



WHY DO AUDIOMETRIC TESTING?

Occupational Health & Safety requires employers to test all employees exposed to excessive noise. 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?

INSPEC utilizes a screening device called an audiometer to determine shifts in acuity. It is designed to determine hearing threshold levels in comparison with standard reference threshold levels. We also utilize an Eckel auditory booth to ensure accuracy. All results deemed as irregular will be sent to our local audiologist for further assessment. 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, such as an Audiologist, for additional testing.

