



FOOD & BEVERAGE INDUSTRY NOISE

TIPS TO PROTECT WORKERS AGAINST AMERICA'S
#1 WORK PLACE DISEASE: HEARING LOSS

HAZARDOUS NOISE IS PERVASIVE IN THE FOOD & BEVERAGE MANUFACTURING INDUSTRY

85 decibels
or above,
is considered hazardous noise¹

1.64M+
of workers in U.S. food
and beverage manufacturing²

2X
Hearing loss rates are almost twice
as high in food production as
manufacturing overall³

Food manufacturing workers experience the
third-highest rate of occupational hearing loss⁴

#1 33.8
incidents
Primary Metal Manufacturing

#2 24.7
incidents
Air Transportation

#3 22.9
incidents
Food Manufacturing

⁴Per 10,000 full-time workers

HEARING LOSS RATES/ 10,000 FULL-TIME EMPLOYEES³

30.9 CASES
BREAKFAST CEREAL
MANUFACTURING

33.2 CASES
SUGAR
PRODUCTION

46.1 CASES
FROZEN FRUIT,
JUICE, VEGETABLE

66.4 CASES
BEET SUGAR
PRODUCTION

68.2 CASES
ANIMAL SLAUGHTER
(EXCLUDING POULTRY)

COMMON SOURCES OF HAZARDOUS NOISE:

- Bottle filling, labeling
- Bread slicing
- Product impact on hoppers wrapping, cutting, bagging
- Canning
- Packaging conveyance
- Bowl choppers
- Pneumatic noise, compressed air
- Milling operations
- Blast-chillers

NIHL

Unprotected exposure to hazardous noise results
in **NOISE-INDUCED HEARING LOSS (NIHL)**

NIHL IS THE MOST COMMON OCCUPATIONAL DISEASE IN THE U.S.⁵

4P^s



**PAINLESS
PERMANENT
PROGRESSIVE
PREVENTABLE**

Because **NIHL is painless and progressive**, it often
goes **unnoticed** until permanent damage has occurred

NIHL hurts workers:

- Impairs communication with family, public, coworkers
- Leads to social isolation, withdrawal
- Reduces quality of life
- Diminishes ability to monitor work environment
- Reduces productivity
- Increases accident risk
- Incurs lifelong expenses for hearing aids
- Increases risk of high blood pressure, high cholesterol, heart disease⁶

NIHL is caused by:

- Prolonged and/or repeated exposure to hazardous noise
- A single high-intensity impulse noise exposure

Effects of NIHL:

- Temporary hearing loss
- Permanent hearing loss
- Unrelenting tinnitus (ringing in the ears)

242 million



1.5 million

Annual penalties for not
properly protecting workers²

Annual spent in workers' comp
for hearing loss disability³

100%
PREVENTABLE

Occupational hearing loss is entirely preventable with today's
hearing loss prevention strategies and technology⁹

OSHA

OSHA recognizes the dangers of occupational noise exposure

- OSHA 29 CFR 1910.95 requires employers to reduce excessive noise via feasible controls
- When controls cannot reduce noise to permissible levels, OSHA requires employers to provide a variety of suitable hearing protectors
- Refer to OSHA 29 CFR 1910.95 for complete details

TIPS

Protecting Food & Beverage workers' hearing is vital

Here's how:

- Offer various types of hearing protectors – so workers can select a personally comfortable, effective solution
- Offer various sizes of earplugs to fit each individual's unique ear canal size, shape
- Educate your workforce – so everyone knows the importance and proper use of hearing protection
- Conduct earplug fit-testing -- to ensure workers learn how to properly fit earplugs for complete protection

Protecting your process material is vital, too.
Contamination can lead to:

- Costly downtime
- Material waste
- Product recall
- Damaged corporate reputation
- Consumer injury, illness or death
- Lawsuit

Avoid costly contamination and ensure quick detection
of **Foreign Materials (FM)**:

- Choose corded earplugs to reduce risk of FM contamination
- Select earplugs with machine-detectable features compatible with your process
- Opt for hypoallergenic, washable, nonporous solutions to promote hygiene

SOLUTIONS



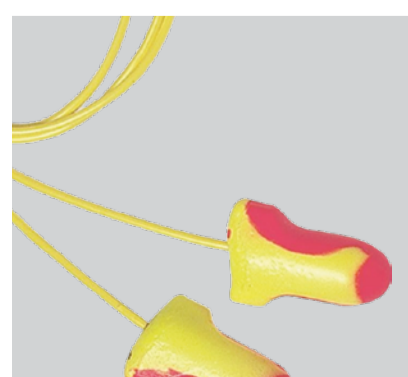
Metal Detectable Disposable Earplugs

- Disposable solution intended for single-use
- An economical choice containing embedded metal
- Ideal for use where metal detection is a primary method for locating and rejecting a FM



Metal Detectable Reusable Earplugs

- Ideal for full-time employees to reuse over the course of 2-4 weeks
- For use where contamination by FM is unacceptable
- Metal makes it easy for detection and compliance checks



Visually-Detectable Corded Earplugs

- Features contrasting colors for visual detection
- Disposable solution is an economic choice for users
- For use anywhere visual and optimal technology is used to identify a FM