

Preparations

5xbeter offers you this discussion manual to engage in conversation with your colleagues and employees about the theme harmful noise. Starting point of this conversation is the screening of the 5xbeter Clip 'Harmful Noise? In the end, it will be quiet forever' and / or a presentation of the results of the 'Test your hearing-week'. In support of the conversation, show the presentation 'In the end, it will be quiet forever'.

Read this manually carefully and determine who would make the best moderator. If these kinds of conversations are new in your organization, it may be a good idea to use 5xbeter for that. Once the ice has been broken about these kinds of themes, supervisors are often able to manage it themselves.

A couple of tips for a good conversation:

Note if you can see people giving affirmative nods or bump each other when displaying the clip and / or the presentation of the results of the 'Test your hearing-week'. If this is the case, you can start the conversation by saying that you saw that happen. Don't call out names, but insert a brief silence. When people start talking about their behaviour during the clip on their own initiative, that's great, but don't force them.

When, on their own initiative, they explain why they responded, write down their words on a flip-chart or board in keywords. Don't go into it too extensively, but tell them that you will get back to it over the course of the conversation.



Presentation

Are you deaf?

In the end, everything will be silent

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Metastoffe FME Metool CTV De Unie

Slide 1

Opening question at the start of the presentation:
How do we deal with noise and hearing protection?

How do we deal with noise and hearing protection?

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Slide 2

Start the meeting by playing the clip 'Harmful Noise? In the end, it will be quiet forever' and / or a the results of the 'Test your hearing-week'.

When is noise harmful?

Harmful noise is always related to:

- The volume -> the number of decibels
- The duration -> how long are you exposed to too loud noise

Hazard threshold:
80 dB(A), 8h per day

The noise level is safe if you can understand each other easily with a normal voice level, so without having to talk loudly

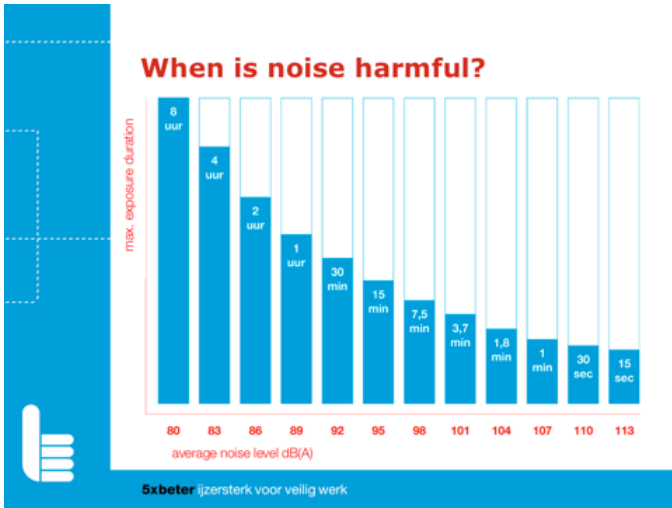
140 dB(A)	Pain threshold
105 dB(A)	Bar
100 dB(A)	Symphony orchestra
80 dB(A)	Street noise
60 dB(A)	Normal conversation
40 dB(A)	Quiet room
20 dB(A)	Raining water
0 dB(A)	Hearing threshold

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Slide 3

A daily dose is the amount of noise an employee is exposed to during an eight-hour work day. For an employee, the daily dose is determined by two factors:

1. The volume:
the number of decibels you hear, eg. the average noise level someone is exposed to per day; and
2. The duration
how long are you exposed to too loud noise? In other words: what is the average duration of this exposure in an 8-hour work day



Slide 4

The more decibels sound produces, the shorter a person should be exposed to it to remain under the legal daily dose!

Consequences of harmful noise

- Hearing loss occurs gradually
- Physical and psychological reactions as well

Hearing loss caused by noise can never be cured!

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Hearing loss occurs gradually The first important signals are temporary hearing loss and tinnitus

When we suffer hearing loss, this can also lead to physical and psychological reactions, such as palpitations, nervousness, insomnia, agitation, increased blood pressure, fatigue and stomach / intestinal disorders.

In case of continued exposure to harmful noise, everything will go silent, eventually.

Occupational illnesses in the Dutch Industry

1. Psychological conditions
2. Conditions to musculoskeletal system
3. Hearing conditions

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Slide 6

Figures of Nederlands Centrum voor Beroepsziekten (Dutch Centre for Occupational Illnesses), (2014).

Top 3 concerns notifications of occupational illnesses for non-construction industries across 2005-2013.

Psychological conditions represent 50.6 percent of the reports, conditions concerning musculoskeletal system (such as back or knees) represents 30.8 percent and hearing conditions represent 7.1 percent.

In the Netherlands, 1 in 10 people suffer from hearing loss

How many of them are 65 years or older?

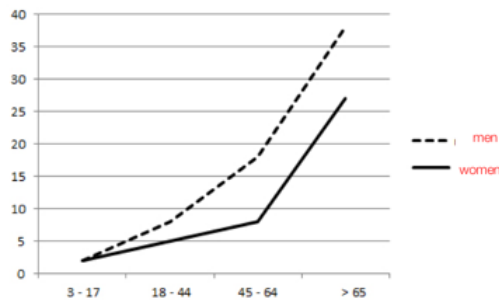
1 in 3

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Slide 7

Await answers then click to reveal the answer.

When we age, we are less able to hear what others are saying



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When we age, the range reduces, high pitched sounds in particular are harder to hear. In this case, it is hard to hear the difference between a B and a D.

Misunderstandings in communication are an important source of errors and accidents.

Do you recognize one of the symptoms below?

- People ask them whether you didn't hear them
- Or people ask you to turn the sound of the TV down
- You notice that you have to ask what someone said more and more

In 'yes' the consequences are:

- Bigger risk of accidents or mistakes at the workplace
- At some point, you'll feel like an outsider in a group

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Hearing loss is often a gradual process. That is why you might not notice it when your hearing is degrading. Await answers then click to reveal the consequences. Then click again.

Do you recognize one of the symptoms below?

- People ask them whether you didn't hear them
- Or people ask you to turn the sound of the TV down
- You notice that you have to ask what someone said more and more



Such a device can improve certain frequencies, making communication easier for a while

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How long a hearing aid will help differs per person. Take a hearing test on time! And protect your ears while you can.

Ringing ears

- Do you recognize the description of having ringing ears after a night out?



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If yes: also ask whether the person involved knows what causes this.

Young people

- How many young people under 21 *always* have ringing ears?



1 in 5

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Await answers then click to reveal the answer.

Since a couple of years, more and more young people applying at the army are rejected.

What requires attention?



- Protection against permanently harmful noise at work
- Protection against occasional harmful noise at work
- Protection against harmful noise in private situations
- If applicable: convince our children to protect themselves better against harmful noise



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Situation at our company

Processing	dB(A)
Sawing belt saw	70-85
Electric welding	85
MIG welding	90-100
TIG welding	65-75
Cutting	88-98
Punching	90-110
Hammering	95-110
Grinding Angle Grinder	95-115
Cleaning compressed air	99-103



- Do we have places where it is *often or always* impossible to understand each other at a meter distance with a normal voice level, so without having to speak loudly?
- Do we have places where *sometimes* there is a lot of noise, making it impossible to understand each other at a meter distance with a normal voice level?

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If one or more questions are answered with yes, draw these areas on a map or put them on a flip chart or on board.

Propose to perform the Improvement Check Harmful Noise of 5xbeter.

What does the Health & Safety Act say?

- > 80 dB(A): hearing protection must be available
- > 85 dB(A): demarcating areas where wearing hearing protection is required
- Employer:
 - Assess whether there is harmful noise
 - Limit the exposure to harmful noise where possible
 - Supervise
 - Offer period hearing tests to employees
 - Providing information about the risks and consequences of harmful noise
- Employee:
 - > 85 dB(A): employees are required to wear hearing protection

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Where economically and operationally feasible, 5xbeter pursues a maximum daily dose of 80 dB(A), because levels exceeding 80 dB(A) pose a risk of hearing loss.

As long as this 80 dB(A) has not been reached, the principle for the Improvement check is that a plan of approach is to be made and hearing protection is to be worn.

The legal threshold values (Health and Safety Act) remain in effect without prejudice.

What to do against harmful noise?

1. Reduce noise at the source. For instance by choosing a more silent machine.
2. Reduce the noise transfer to others. For instance by encasing a machine.
3. Prevent prolonged exposure to harmful noise. Think in solutions, such as task or workstation rotation.
4. Providing the most suitable (and pleasant) hearing protection. And wear it!



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If the aforementioned questions gave rise to perform the Improvement check, agree to get back to it, to check whether work needs to be done on source protection or hearing protection.

Wear your hearing protection

- It can prevent damage
- If there already is damage, it can prevent it from getting worse or delay the process



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Are you ever tempted to not use your hearing protection?

- When?
- Why?



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Invite the people who always wear protection to have them explain why they do that.

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Working together



- Agree with yourself and your colleagues to always wear hearing protection where needed. Hold each other accountable with regard to this.



- Think about how you can cause less harmful noise in your workplace



- This includes the volume of the radio: prevent the music from exceeding the high noise levels

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Young people

- What is the effect of hearing loss on your future perspective?



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Although young people tend to think that their hearing is perfect, there often already is a measurable dip in their frequency reach. In time, this makes them unsuitable for communicative positions. They can no longer become a pilot, the Defence department will no longer hire you, etc!

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Are you deaf?

More information?
www.5xbeter.nl

Want to improve even more?
Enable an Improvement coach!
Call the toll free number 0800 - 55 55 005 or send an e-mail to info@5xbeter.nl

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End with a clear agreement and adhere to it. In the next toolbox or meeting, revisit the agreement made.