Protect your ears, if you want to hear!

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Intro Video

- Tinnitus - Can you hear that?
Quiz

- How often (per month) do you attend music entertainment venues? (e.g. clubs, bars, festivals etc.)
- How many **hours per week** do you listen to music through personal listening devices (headphones) or speakers?
- When visiting music entertainment venues, **how often do you take breaks**? (Once every ... minutes / never)
- When visiting music entertainment venues, do you use **hearing protection** devices (like earplugs)?
- When visiting music entertainment venues, are you **aware of the location of the speakers**? (do you deliberately stand farther away from them)
- Looking at your current behavior involving visiting music entertainment venues, do you feel you are **at risk** of attaining **Noise-Induced Hearing Loss (NIHL)**?
Elaboration

- How hearing loss occurs
Noise-Induced Hearing Loss (NIHL)

- Exposure + significant intensity + duration → Increased risk of NIHL.

- Young people → report experiencing early symptoms.

- 54,075 healthy Dutch online hearing test.
  - 23% insufficient
  - 9% poor

- Those who use headphones have a larger risk of noise-induced hearing loss than when listening through speakers.
Let’s compare!

• **6.93 hours per week** with PLDs (67% listen through headphones)

• **55%** think they are at risk of attaining NIHL.

• **15%** wear earplugs while attending loud music events.
Discussion

• When is music too loud?

• How much exposure is too much?

• How do you think the consequences would affect your daily life?

• Work
• Social life
• Hobbies, sports, recreation, etc.
Noise level

- Every 3 dB → 2 times more damage

- 8 hours listening to an 80 dB sound

- If you can't hold a conversation with someone who is standing 2 meters away, the noise level is damaging to your ears.
Loudness and Exposure

- Significant chance of attaining noise-induced hearing loss:

<table>
<thead>
<tr>
<th>Intensity</th>
<th>Per day</th>
<th>Per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 dB</td>
<td>8 hrs</td>
<td>40 hrs</td>
</tr>
<tr>
<td>89 dB</td>
<td>1 hrs</td>
<td>5 hrs</td>
</tr>
<tr>
<td>95 dB</td>
<td>15 min</td>
<td>75 min</td>
</tr>
<tr>
<td>101 dB</td>
<td>4 min</td>
<td>19 min</td>
</tr>
<tr>
<td>104 dB</td>
<td>2 min</td>
<td>10 min</td>
</tr>
</tbody>
</table>

(source: http://ggd.groningen.nl/milieu-gezondheid/gehoorschade)
Are you at risk?

Do you believe you are at risk, or not?
What Now?

• What can we do?
How to protect your ears

- Once your hearing is gone, it's **gone for good**
- **Prevention** is the best medicine

**Loud music** can damage your hearing, permanently.
**Protect it.**
Things we can do!

True or false?
• Napkins in your ears can protect you from damaging your ears
  • False!
• Taking breaks from loud music can protect you from damaging your ears
  • True!
• Standing further from the speakers can protect your ears
  • True!
• Going to any club or festival will give you hearing damage
  • False!
Hearing Protection Devices (HPDs)

• The best way to protect your ears
• Decreases the intensity of vibrations inside your ears
• Variety in how much they filter
• Special music filters that don’t muffle sound
• Ranging from €10 to €200 (personal fit)

• Demonstration.... Any volunteers??
Where to buy?

• **Drugstores:**
  - DA
  - D.I.O.

• **Opticians:**
  - Specsavers
  - Hans Anders
  - Beter Horen

• **Internet**
  - Websites of earplug brands (Alpine, Noizzezz, Pluggerz)
  - Drugstore websites (Etos.nl, DA website)
  - Specialist websites (ultimate ears, oordopjes-kopen.nl)
Take Breaks!

• The longer you are exposed to loud music, the greater the risk of damage to your hearing.

• If there is a **chill out area** at the nightclub, use it!

• **10 minutes per every 1 hour.**
Not standing too close to speakers

- Don’t get too close to the loud speakers!
- The closer you are, the greater the damage being done to your ears.
Avoiding loud places

• A lot of difference in **volume**
• A lot of difference in **sound systems**
• A lot of difference in **set-up of sound systems**
• **Silent spaces**?
• Availability of **Earplugs**?
Let’s Review

• **Consequences** of exposure to loud music?

• Amount of damaging **decibels** after a certain amount of **time**?

• What can you **do**?

• **Benefits** of protecting your ears?
Finally

• An important message on saving your hearing
Thank you for your attention!