults with hearing loss (HL), impairing day-to-day functioning; rising incidences in population < 65 years old
- ~80%** At risk of HL progression leading to lower productivity, lower pay, depression, dementia
- 1B+** Young adults, globally, at risk of noise-induced HL due to lifestyle - represents current and future workforces

Need for tools to complement Occupational Hearing Conservation Program

Growing Importance of Self-management



Proposed eTool for Self-Management of Hearing Health

Hearing Health eTool



- Hearing Health**
 - Hearing and HL
 - Personal impacts
 - Job and social issues
 - Other issues such as fatigue, fall risk, injuries
 - Health impacts such as depression, dementia
 - Protective and preventive measures
- Risk Check**
 - Noise: Work and outside work
 - Ototoxicants: Chemicals, Medications
 - Personal: e.g. age, race, gender, infections, head impacts
 - Manageable: e.g. medical treatments, vaccinations, habits
- Symptom Check**
 - Qs from FDA, NIDCD, OSHA on personal experiences
 - Mild-Moderate HL, Advanced HL, Single-sided HL, Tinnitus, Hyperacusis
 - Red Flag symptoms requiring medical consult
- Your program**
 - ✓ Personal Safety Analyses
 - ✓ Self-Protect from all day noise, ototoxicants
 - ✓ Self-Identify HL, Red Flags, related health conditions
 - ✓ Self-Treat: HAs (like OTC), Assistive Technologies
 - ✓ Medical consult
 - ✓ Work safety and accommodations needs
- Keep Track**
 - + Monitor symptoms, take actions
 - + Healthy lifestyle and motivation questionnaire
 - + HA use and Quality of Life questionnaire
 - + Progress with total (work/nonwork) health & safety

Integration into Occupational Safety

Addition to Hearing Safety Training
Supports fitness for duty and self-care

Hearing loss is (still) a common work-related illness

Workplace: High direct + indirect costs (OSHA Safety Pays calculator)

Worker: High cost and limited access to early HL treatment (e.g. HAs), HL progression

Hearing Health eTool furthers workplace safety & health

Workplace:

Low-cost integration of new federal rule for worker health
Complements required hearing safety training

Worker:

Private, easy, self-managed investment in personal health
Encouraged to support workplace safety, promote noise control initiatives, personal protection
Advocate safety & self-care to co-workers, family, community

eTool development

Safety and Regulatory input: CAOHC and NSC Advanced Safety certified professional, FDA strategist, Audiologists, HA users

Wide demographic testing: Age, occupation, hearing needs, lifestyle

Improving access: Easy to follow, interactive, Spanish version

Planned presentation: 2023 OSHA Safe and Sound Week

References

1. OSHA 1910.95. Occupational noise exposure
2. FDA Final Rule. Establishing OTC Hearing Aids
3. NIOSH Total Worker Health program
4. NIDCD Hearing, Ear infections and Deafness
5. WHO World Report on Hearing



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