

**NOISE TOOLBOX TALK PACK – WORKING
DRAFT OCTOBER 2003**

**the toolbox talk has now been
extensively revised and published by HSE in April 2005**

CONTENTS:

Notes for employers

Notes for the speaker

The toolbox talk

Hearing protection picture card

CD on what it sounds like to lose your hearing - (audio demonstration of noise induced hearing loss is also available on the HSE website at:

<http://www.hse.gov.uk/noise/demonstration.htm>)

HSE pocket cards on noise (INDG 363)¹ – (on the HSE web site at: <http://www.hse.gov.uk/pubns/indg363.pdf>)

HSE leaflet on noise for employers (INDG 362) – (on the HSE website at: <http://www.hse.gov.uk/pubns/indg362.pdf>)

HSE Wear your ear protection poster

¹ Extra copies may be ordered from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA or downloaded from the HSE's website at www.hse.gov.uk

EMPLOYER'S NOTES:

(to be read with leaflet *Noise at work – advice for employers*)

1) ABOUT NOISE

Why noise is a problem

- it can cause irreversible hearing damage and other conditions such as tinnitus (constant ringing, rumbling or whistling noise in ears)
- the impact on the quality of life of the people affected and on their families can be severe.
- the manufacturing industry, particularly, textiles, printing, engineering (including shipbuilding and foundries) has the second highest rate of new cases qualifying for industrial benefit for noise induced deafness (based on 1999-2001 figures)

How do you know if you have a noise problem?

- use the '2m rule' explained on page 2 of the *Noise at work – advice for employers* leaflet to help you decide.
- if this shows you might have a problem, arrange for a noise assessment which measures the levels of noise employees are exposed to each day,

BUT: if you haven't got a noise assessment, don't put off taking action to protect your employees' hearing until you get one.

How is noise measured?

Noise is measured in units called decibels, also written as dB(A). What is important is how much noise a person is exposed to during the working day. To work this out the quieter and noisier times are averaged out over the day. Because of the way decibels work, a reduction of 3 decibels is equivalent to halving the noise that the person is exposed to. So if a person's noise exposure is 87dB(A), they will have half the noise exposure of a person exposed to 90dB(A).

What is an action level?

The regulations use noise exposure levels of 85dB(A) (first action level) and 90dB(A) (second action level) as the trigger for certain actions by the employer:

- *First action level:* the employer has to provide information and training and make hearing protection available.

- *Second action level:* the employer has to take action to control the noise.

N.B. – in 2006 new noise regulations will reduce the action levels to 80dB(A) and 85dB(A) and introduce a new exposure limit of 87dB(A), so it is a good idea to start preparing now!

Relying on hearing protection?

If the second action level is exceeded you cannot use hearing protection as a substitute for reducing the amount of noise in your workplace. Hearing protection is only to be used to either tackle the immediate risk before developing other noise controls, or to tackle any risk remaining afterwards. See pages 6 and 7 of the employers leaflet for further details.

Why provide training on hearing protection?

- hearing protection only provides adequate protection if it is worn correctly and if it is worn for the whole time that the noise is there,
- the law says that people exposed to loud noise have to be given adequate information and training. The training should also be given in normal working hours.
- 1 in 4 of all compensation claims for occupational ill health are for noise induced deafness – training (and refresher training) goes a long way towards protecting you against claims.

Who should be trained?

- training is not optional – all who need it have to have it – i.e. anybody who has a daily noise exposure at or above the first Action Level or where a noise assessment has still to be carried out, anybody working in an area where the 2m rule applies.
- anybody who enters an ear protection zone – even for a short time, e.g. managers and maintenance fitters.
- anyone who has responsibilities for making sure that ear protection is worn correctly.

Who should give the training?

- someone who is used to giving training or who has good presentation skills – they don't need to be an expert on noise – the pack contains enough to give the trainer a basic understanding.

If you need help on how to wear hearing protection correctly, ask someone from the company who sells you your hearing protection to give you a demonstration.

What does the training involve?

The training is in three parts:

- how noise damages hearing and an audio demonstration of what it sounds like to go deaf;
- who is at risk, how the risk can be controlled, what you have already done to control the noise; and
- using ear protection - what sorts of ear protection are appropriate, how to wear it correctly and how to look after it. (Ideally, this session should give employees the chance to try on different types of ear protection.)

The training is drafted as a single session lasting 30 minutes but can readily be broken down into three separate sessions if necessary.

What equipment is needed?

For details of the equipment that is needed see page 1 of the toolbox talk.

2) BEFORE YOU START

- Health and safety training only works if those being trained believe that you, as the employer, mean what you say. Discuss the training with your employee and safety representatives to help get the support of your employees.
- There is little point in giving the training if you are not complying with the Noise at Work Regulations. Training on its own is unlikely to protect you from a claim for noise induced hearing loss!
- So before you use the pack:
 - clearly mark out areas of the workplace where ear protection has to be worn as Ear Protection Zones. (This should be based on a noise assessment or where an assessment has still to be carried out, on the 2m rule).
 - identify employees who need the training (see page x).
 - plan out how you will implement your ear protection programme. This should be done in consultation with your employee and safety representatives. The programme should include:
 - choosing the selection of hearing protection you will make available – it should be suitable for the task, the individual and the workplace. Suppliers of hearing protection can help you with this.

- arrangements for distributing the hearing protection. If using dispensers for single use ear protection make sure they are located where they are easy to get to.
- making sure that replacement hearing protection is readily available and that you keep adequate stocks of disposable ear protection.
- providing storage for reusable hearing protection so that it is kept clean and free from damage.
- setting out procedures for care and maintenance of ear protection equipment.
- getting feedback from your employees on how the system is working and acting on it.
- arranging for refresher training in due course.
- allocating responsibilities for 'who does what' in the ear protection programme. Make sure they are competent and there are arrangements for monitoring their performance.

3) AFTER THE TRAINING HAS FINISHED

- Make a record of the training that has been given, the date and who attended. Make alternative arrangements for any employees who missed the training.
- Follow-up any employees who found it difficult to get hearing protection to fit them properly. You may have to offer them additional kinds to try, if so supervise their choice. People cannot be allowed to use hearing protection if it does not fit them properly even if they prefer it.
- Put up the ear protection poster.
- Place a mirror near the earplug dispenser, or at the entrances to ear protection zones, so people can check earplugs are correctly inserted.
- Finally, and most importantly, monitor the correct use and maintenance of ear protection on a regular basis.

What equipment do you need? – *the best place for this is probably in with the tutor's notes*

- a CD player (or computer that plays CDs)
- a sketch of the factory showing the likely noise exposure levels in different areas. (You should be able to get this from your noise assessment or estimate the levels using the 2m rule.)
- a mirror(s) so people can check that they are wearing the ear protection correctly.
- samples of different types and makes of hearing protection for people to try.
- enough copies of the *employee pocket card*
- a flip chart and pens - not necessary, but helpful.

TOOLBOX TALK

PART ONE – WHAT’S YOUR HEARING WORTH?

1. Introduction

- Explain that training is in three parts:
 - part one covers how noise damages hearing and there is an audio demonstration of what it sounds like to go deaf.
 - part two looks at who is at risk, how the risk can be controlled, what you have already done to control the noise, and how to use ear protection.
 - part three looks at what sorts of ear protection are appropriate, how to wear it correctly and how to look after it.
- Say why the training is being given:
 - exposure to noise can result in hearing loss – once it is lost there is nothing that can be done to bring it back. It can also lead to tinnitus, which is a constant ringing, rumbling or whistling in the ears;
 - noise induced hearing loss is completely preventable.
 - the training is to make them aware of the risk to their hearing, what is being done to control the risk and what they can do to help protect themselves.

2. What is your hearing worth?

Question: *How important is sound to your everyday life? Give examples such as the following:*

- being woken up in the morning:
 - sharing a joke or gossip
 - enjoying the atmosphere of a football match or a party
 - listening to birdsong or music
 - warning of danger, such as fire
 - detecting problems with the car or a machine
 - hearing a cry for help.
- Noise destroys delicate nerve cells in the inner ear that transmit sound to the brain. The nerve cells get replaced by scar tissue that does not transmit sound.

- Hearing naturally deteriorates as we get older, but when combined with loud noise, the effect will be much worse.
- You might think that you will notice if your hearing starts to go – not so. It gradually deteriorates over time without you realising it. You will only notice when it starts to affect your life and by then it will be too late. So now is the time to protect it.
- hearing loss can affect your relationships with your family and friends. It becomes difficult to have a normal conversation; your family will complain because the television or radio is too loud, and you will have problems forming new friendships or relationship for example with grandchildren. Deafness cuts you off from people and can make you feel very isolated.

Question: *does anyone here suffer from hearing loss, or know of someone who does? How does it affect them?*

- tinnitus, the constant noise in your ear, is a real problem. It makes you tired and irritable, you find it difficult to concentrate, which can make you anxious and depressed, and is particularly noticeable at night when the house is quiet and you are trying to get to sleep.

Question: *does anyone here suffer from tinnitus, or know of someone who does? How does it affect them?*

3. The CD

- explain that it can be hard to imagine what it is like to be deaf, particularly when you are young. The CD shows you – the effects can start to be detected after just 2 years of exposure to loud noise.
- Do not adjust the volume after starting to listen to the CD. (Make sure it is loud enough for everyone to hear it at the start!)
- Play the CD
- Afterwards, remind attendees that hearing loss is irreversible. When it's gone, it's gone. Hearing aids only give limited help.
- Advise that if anyone experiences symptoms, such as difficulty in understanding speech in conversation or when using the telephone, or has a permanent ringing in the ears, to seek medical advice.

Question: *Does anyone have any questions or comments on what they have heard so far?*

TOOLBOX TALK

PART TWO – ARE YOU AT RISK?

1. Introduction

- Part two looks at who is at risk, how the risk can be controlled, what you have already done to control the noise, and how to use ear protection.

2. Who is at risk?

- The risk of hearing loss depends on how loud the noise is that you are exposed to and how long you are exposed to it. The louder the noise, the shorter time it takes to affect your hearing.
- As a rule of thumb, noise is loud enough to damage your hearing if you have to shout to be clearly heard by someone 2m away.
- On the sketch of the factory show the areas where this rule applies (or where your noise assessment has shown that there is a risk to hearing).
- Ask if those attending agree with that these are the right areas and whether there are any others.
- Identify all the employees who work in those areas and make them aware that they are at risk of hearing loss.

NB all the areas identified should have been clearly marked as ear protection zones.

- Show the sign used to mark out the ear protection zones.
- Advise that anyone entering an ear protection zone **MUST**, by law, wear ear protection, no matter how long or short they are going to be in the zone for. Even if just passing through, hearing protection has to be worn for the whole time. Unless it is worn for all the time that it needs to be, it will not give adequate protection. For example, if hearing protection is taken off for just 3 minutes in an hour, the level of protection provided is reduced by 50%.

3. Excuses for not wearing hearing protection

- Read out some excuses people use for not wearing hearing protection. Ask for feedback after each one.

“I don’t need to wear ear protection – I’m already deaf”.

Feedback: If not raised, mention the following:

- only a small proportion of people with hearing problems are completely deaf. Once the exposure to loud noise is stopped the hearing loss from it won't get any worse.
- It is even more important that people who already have some damage to their hearing protect what they have left. A person who had lost one eye, would not be careless with the other!

“It’s a free country – I’m exercising my right not to wear ear protection”

Feedback: If not raised, mention the following:

- employees have a legal duty under the Noise at Work Regulations to wear the hearing protection they are provided with in ear protection zones.
- If an employer has complied with the law, but the employee still refuses to wear ear protection, then HSE could take the employee to court. If they are found guilty, they could be fined up to £5,000.

“I can’t hear people speaking to me when I’m wearing ear plugs/muffs”

Feedback: If not raised, mention the following:

- it is actually easier to distinguish speech in a noisy environment whilst wearing ear protection, because much of the background noise is screened out.
- Some ear protectors are specially designed to make it easier to hear speech, such as level-dependent protectors. (Show an example if possible.)

“I need to remove my ear protection for a short time so that I can listen to the sounds the machine is making”

Feedback: If not raised, mention the following:

- removing ear protection, even for a short time, greatly reduces the protection provided.
- If their hearing were to become damaged as a result of doing this, it would be even harder to hear the machine.
- diagnosing faults on machines can still be done wearing ear protection, but people need to re-learn what the machines sound like with ear protection.

“I’ll only be in this area for a minute or two”

Feedback: If not raised, mention the following:

- Everyone should put on ear protection before they enter an ear protection zone, no matter how long they intend to stay there. This applies to managers, people who work in the office, visitors and forklift truck drivers, who may be in and out of the area regularly.

“Wearing ear protection can harm your ears”

Feedback: If not raised, mention the following:

- Earplugs are soft and not long enough to reach far in to the ear canal so it is virtually impossible to do any harm.
- Earplugs cannot cause ear infections, although people with existing ear infections should not wear them; they should wear earmuffs instead. Ear infections are never a reason why ear protection should not be worn.
- If employees report ear problems such as infections or a build-up of wax, they should go to their GP (or if you have one, to the company’s medical advisor).

“My personal stereo blocks out the factory noise”

Feedback: If not raised, mention the following:

- Personal stereos simply add to the total factory noise exposure, they can’t protect against it.

“I’m not the one using the noisy machine/tool”

Feedback: If not raised, mention the following:

- Sound is transmitted through the air and affects everyone, not just the person nearest to it. So even if you are not the one using the noisy tool, or working at a noisy machine, you still need to protect your hearing.

4. Feedback on existing ear protection

- Ask for employees’ opinions on the ear protection they currently use. Are there any problems, which discourage them from wearing it, or reduce the protection it provides. This could happen if it is:
 - uncomfortable to wear

- incompatible with spectacles or other PPE worn, or
 - provides over-protection
- advise that their opinions and concerns are taken seriously, and they are being given the opportunity to try out other types of ear protection. Try to include ear protection in the trial, which will address any of the concerns raised.

5. Other precautions

- Outline any other steps you have taken to protect employees' hearing, e.g., to reduce noise levels by using anti-vibration mountings, exhaust silencers or noise enclosures.
- Ask for thoughts on any other measures that could be taken to reduce the amount of noise being generated at source.

6. Employees' role

- Explain that employees have a legal duty to:
 - correctly use any noise control measure provided.
 - they can also help to keep noise down by e.g.
 - not keeping machinery or compressed air systems running when not needed
 - not playing the radio too loud
 - using a less noisy process when one is available
 - using the lowest serviceable pressure on compressed air systems.
 - they should also report defects, such as damage or wear. Explain whom they should report to and how.

Question: *Does anyone have any questions or comments on what they have heard so far?*

TOOLBOX TALK

PART THREE – PROTECTING YOUR HEARING

1. Introduction

- Part 3 covers the types of hearing protection that are suitable for the individual, the job and the working environment. (If appropriate, say that there will be the opportunity to try out different types of ear protection.)
- Remind those present - not sure about using the word trainees – it makes me think of people new to the company or YTS rather than the people attending the talk that ear protection is compulsory in ear protection zones.

2. Different types of ear protection

- Explain the different styles and types of ear protection:
 - earmuffs, which completely cover the ear;
 - earplugs, which are inserted into the ear canal; and
 - semi-inserts (also called canal caps), which cover the entrance to the ear canal.
- State that the ear protection has to reduce noise exposure to below 90dB(A).
- If other types of personal protection are worn, such as hard hats or eye protection, the ear protection must be compatible. Show the illustration in the pack.
- Ear muffs might not be suitable for people who wear earrings or who wear their hair over their ears.
- Demonstrate (or arrange for a supplier's representative to demonstrate) how to wear the different types correctly. Refer to the picture in the pack. (Pictures to be based on photographs shown on page 14 of leaflet "Noise at work – Advice for employers")
- Comfort is important – it is more likely to be worn properly if you don't constantly have to adjust it.
- For non-disposable ear protectors, say where they are to be kept when not in use. Also, how they should be kept clean.

3. Employee pocket card

- Hand out the employee pocket card "Protect your hearing or lose it!" to everybody present.

- Tell them it summarises what has been covered in the training and is to act as a reminder of the main points raised.
- Ask them to take it away and to read it and to let you know if there is anything that they do not understand.