

# OCCUPATIONAL NOISE

THE INVISIBLE HAZARD AND KEYS TO SUCCESSFUL HEARING PROTECTION



**NOISE-INDUCED HEARING LOSS (NIHL) IS THE MOST COMMON PERMANENT AND PREVENTABLE OCCUPATIONAL DISEASE IN EUROPE**

**#2 7% 22% 34.4 million**

jet engine takeoff <b>150</b> dB	Occupational noise exposure is the second most common risk factor in the workplace, behind workplace injuries.	Of European workers consider that work affects their health in terms of hearing disorders.	Of workplace related health issues in EU had noise exposure contribution.	Adults in the EU have a disabling hearing loss (35 dB or greater).	hammer on nail <b>120</b> dB
generator <b>116</b> dB	Unlike most injuries, it's difficult to tell when you've been affected by NIHL because it's painless and progressive.				ambulance siren <b>112</b> dB
impact wrench <b>102</b> dB	<b>CAUSES</b>				bulldozer <b>100</b> dB
table saw <b>93</b> dB	<ul style="list-style-type: none"> <li>The noise exposure limit exceeding daily or weekly exposure of <b>87 decibels (dB)</b>, taking into account any attenuation from hearing protection.</li> <li>The noise exposure action levels set at daily or weekly exposure of <b>80 dB (lower value)</b> and <b>85 dB (upper value)</b>.</li> </ul>				lawnmower <b>90</b> dB
<p><b>TOP INDUSTRIES WITH NOISE HAZARDS</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> AGRICULTURE</div> <div style="text-align: center;"> CONSTRUCTION</div> <div style="text-align: center;"> FOOD PROCESSING</div> <div style="text-align: center;"> MANUFACTURING</div> <div style="text-align: center;"> MILITARY</div> <div style="text-align: center;"> MINING</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;"> OIL &amp; GAS</div> <div style="text-align: center;"> PUBLIC SAFETY SERVICES</div> <div style="text-align: center;"> TRANSPORTATION</div> <div style="text-align: center;"> UTILITIES</div> </div>					
<b>EXAMPLES OF NOISE HAZARDS</b>					

**€185 billion**

Untreated, disabling hearing loss costs to EU each year.\*

SOCIAL ISOLATION AND WITHDRAWAL

LIMITS ABILITY TO UNDERSTAND SPEECH

IMPAIRS ABILITY TO COMMUNICATE



REDUCES PRODUCTIVITY

RESULTS IN TEMPORARY OR PERMANENT HEARING LOSS

INCREASES RISK OF HYPERTENSION AND HIGH CHOLESTEROL

**€55 billion**

In lost productivity in society due to a higher unemployment among people with a disabling hearing loss in the EU.

## EFFECTS OF NIHL ON WORKERS

Cost to economy

Cost to society

## Safety Regulations in the EU\*

According to Directive 2003/10/EC where noise levels present a health risk, EU countries must ensure the appropriate health surveillance of workers.

The employer shall assess and, if necessary, measure the levels of exposure to noise to which workers are exposed.

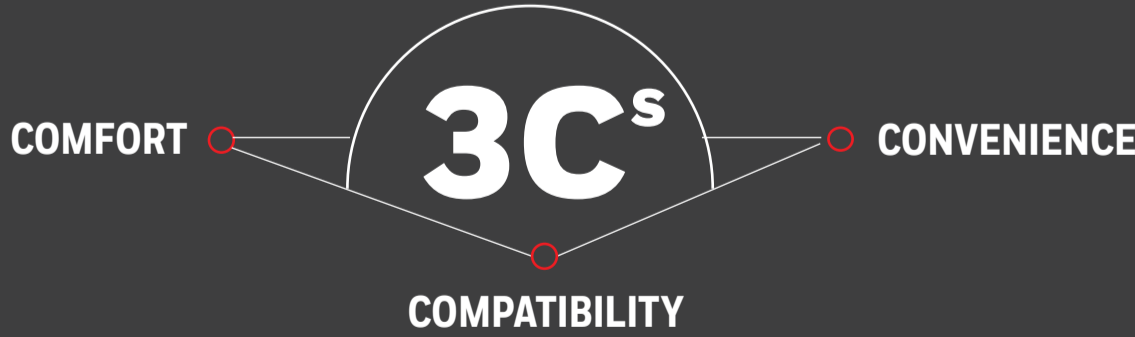
The workers noise exposure limit values must not be exceeded, principally pertains to a daily or weekly exposure of 87 decibels (dB), taking into account any attenuation from hearing protection.

If risk can not be banned by other means, the employer has to provide properly fitting personal protective equipment (hearing protectors), in accordance to Directive 89/656 EEC.

Refer to Directive 2003/10/EC on the minimum health and safety requirements regarding the exposure of workers to noise.

# KEYS TO SUCCESSFUL HEARING PROTECTION

Occupational NIHL can be reduced or eliminated when proper measures are implemented



### Wearers should:

- Be aware of jobsite noise risks
- Always use hearing protection where noise hazards exist
- Carefully follow fitting instructions to ensure protection
- Inspect, clean, and replace hearing protection devices (HPD) according to instructions

### Employers should:

- Provide an assortment of hearing protection types and sizes to ensure workers achieve the 3 Cs
- Monitor noise levels and make necessary adjustments to reduce hazardous noise levels
- Educate workforce on the importance of using hearing protection devices and their proper use
- Avoid overprotection to ensure clear communication and the ability to hear warning signals
- Rely on Honeywell Howard Leight to help guide the selection process and ensure appropriate protection that meets the unique needs of your workforce

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Sources:  
<https://www.hear-it.org/hearing-loss-in-europe>  
<https://www.hear-it.org/untreated-hearing-loss-eu-costs-more-whole-eu-budget>  
<https://osha.europa.eu/en/legislation/directives/82>  
<https://apps.who.int/iris/bitstream/handle/10665/260336/9789241550260-eng.pdf>  
<https://osha.europa.eu/en/publications/factsheet-67-noise-figures>  
 \*Factsheet\_67\_-\_Noise\_in\_figures%20(1).pdf (WHO Europe, 2017).  
<https://apps.who.int/iris/bitstream/handle/10665/260336/9789241550260-eng.pdf>

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