

Noise at workplaces

Scope and applies to

This document contains the Novo Nordisk OHS requirements to noise at workplaces, re the OHS Code of Conduct section 4. Noise is defined as harmful, unnecessary or annoying noise.

The requirements apply to all workplaces in Novo Nordisk with the people manager as responsible.

Both short and long term exposure to noise can impact health and well-being such as hearing loss, higher blood pressure and disturbed concentration at work.

Requirements

Novo Nordisk has the following requirements to noise at workplaces, see below for further explanation:

- A noise limit at 80 dB(A)
- Unnecessary noise must be avoided
- Annoying noise should be avoided
- The acoustic environment must be satisfactory

Noise assessment

The noise environment must be assessed in order to ensure a healthy and safe working environment:

- The noise environment must be mapped if it is suspected that the noise limits at workplaces are exceeded
- Unnecessary noise must be avoided
- Complaints from employees about noise related problems at the workplace must be assessed in order to ascertain the existence of unnecessary noise and annoying noise

Noise mapping data is considered valid if no changes have been implemented since the mapping. If the noise mapping documents noise levels at or just below 80 dB(A), the noise mapping must be renewed no later than every 3rd year.

If necessary for noise assessment and prevention a consultant with the relevant knowledge and controlled measuring equipment should be contacted, see also terms and definitions.

Noise prevention and protection against noise related injuries

If the assessment of the existing noise environment reveals any noise problems, the people manager must plan which control measures are best suited to solve the noise problems.

Choose preventive initiatives following this prioritised list:

- Replace by less noisy units or equipment
- Reduce noise at the source
- Enclose the noise
- Plan the work in order to limit exposure time
- Use of hearing protection should be considered only when other noise reducing actions are not possible

At workplaces where the noise level exceeds 80 dB(A) hearing protection must be used. Signs must tell employees to wear hearing protection, see also guidance on hearing protection under relevant links.

Hearing tests must be offered to the employees in accordance with requirements in local legislation.

Noise limits at workplaces

In Novo Nordisk the following noise limits apply for workplaces:

- The noise level must not exceed 80 dB(A). The noise level is defined as an average noise level during a representative period of time
- Impulse noise must not exceed 125 dB(C) peak

In rooms where employees only perform occasional work or short tasks, and where it is not possible to reduce noise adequately, management must take other measures to prevent exposure. This applies to for example technical rooms with particularly noisy machines, rooms with compressors and pumps.

Unnecessary noise

Exposing employees to unnecessary noise must be avoided, by doing the following:

- Separate noisy and less noisy activities
- Avoid unnecessary low and high-frequency noise
- Use known methods and equipment to reduce the noise
- Keep machines in good working order
- Avoid unnecessary noise from single equipment

Through Novo Nordisk's experience, it is considered unnecessary to exceed the noise limits for new equipment stated in the table below. These noise limits should be regarded as requirements and apply to new equipment taken into operation from 1 January 2012.

Equipment with unnecessary noise limits		Noise level ¹
Filling lines, assembly lines, packaging lines		75 dB(A)
Inspection lines, storage facilities, kitchens. All types of equipment		70 dB(A)
Laboratories	Safety benches	60 dB(A)
	Fume cupboards	50 dB(A)
	HPLC cupboards incl. equipment	45 dB(A)
	Small vacuum pumps	50 dB(A)
	Table centrifuges	50 dB(A)
Offices: Technical installations including ventilation		35 dB(A)

Note 1: The noise level is measured at an operator's workstation with noise contribution from the single equipment only, and including the influence of room acoustics. In cases where it might be technically difficult to meet the limits, the technical reasons must be explained.

Annoying noise

Annoying noise should be avoided where possible.

Noise at workplaces might individually be perceived as annoying, regardless that the noise limits at workplaces are in compliance. Examples are noise in open office areas, and noise with audible tonal content from machines or facilities.

Novo Nordisk has defined the following guiding noise limits for office areas and similar workplaces:

- 60 dB(A) in workplaces where communication is needed
- 45-50 dB(A) in areas where concentration demanding work is carried out

Acoustic environment

The acoustic environment in all workrooms must be satisfactory.

Novo Nordisk has defined technical requirements to acoustics in offices, laboratories, and other type of work rooms. Please find the requirements under relevant links on the right hand side of this page.