

## How loud is it? — Oil and gas

As a worker in the oil and gas industry, you are likely exposed to hazardous levels of noise on the job. Regular exposure to sounds louder than **85 decibels (dBA)** can cause permanent hearing loss. WorkSafeBC’s noise measurements and hearing test results show that **almost all workers in oil and gas** are exposed to hazardous noise levels. The results also show that workers in the oil and gas drilling sector have some of the highest hearing-loss rates of any industry.

The risk of hearing loss depends on the noise level and the duration of exposure. The table to the right shows how long you can be exposed to certain levels of noise without harm. It also lists examples of typical noise levels for various work locations or activities.

To understand the risk you face, it’s important to know how loud your work environment is and how long you are working in it. For example, regardless of your occupation, if you are exposed to a noise level of 91 dBA, you can only work in this environment for 2 hours before the noise becomes hazardous.



When inserted properly, earplugs are not visible from the front. Refer to the table on page 2 to determine when dual hearing protection is required.

Maximum daily unprotected exposure time by noise level in dBA (regardless of occupation)		Examples of noise levels by work location/activity* (in dBA)	
16 hours	82		
12 hours	83	Dog house	80–84
10 hours	84		
8 hours	85		
4 hours	88	Mud tanks Rig floor	86–90 86–100
2 hours	91	Mix shack	90–93
1 hour	94	Mud pumps	90–95
30 minutes	97	Pump house	95–100
15 minutes	100	Compressors	99–105
7.5 minutes	103	Generator building	103–111
3 min, 45 s	106	Fracturing	104–107
1 min, 50 s	109	Vac truck	102–110
1 minute	112	Rig engine room	105–115
30 seconds	115	Pump trucks	112–116

\*May not reflect all operating conditions and equipment.

If you are exposed to noise levels greater than 85 dBA, your employer must take steps to protect your hearing. This includes reducing workplace noise, arranging annual hearing tests, and providing hearing protection.

Your hearing protection must provide adequate protection from noise. To do this, it must be the right size for you and be comfortable, and you must wear it properly. (For example, if you can easily see a foam earplug, it is not inserted correctly and may not protect you.) Apply your hearing protection before exposure to hazardous noise, and remove it only after leaving the hazardous-noise area.

The Canadian Standards Association (CSA Group) recommends protection for 8 hours of exposure as follows:

Exposure: $L_{ex,8}$ (dBA)	Recommended CSA class
$\leq 90$	C
$> 90$ up to and including 95	B or BL
$> 95$ up to and including 105	A or AL
$> 105$	Dual*

\*Dual hearing protection is required. Use a minimum of a Class B earmuff and a Class A earplug.

## For more information

*[Hear for Good: Preventing Noise Exposure at Work](#)*