

POLICY FOR HEALTH, SAFETY & WELFARE

PART C - ARRANGEMENTS

Section 13

NOISE AT WORK

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1. INTRODUCTION

High levels of noise can cause hearing loss that may be irreversible. People often experience temporary deafness after leaving a noisy place. Although hearing usually recovers within a few hours, this should not be ignored. It is a sign that continued exposure to the noise could cause permanent hearing loss. Hearing loss is not the only problem from noise exposure; people can also develop tinnitus (ringing, whistling, buzzing or humming in the ears), which is a distressing condition that can lead to disturbed sleep.

Hearing loss caused by exposure to noise at work continues to be a significant occupational disease with 170,000 people in the UK suffering from deafness, tinnitus or other ear conditions as a result of exposure to excessive noise at work.

2. DEFINITIONS

Noise is measured in units of pressure known as decibels (dB). 'dB(A)' and 'dB(C)' refer to different types of decibel readings used to measure different types of noise). A 3 dB increase in noise level doubles the power of noise, so what might seem like small difference in the numbers can be significant to the damage caused to hearing. To comply with the Noise at Work Regulations, the following definitions apply:

Daily personal noise exposure (Lep.d) - means the level of daily personal exposure of an employee to noise taking into account varying noise levels and how long a person is exposed to them, but taking no account of any ear protection used.

Exposed - means exposed to noise whilst at work and "exposure" shall be construed accordingly.

Exposure action values are levels at which damage to hearing can occur, if the exposure is for a long time. They are:

- **the lower exposure action value** means a daily personal noise exposure of 80dB(A) or any exposure of 135db(A);
- **the upper exposure action value** means a daily personal noise exposure of 85dB(A) or any exposure of 137db(A)
- **the exposure limit level** means a daily personal noise exposure of 87db(A) or any exposure of 140db(A)

Policy

Council policy is to reduce the risk of damage to hearing of employees and other people for whom it has a duty of care by making and maintaining arrangements to reduce exposure to noise at levels that can cause harm. If this cannot be achieved by changes to the work activity or equipment, we will provide adequate means of ear protection.

Responsibilities

DU Directors must ensure that the arrangements contained in this document are made and maintained, within their Delivery Units in order that;

the risk of damage to the hearing of employees, from exposure to noise, is reduced to the lowest level reasonably practicable; and where any employee is likely to be exposed to harmful noise levels exposure to noise is reduced so far as is reasonably practicable a safe level without the use of personal ear protection.

DU Directors will also make arrangements as necessary to prevent the risk of damage to the hearing of other persons who may be affected by the council's work. The arrangements made by Delivery Units to comply with the requirements of this section are to be included within individual Health, Safety and Welfare policies.

3. ASSESSMENT

Tasks which may exceed action values.

The nature of the council's undertaking covers many diverse activities involving a wide variety of works and workplaces.

For a majority of this work carried out by the council, noise levels do not exceed action values. A limited number of the council's activities, however, could result in noise exposure to the lower and higher exposure action values or above, and, on rare occasions, to the noise limit level or above, examples of these are:

- operating of wood and metal working machinery,
- using of hand held power tools – drills, saws, fixing tools etc.,
- operating heavy plant – breakers, generators, mowers, diggers etc.,
- vehicles – external and internal,
- recreation – swimming pools, sports centres etc.
- working on or near to busy roads

Some examples of typical noise levels are shown below. This shows that a quiet office may range from 40-50 dB, while a road drill can produce 100-110 dB.



Identification

To identify areas where the action levels may be exceeded, a simple test can be carried out. Two people should stand 2 metres apart.

If it is necessary for them to shout to be heard by each other, the test is positive.	If they do not have to shout, it is negative.
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If the test is positive, the manager should contact the Health and Safety Team, who will advise on how to consult a Competent Noise Assessor (CNA) to carry out a full assessment. The CNA will then provide clear instructions to the manager of the control measures that need to be established.

If the test is negative, a record must be made that the test was carried out and that no more action is necessary, unless equipment or processes change.

Review of assessments

If there is reason to believe that the assessment is no longer valid, (for example, there has been a significant change in the work activity or the work equipment) or if health surveillance shows that someone is suffering from hearing loss, the original assessment must be reviewed and if necessary a re-assessment carried out. When this situation arises, the manager can contact the Health and Safety Team for further advice. Assessment reviews should be regularly carried out where the original noise exposure is between the first and second action levels.

Records

Records must be kept of all noise assessments including the basic tests carried out in workplaces. They should be retained so long as the activity, process or plant forms part of the work activity of the council. A sample noise risk assessment form is provided in **appendix 1** and a flow chart for managers to guide on the assessment process is provided in **appendix 2**.

4. REDUCTION OF EXPOSURE TO NOISE

Introduction of new plant and equipment

Where it is proposed to introduce plant or equipment into the workplace and it is foreseeable that this may result in increased noise exposure the following action must be taken: -

- obtain from the manufacturer or suppliers noise emission data and other information regarding the reduction of noise levels;
- seek advice from the Health and Safety Team (HSU) regarding information received from the Manufacturer or Supplier and the nature of the workplace acoustics;
- consult with the workplace Trade Union Health and Safety Representative regarding the proposed introduction;

Noise exposure management

Ear protection, as a method for dealing with noise at work, should be seen as a last resort. Noise exposure management requires that reduction measures must be considered and where feasible introduced, **before ear protection measures are considered**. The main methods of noise management, to be considered before ear protection, are:

- Change the work process so that it is not necessary to use noisy equipment or processes,
- reduce noise at source, by using less noisy equipment, or by maintaining or modifying equipment
- isolate the source of noise, or isolate people from it,
- reduce the time when people are exposed to noise

For more advice on these measures, contact the Health and Safety Team (HSU).

Supervision

There must be an adequate level of supervision of equipment use to ensure that the noise reduction measures are fully adhered to.

Maintenance

Arrangements must be made to undertake an appropriate level of maintenance of equipment, including services fitted to reduce noise. Normally this will be in accordance with the manufacturers or suppliers instructions.

Contracts

In contracts where the type of work being undertaken is likely to expose Council employees and other persons, to noise at or above the lower exposure action value, or, at or above the peak action level, the officer responsible for drawing up the contract must consider the noise management aspects at the planning stage and make adequate provision in the specification and the selection process to ensure that all reasonable steps are taken to reduce noise levels.

While the work is in progress the supervising officer should periodically monitor the use of the control measures in place, to ensure that the noise is adequately controlled.

5. PROTECTION

Ear protection

Personal hearing protection should only be used as a last resort, when there is a need to provide additional protection beyond what has been achieved through other noise control measures (such as changes to equipment and processes), or as an interim measure while control measures are being introduced. **It should not be used as an alternative to controlling noise by technical and organisational means.** The duty to provide hearing protectors depends on the exposure levels.

Where employees are exposed between the lower and upper exposure action values (80dB – 85dB) you have to provide protectors to employees who ask for them but their use is not compulsory.

Where employees are likely to be exposed at or above the upper exposure action values, it is mandatory to provide hearing protection, information about the protection and how to obtain and use it, and make sure that employees use them. Similar provision must also be made for contractors and other visitors to noisy areas.

Appendix 3 contains guidance from the Health and Safety Executive (HSE) on identifying and reducing noise risks.

Ear Protection Zones

Any Council premises or part of premises, where people likely to be exposed to the upper exposure action value or above, must be designated an ear protection zone. The zone must be clearly labelled with suitable signs and must include information that indicates:

- That it is an ear protection zone,

- That no-one may enter the zone unless they are wearing ear protectors,
- Where to obtain ear defenders

Premises Controllers, whose premises contain ear protection zones, must ensure that spare personal ear protectors are available for visitors.



Figure 1 Hearing protection zone sign

Use and maintenance of ear protectors

DU Directors must establish procedures to ensure that the ear protection provided is fully and properly used and is maintained in an efficient state, in efficient working order and in good repair (maintenance includes cleaning).

Health Surveillance

Managers must provide health surveillance (hearing checks) for all your employees who are likely to be regularly exposed above the upper exposure action values, or are at risk for any reason, e.g. they already suffer from hearing loss or are particularly sensitive to damage. The purpose of health surveillance is to:

- warn you when employees might be suffering from early signs of hearing damage;
- give you an opportunity to do something to prevent the damage getting worse;
- check that control measures are working

Duty on all employees

Every Council employee must, fully and properly use personal ear protectors when they are provided, and use any other protective measures provided by the Council. They shall also report defects immediately to their supervisor or line manager.

6. TRAINING

Arrangements must be made to ensure that any employee who is likely to be exposed to noise above the lower exposure action value is provided with adequate information, instruction and training on the risk of damage to hearing that exposure may cause, the steps that have been taken to minimise that risk and maintain control measures, and employees' obligations to use all control measures and to

report defects. This information and training must include how and when to use hearing protection.

Where it is reasonably practicable the above arrangements should be extended to other persons whose exposure is likely to be for a prolonged period, e.g. pupils undergoing a course involving noisy machinery.

Management Training

Any manager or Premises Controller, who manages or controls to any extent, work activities or premises where the noise exposure exceeds the first action level, is to receive training on the legal requirements to reduce noise and this arrangement. Contact the Health and Safety Team for advice on how to obtain training.

7. CONSULTATION

The council will consult with Employee Representatives and employees when a noise survey planned, share the results of that survey, and consult with them on any action that should be taken.

8. FURTHER INFORMATION

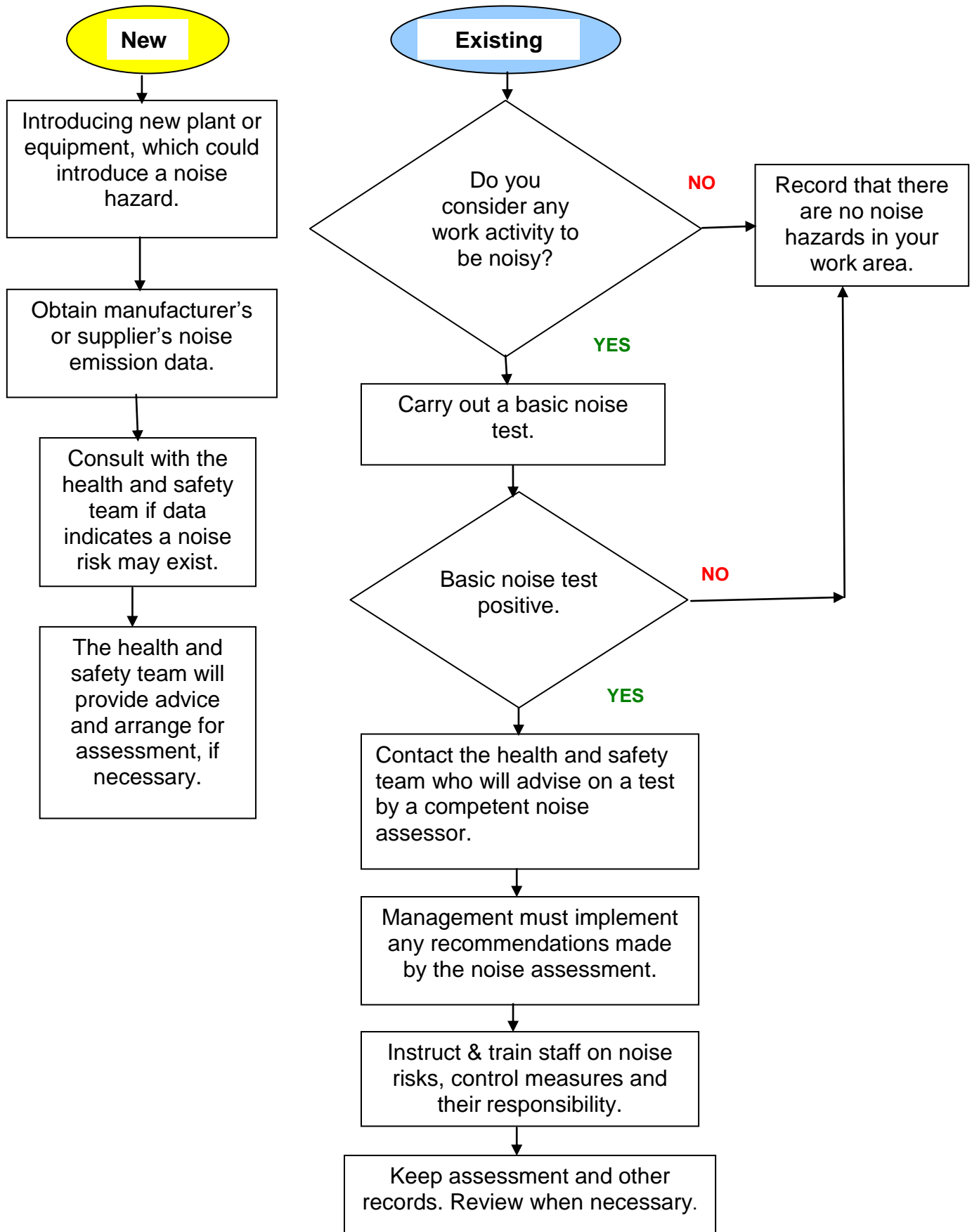
For general advice, contact the Health and Safety Team on 020 8359 7960.

For advice from the Health and Safety Executive, visit <http://www.hse.gov.uk/noise/> this site contains detailed guidance on noise, the damage it can cause, and solutions available to manage noise effectively.

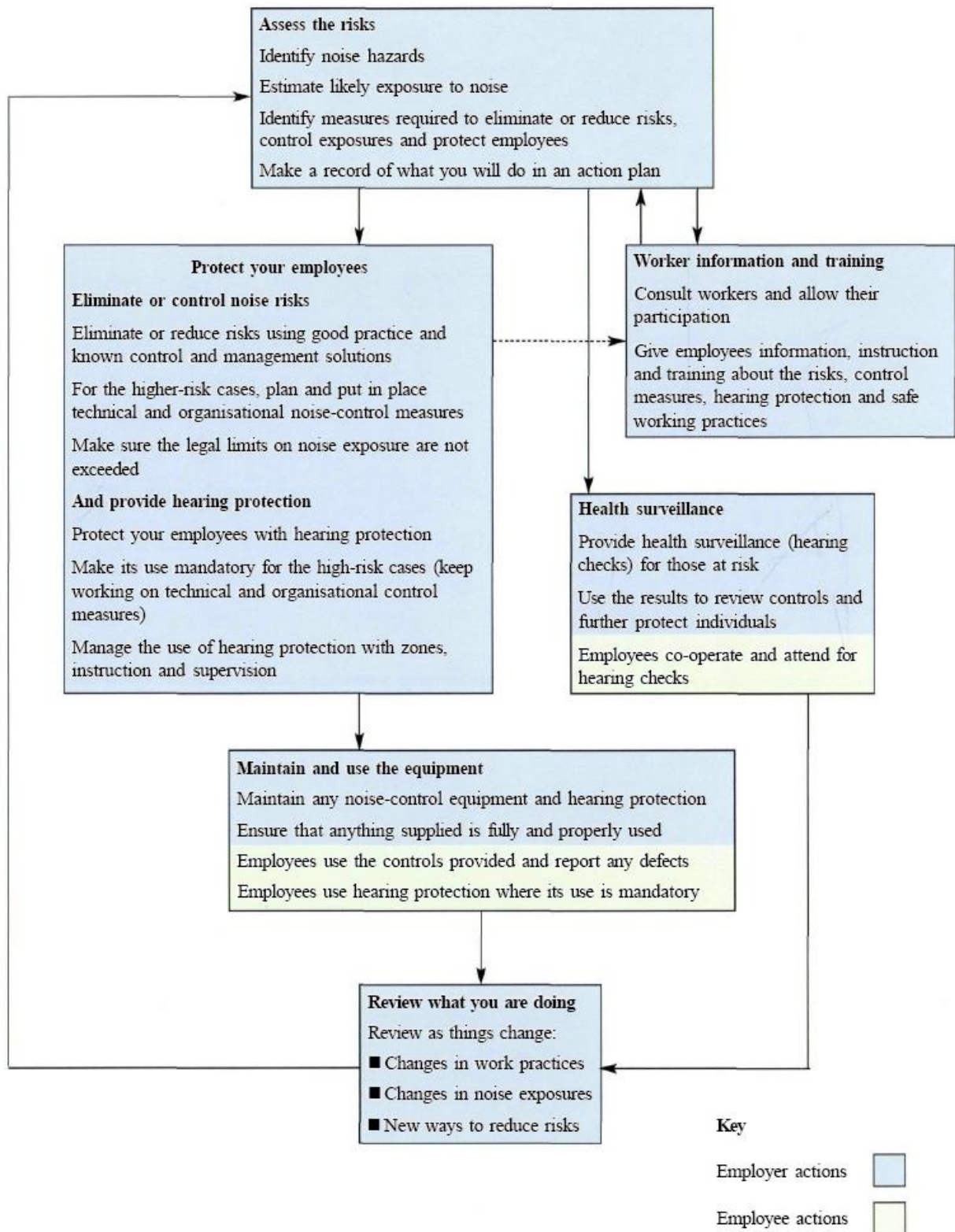
APPENDIX 1 – NOISE ASSESSMENT FORM

PREMISES:		ACTIVITY:		EQUIPMENT ID:	
EQUIPMENT DESCRIPTION:			ASSESSED BY:		DATE:
Activity/Equipment	Noise Level Immediate (Maximum)	Noise Level 8 Hour (TWA)	Action Level Reached - Y/N (Which level)	Remedial action taken.	

APPENDIX 2 - FLOW DIAGRAM FOR NOISE ARRANGEMENT



APPENDIX 3 - MANAGING NOISE RISKS – HSE ADVICE



Noise hazard checklist

- **Do you work in a noisy industry**, eg construction, demolition or road repair; woodworking; plastics processing; engineering; textile manufacture; general fabrication; forging, pressing or stamping; paper or board making; canning or bottling plant; foundries?
- Do your employees use **noisy powered tools or machinery** for more than **half an hour** each day in total?
- Are there noises due to impacts (such as hammering, drop forging, pneumatic impact tools etc), explosive sources such as cartridge-operated tools or detonators, or guns?
- Are there areas of the workplace where noise levels could interfere with warning or danger signals?

'Listening checks'

- Are employees exposed to noise which makes it necessary to shout to talk to someone **1 m** away, for more than about **half an hour per day** in total? *The noise level here is probably 90 dB or more.*
- Are employees exposed to noise which makes it necessary to shout to talk to someone **2 m** away, for more than about **two hours per day** in total? *The noise level here is probably 85 dB or more.*
- Is conversation at 2 m possible, but **noise is intrusive** - comparable to a busy street, a typical vacuum cleaner or a crowded restaurant - for more than about **six hours per day** in total? *The noise level here is probably 80 dB or more.*

SIMPLE TESTS TO SEE IF A NOISE ASSESSMENT IS NEEDED

<i>Test</i>	<i>Probable noise level</i>	<i>A risk assessment will be needed if the noise is like this for more than:</i>
The noise is intrusive but normal conversation is possible	80dB	6 hours
You have to shout to talk to someone 2 metres away	85dB	2 hours
You have to shout to talk to someone 1 metre away	90dB	45 minutes