Hearing test results in the oil and gas industry: Low participation rate and evidence of noise-induced hearing loss (NIHL)

Employers in British Columbia must offer a hearing loss prevention program (HLPP) to all workers who are exposed to hazardous noise. This program needs to include annual hearing tests for workers, which can identify early signs of permanent hearing loss before it becomes a significant disability.

The 2014 hearing test results show a concerning amount of hearing loss amongst workers in the upstream oil and gas and pipeline construction industries. This hearing loss appears to be noise-induced. This bulletin reports some issues identified by those test results and highlights the need for changes to the way HLPPs are protecting workers’ hearing.

**Issue #1: Workers show signs of noise-induced hearing loss (NIHL)**

Our data shows that a low number of B.C. oil and gas and pipeline construction workers had a hearing test in 2014, which is a concern. In addition, of those workers tested, 33 percent showed signs of NIHL. This is significant because:

- It’s more than double the 16 percent average for workers in noisy industries.
- More than half of those workers are 35 and under, showing that hearing loss in these industries is not simply a by-product of aging.

**Issue #2: Hearing protection worn is insufficient**

While almost 37 percent of workers in the oil and gas drilling industry show signs of hearing loss, almost all of them report wearing hearing protection. This implies that the hearing protection being worn is not working. There are a few possibilities to explain this:

- Workers might be removing their hearing protection devices (HPDs), or wearing them incorrectly.
- Workers might need to be wearing more protection (e.g., dual HPDs such as ear plugs and earmuffs).
- It’s possible that no matter what type of hearing protection is worn, noise levels are so high that no combination of HPDs would suffice. If this is the case, the only option is to implement engineering controls to reduce the noise levels or limit the time spent in hazardous noise.

**Issue #3: Young workers are not wearing hearing protection**

Many young workers in the oil or gas field service industry do not wear HPDs: 17 percent of the 35-and-under group report that they do not use hearing protection. That figure climbs to 27 percent for the under-21 group.
What employers can do

The data indicates that simply wearing hearing protection isn't enough. Improvements to the HLPP in the upstream oil and gas and pipeline construction industries need to be made. In the interim, there are four measures that employers should consider:

1. Identify potential engineering controls to mitigate risk.

2. Rotate your workers to different positions so they spend less time in noisy environments.

3. Ensure your workers are wearing sufficient hearing protection, and that they know how to properly fit and wear their hearing protection.

4. Ensure that your workers have their hearing tested and are aware of their hearing test results.

Resources

- Online publication, Sound Advice: A Guide to Hearing Loss Prevention Programs, for more information and suggestions on how to address these measures.
- WorkSafe Bulletin 2013-02, Occupational disease hazards in the oil and gas industry
- Ear Plug instructional poster/handout: When you use foam ear plugs...