

TEST ANSWERS: NOISE

The *BSO Plus Safety Topic* is a review designed from the BSO Plus agenda. This safety topic is your way to stay current on the safety information over the 3 years between BSO Plus and BSR.

1. Non-auditory effects of noise exposure include: (Circle all that apply)

a. Stress

b. Temporary hearing loss

c. Changes in the heart beat pattern

d. Sleeping problems

RATIONALE: Noise is one of the most common occupational health hazards. Non-auditory effects include stress, related physiological and behavioural effects, and safety concerns.

2. Auditory effects of noise exposure include: (Circle all that apply)

a. Acoustic trauma

b. Temporary hearing loss

c. Tinnitus

d. Sleeping problems

RATIONALE: Noise is one of the most common occupational health hazards. Auditory effects include hearing impairment resulting from excessive noise exposure. Noise-induced permanent hearing loss is the main concern related to occupational noise exposure. Workers may also experience temporary hearing loss, acoustic trauma, or tinnitus (ringing or buzzing in the ear).

3. Common signs of hearing loss can include the following: (Circle all that apply)

a. Straining to hear

b. Misunderstanding conversations

c. Favoring one ear

d. Withdrawing from social contact

RATIONALE: As noise induced hearing loss (NIHL) develops slowly over time, it is hard to notice in the early stages. Due to its subtle nature, workers often don't notice, or they ignore signs of hearing loss until more pronounced symptoms emerge. Early recognition of NIHL is important for proper management and protection from further hearing loss.

4. If it is not possible to eliminate the source of noise, which personal protective equipment (PPE) could be worn by workers to protect them:

- a. Full body harness and ear muffs
- b. Ear plugs, semi-insert ear plugs, or ear muffs
- c. Helmet and ear plugs
- d. Helmet and coveralls

RATIONALE: The exposure to noise can be reduced by eliminating the source of noise (if possible), substituting the source with a quieter one, applying engineering modifications, using administrative controls, and by using protective equipment. The choice of hearing protectors is a very personal one and depends on a number of factors including level of noise, comfort, and the suitability of the hearing protector for both the worker and his environment.

5. Hearing protection is only required when sound levels exceed 85 dBA.

- a. True
- b. False

RATIONALE: The Noise Regulation (O. Reg. 381/15) applies to all workplaces covered under the Occupational Health and Safety Act (OHSA). The regulation requires that every employer shall ensure that no worker is exposed to a sound level greater than a time-weighted average exposure limit of 85 dBA measured over an 8-hour work day. A constant exposure to 84 dBA over a 12 hour period would mean that worker protection is still mandated, because the exposure limit for noise would be exceeded.