

OHS FARM SAFETY NOISE LEVEL ASSESSMENTS

January 2024



Do you know what the noise levels are on your farm?

Or when and where hearing protection is needed?

Could you, your family, or your workers be at risk of hearing loss?

Noise-induced hearing loss happens over time and can often be linked to a noisy work environment. Noise hazards are present in many industries, including the potato industry. In fact, the prevalence of hearing loss in adult farmers is almost double that of non-farmers, according to the Canadian Centre for Rural and Agricultural Health (Saskatchewan). The good news is that this type of **HEARING LOSS IS PREVENTABLE!**

With that in mind, the Workers Compensation Board's OHS Farm Safety Specialist is looking for volunteers to have noise levels measured on their potato farm. **This is offered free of charge.** Depending on the time of year the assessments will focus on when storing, grading, packing, polishing, etc., are taking place. The information collected will be used to create relevant and useful educational materials for PEI's potato industry. If you choose to participate, your individual results will only be shared with you and the WCB's Occupational Health and Safety Division. If you are interested in participating, please contact the OHS Farm Safety Specialist, Hillary Hayden, at hhayden@wcb.pe.ca.

As a potato industry employer, managing the risk of hearing loss is an important step you can take to protect and promote a healthy farm workplace. Management includes assessing the noise hazards, lowering noise levels if possible, selecting adequate hearing protection, training workers, and audiometric testing. Hearing loss is a permanent disability, and these efforts can help protect your farm workers.

Remember, there is no substitute for someone's natural ability to hear!

How is noise level measured?

There are a number of ways to conduct a noise survey and various noise measuring instruments available. These instruments are designed for specific types of noise measurements.

Personal exposure measurements measure individual worker's noise exposure. The most common instrument used to measure personal exposure is a dosimeter (Figure 1). This specialized sound level meter is intended to measure personal noise exposure over a period of time, such as an 8 hour workday.



Figure 1

What are allowable noise levels?

Noise Level db(A)	Allowable Exposure Time
155 or greater	0
112	.94 minutes
109	1.88 minutes
106	3.75 minutes
103	7.50 minutes
100	15 minutes
97	30 minutes
94	1 hour
91	2 hours
88	4 hours
85	8 hours
82	16 hours
80	24 hours

Common noise levels

Noise Level (dB)	Equipment
112	Pile driver
110	Air arcing gouging / Chainsaw
108	Impact wrench
107	Bulldozer – no muffle
102-104	Air grinder
102	Crane – uninsulated cab
101-103	Bulldozer – no cab
97	Chipping concrete
96	Circular saw and hammering
96	Jack hammer
96	Quick-cut/concrete saw
95	Masonry saw
94	Roller/compactor – no cab
90	Crane – insulated cab
87	Loader/backhoe – insulated cab
86	Grinder
85-90	Welding machine
85	Bulldozer – insulated cab
50-70	Speaking voice

Double protection recommended above 105 dB (A)

Hearing protection recommended above 85 dB(A)