## NOISE: NUISANCE AND HAZARD AT WORK

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Is noise a regular feature of your working day? Although it may seem harmless, noise can have harmful effects on your health: fatigue, sleep disorders, hearing loss, etc.

This brochure is designed to help you better understand what noise is, the risks it poses to your health, your employer's obligations in this area, and what you can do to protect yourself and maintain your well-being.



#### What is noise?

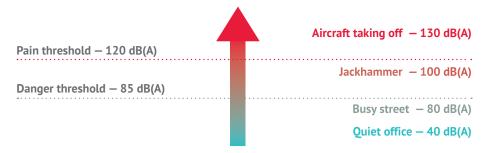
**Sound** is a vibration in the air which, when it hits the eardrum, is interpreted by the ear and the brain. When these sounds become annoying, unpleasant or dangerous to health, we refer to them as **noise**. This noise, which is omnipresent in certain working environments, can be harmful to your hearing... and not only that.

Sound is characterised by:

- The **frequency** (in Hertz Hz): a low or high tone.
- The **sound leve**l (in decibels dB): a low or high volume.

Our ears are particularly sensitive to **noises of** ≥ **55 dB(A)**, mid-range or high-pitched tones. These have a greater impact on our hearing.

Some examples of sound levels:



#### ! Noise levels are not added together.

For example: 1 jackhammer (100 dB(A)) + 1 jackhammer (100 dB(A)) = 103 dB(A), not 200 dB(A).



### When does noise become dangerous?

Exposure to noise becomes dangerous depending on certain factors:

- A high noise level (too loud)
- **Prolonged exposure** (too long), even at average noise levels
- High frequencies (piercing noises)
- Sudden noises (such as a jackhammer or an alarm)

Some people are also more sensitive to noise:

- People with hypoacusis or a genetic predisposition
- Older people, who are at increased risk of hearing loss with age
- People with certain conditions (high blood pressure, diabetes)





#### What are the health risks?

#### Tinnitus: persistent ringing, **Progressive Deafness** hearing loss whistling or squeaking Depression • Reduced concentration Nervousness, stress • Increased blood pressure Sleep disorders • Mental and physical fatigue

Noise is also a risk factor for accidents: it disrupts communication, masks warning signals and reduces alertness.



#### And what can you do yourself?

To protect your health and safety, it is essential that you have the right equipment and develop the right habits.

There are different types of **hearing protection**:

- disposable or reusable earplugs,
- custom-made earplugs (otoplastics),
- hearing protection headphones.

The choice depends on the noise level, the duration of exposure, the type of work, whether other PPE is worn, personal comfort, etc.

To ensure effective protection:

- Wear your hearing protection correctly and at all times, even if only for a short period of time.
- Check its **condition** regularly (wear and tear, cleanliness),
- Do not share it with other employees,
- In case of discomfort, pain or hearing loss, or if you are exposed to excessive noise: **report this immediately** to your employer or the occupational physician.

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### What are your employer's obligations?

In Belgium, protection against noise is part of the legal obligations regarding well-being at work. Your employer must therefore take all necessary measures to protect your health and safety by:

- Assessing the risks of exposure to noise in your workplace,
- Identifying high-risk workplaces and situations,
- Ensuring compliance with exposure limits (see below),
- Taking prevention and protection measures, giving priority to collective measures (eliminating or reducing noise at source, reorganising work, etc.) and only resorting to individual measures as a last resort.

NB: In the context of maternity protection, a pregnant woman must not be exposed to noise levels of ≥ 80 dB(A) (for 8 hours per day). This prohibition applies throughout the entire pregnancy.

# ≥80 dB(A)



- Information and training
- Provision of suitable hearing protection
- Organisation of medical supervision with audiometry every 5 years

### ≥85 dB(A)



- Mandatory use of hearing protection
- Implementation of a plan to reduce noise
- Marking and demarcation of hazardous areas
- Organisation of medical supervision with audiometry every 3 years

#### ≥87 dB(A)



Limit value: must not be

#### In case of exceedance:

- Introduction of immediate measures to reduce exposure to a level below the limit values
- Identification of the cause of the exceedance
- Adjustment of prevention and protection measures to prevent recurrence
- Organisation of medical surveillance with annual audiometry



