

# Noise – Audiometric Tests Fact Sheets



## WHY DO AUDIOMETRIC TESTING?

Exposure to noise in excess of the limits can lead to hearing loss.

Audiometric testing of a worker's hearing is important to the success of a hearing conservation program because it helps determine if occupational hearing loss is being prevented by the noise control measures. Because occupational hearing loss happens gradually over time, workers often fail to notice changes in their hearing ability until a relatively large change occurs. By comparing audiometric tests from past years, early changes can be detected and appropriate protective measures can be implemented to prevent further damage.

## What can workers expect during the test?

During an audiometric test, a worker is seated in the sound-treated booth or other appropriate room and a set of headphones placed over the ears (or inserts placed into the ears). When the worker is ready, the audiometric technician sends a series of tones through the earphones to one ear, and then the other. The worker signals as each tone is heard. The worker's thresholds are recorded for each ear either on a graph, called an audiogram, or numerically on a chart.

The audiogram shows how loud a tone must be to be barely heard by the worker, at a number of different pitches or frequencies. In the early stages of noise-induced hearing loss, the audiogram will show some hearing loss for high-pitched sounds. As hearing loss advances, the audiogram shows a hearing loss for many pitches. Workers with advanced hearing loss will notice the sounds of speech and surrounding sounds becoming muffled.

As part of the audiometric test, workers should expect to be counselled about the necessity, use, maintenance, and replacement of hearing protection

The test results will typically be classified as normal or abnormal. If a worker's test result is found to be normal, no further testing is required until the next scheduled test.

If a worker's test result is found to be abnormal, the audiometric technician may ask the worker for additional medical history, and advise the worker to follow up with an appropriate medical professional for more in-depth testing.

## Who does the audiometric testing?

The employer is responsible for making sure that audiometric tests are conducted by an audiologist or a person who is certified and competent to conduct audiometric testing.

## **Where do you find audiometric testing requirements in Canadian legislation?**

The following are references to the federal, provincial, and territorial legislation where you will find the audiometric testing requirements from the different jurisdictions in Canada. Since legislation is amended from time to time, the jurisdiction should be contacted for the most current information. Where specific requirements are not listed for audiometric testing, please consult with the jurisdiction as it may be covered by other medical surveillance requirements or employer duties.

### **Canada**

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### **British Columbia**

Occupational Health and Safety Regulation  
Part 7 Section 7.8 and 7.9

### **Alberta**

Occupational Health and Safety Code 2009  
Sections 223 and 224

### **Saskatchewan**

The Occupational Health and Safety Regulations, 1996  
Part VIII Section 113

### **Manitoba**

Workplace Safety and Health Regulation  
Part 12 Section 12.5 and 12.6

### **Ontario**

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### **Quebec**

Regulation respecting occupational health and safety  
Division XV Section 136

### **New Brunswick**

Underground Mine Regulation  
Part III Section 12

### **Nova Scotia**

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### **Prince Edward Island**

General Regulations  
Part 8 Section 8.9 and 8.10

### **Newfoundland and Labrador**

Occupational Health and Safety Regulations  
Part VI Section 68

### **Northwest Territories**

Occupational Health and Safety Regulations  
Part 8 Section 116 and 117

### **Nunavut**

Consolidated Occupational Health and Safety Regulations  
Part 8 Section 116 and 117

### **Yukon Territories**

Occupational Health Regulations  
Section 6

