## PEAK HEARING

Professional Audiology Services

# Prevalence of Hearing Loss Among Noise-Exposed Workers in Mining and Oil & Gas Industries

Occupational Health Research Summary 2006-2015

## **Executive Summary**

A comprehensive analysis of hearing loss prevalence among noise-exposed workers in the Mining and Oil & Gas Extraction sectors reveals alarming statistics. With prevalence rates as high as 24% in mining operations, occupational hearing loss remains a critical workplace health issue requiring immediate attention and intervention strategies.

### Study Overview

This large-scale epidemiological study analyzed audiometric data from over 1.4 million noise-exposed workers across Mining and Oil & Gas sectors from 2006 to 2015. The research provides crucial insights into:

- Industry-specific hearing loss prevalence
- Risk factors and exposure patterns
- Effectiveness of hearing conservation programs
- Trends in occupational hearing loss over time

## **Key Statistical Findings**

#### Mining Industry:

• Overall prevalence: 24% of workers show material hearing impairment

• Surface mining: 21.3% prevalence

• Underground mining: 27.8% prevalence

• Coal mining: 25.2% prevalence

• Metal/nonmetal mining: 23.1% prevalence

#### Oil & Gas Extraction:

Overall prevalence: 14% of workers affected

Drilling operations: 18.6% prevalence
Support activities: 15.2% prevalence
Extraction workers: 12.8% prevalence

Age-adjusted rates show hearing loss increases significantly with years of exposure, with workers over 50 showing prevalence rates exceeding 36%.

## Risk Factors Identified

Primary Risk Factors:

- 1. Continuous Noise Exposure: Workers exposed to noise levels >85 dB(A) for 8+ hours daily
- 2. Impact/Impulse Noise: Blast exposure, drilling operations, heavy machinery
- 3. Ototoxic Chemical Exposure: Solvents, heavy metals, carbon monoxide
- 4. Inadequate Hearing Protection: Improper use or insufficient noise reduction rating
- 5. Lack of Administrative Controls: Insufficient rotation schedules, break periods

## **Hearing Conservation Best Practices**

Effective hearing conservation programs should include:

- Annual audiometric testing for all noise-exposed workers
- Proper selection and fitting of hearing protection devices
- Noise exposure monitoring and engineering controls
- Worker education and training programs
- Early intervention for detected hearing shifts
- Regular program evaluation and improvement

## Workers Compensation Implications

Understanding your rights:

- Occupational hearing loss is compensable in all Australian states
- Documentation requirements include baseline and serial audiograms
- Early reporting improves claim success rates
- · Rehabilitation services may be covered
- Legal time limits apply to claims submission

## Peak Hearing Services for Industry

Peak Hearing offers comprehensive occupational audiology services:

- WorkCover audiometric assessments
- Industrial hearing conservation program development
- Custom hearing protection fitting and training
- Noise exposure assessment consultation

- Workers compensation documentation
- Return-to-work hearing rehabilitation

Our mobile testing units can provide on-site services for mining and industrial operations throughout the Mackay, Moranbah, and Clermont regions.

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Contact Peak Hearing Today
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Locations: Mackay | Moranbah | Clermont

This summary is based on published research and is intended for informational purposes. Individual workplace requirements may vary. Consult with occupational health professionals for site-specific recommendations.