



National  
Operational  
Guidance

# Hazard Noise



**NFCC**  
National Fire  
Chiefs Council

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## Hazard - Noise

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### Hazard Knowledge

Fire and rescue service personnel may need to work in noisy environments; noise could be produced by:

- On-site machinery
- Vehicles
- Activated alarms or warning systems
- Fire and rescue service activities, including the use of equipment
- Munitions
- Explosions
- Crowds of people
- Music

The hazards may include:

- Hearing loss
- Impaired communication
- Impaired operational awareness

### Hearing loss

Noise-induced hearing loss is caused by prolonged exposure to excessive levels of noise – for example, in noisy workplaces, or while listening to loud music. It can also be caused by extremely loud bursts of sound such as gunshots and explosions that can lead to some damage within the ear structures. The effects of noise-induced hearing loss may not be noticed until years after exposure to loud noise. Some people experience tinnitus as the first sign that their hearing has been damaged by noise.

Further information about hearing health can be found on the [RNID website](#).

### Impaired communication

When working in a noisy environment, normal communication methods may not be sufficient. The noise level may impact on emergency evacuation signals and affect the ability to hear an activated automatic distress signal unit (ADSU).

### Impaired operational awareness



The noise level may make it difficult to hear distress calls from casualties when performing rescues. It may also impair the ability of personnel to hear moving vehicles or machinery, or even sounds from a moving or collapsing structure.



## Control measure - Reduce risk from exposure to noise

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### Control measure knowledge

Under [The Control of Noise at Work Regulations](#) and [The Control of Noise at Work Regulations \(Northern Ireland\)](#), noise in the working environment should be eliminated or reduced. If this is not feasible, personnel should be removed from the source of the noise, or be provided with personal hearing protectors that are appropriate to the environment or activity.

Pre-planning may identify likely sources of noise and appropriate control measures that reduce exposure to noise.

### Strategic actions

Fire and rescue services must:

- Assess and identify measures to eliminate or reduce risk from exposure to noise in the workplace

Fire and rescue services should:

- Provide personnel with appropriate hearing protectors
- Ensure information about noise hazards is recorded in Site-Specific Risk Information

### Tactical actions

Incident commanders should:

- Reduce prolonged exposure to the source of noise

- Increase the distance of personnel from the source of the noise
- Ensure personnel wear appropriate hearing protectors



## Control measure - Isolate the source of noise

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### Control measure knowledge

It may be possible to isolate the source of noise, if it is being produced by on-site machinery, vehicles or fire and rescue service equipment. Decisions to isolate these sources of noise may require liaison with the responsible person, occupants or site engineers.

Alarms or warning systems will need to be managed appropriately; silencing them may be detrimental to activities such as evacuation. Decisions to isolate these sources of noise may require liaison with on-site staff, with reference to Site-Specific Risk Information (SSRI) if appropriate.

### Strategic actions

Fire and rescue services should:

- Record information about alarms or warning systems in the Site-Specific Risk Information (SSRI)

### Tactical actions

Incident commanders should:

- Consider isolating sources of noise
- Consider requesting that alarms or warning systems are silenced



## Control measure - Safe system of work: Noisy environments

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### Control measure knowledge

If it is not possible to reduce or isolate the source of noise, safe systems of work should be implemented to ensure:

- Communication between personnel is maintained
- Personnel do not rely on audible cues or information, especially for emergency evacuation or tactical withdrawal

Alternative methods of communication may need to be adopted. This could include visual signs using hands, flags or lights.

### Strategic actions

Fire and rescue services should:

- Consider providing equipment to assist with alternative methods of communication

### Tactical actions

Incident commanders should:

- Consider using alternative methods of communication in noisy environments
- Consider implementing appropriate methods to activate the emergency evacuation or tactical withdrawal of responders in noisy environments