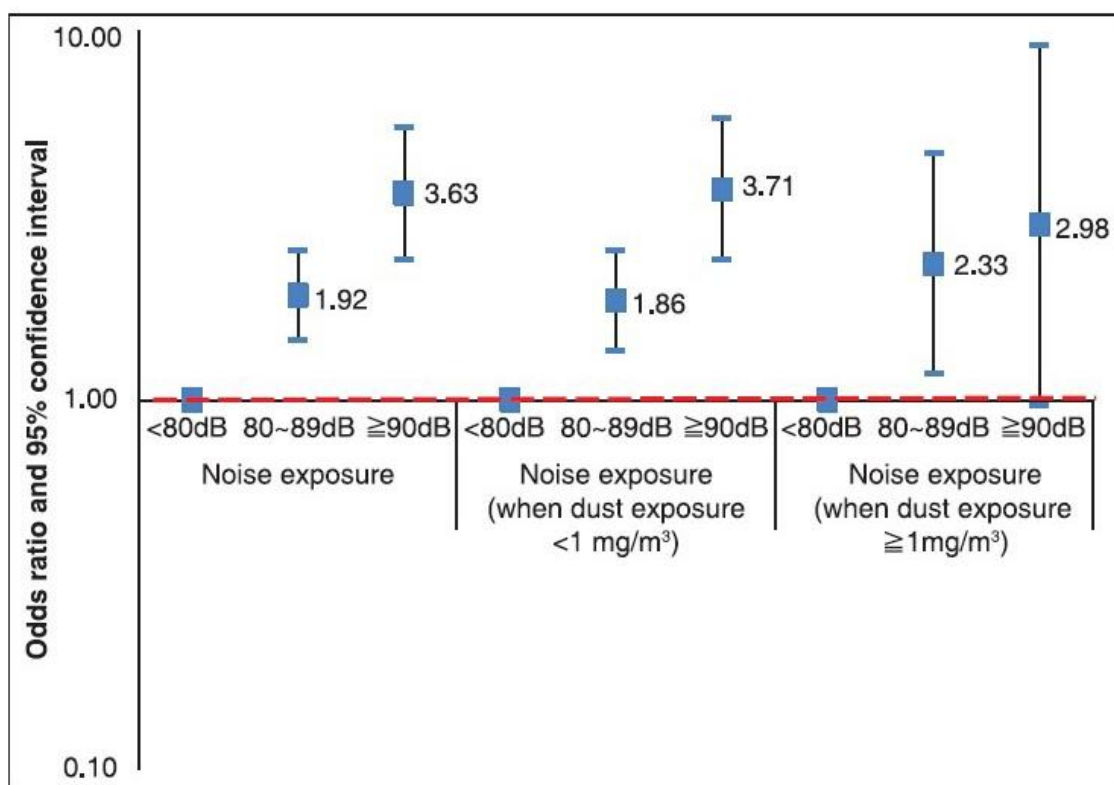


Lower Accident Rates by Lowering Noise Levels

There is a strong relationship that shows that higher noise exposures are associated with higher accident rates.

In a study conducted in 1,790 factories, noise exposure was shown to significantly increase the risk of occupational injury in the workplace. Furthermore, the risk of occupational injury increases with noise exposure level in a dose-response relationship. Therefore, strategies for reducing noise exposure level can decrease the risk of occupational injury.

Figure 1



Odds ratios and 95% confidence intervals for occupational injury

Source: [Noise Health](#). 2015 Jan-Feb;17(74):43-7. doi: 10.4103/1463-1741.149578. Dose - response relationship between noise exposure and the risk of occupational injury. [Yoon JH](#), [Hong JS](#), [Roh J](#), [Kim CN](#), [Won JU](#)¹.

Therefore, strategies for reducing noise exposure level will help decrease the risk of occupational injury. This strengthens the call for the introduction of noise controls rather than hearing protection.

A new study published in the April 10, 2014 edition of Canadian Occupational Health e-magazine, finds that noise-induced hearing loss and exposure to loud noise on the job may cause workers to miss danger warnings and result in high number of workplace accidents.

The study was led by Serge-Andre Girard, who is a researcher with the National Public Health Institute of Quebec in Quebec City. His research looked at records for 46,550 male workers over nearly 20 years, and found that 1,670 had been hospitalized for work-related injuries within five years of being given hearing tests. The researchers compared the number of injuries to worker's levels of hearing loss indicated by the tests and their exposure to loud noises in the workplace.

Study Findings

- Workers who already have a hearing loss are also more likely to be seriously hurt.
- For every decibel of hearing loss, the risk of hospitalization due to work related injury increased by 1%.
- Workers exposed to noise levels above 100dB had almost 2.5 times the risk of being hospitalized for work related injuries compared to workers not exposed to loud noise.
- For workers with both a severe hearing loss AND high noise exposure, the risk of being hospitalized with a work related injury is 3.6 times that of workers with neither condition.
- Exposure to high noise levels increases fatigue, decreases concentration and impairs the quality of communication. These can be contributing factors in workplace injuries and absences.