

## **NOISE IN KERBSIDE GLASS COLLECTION HEARING PROTECTION AND HEALTH SURVEILLANCE**

*This WISH information document is aimed at health and safety improvements in the waste management industry. The Health and Safety Executive (HSE) was consulted in the production of this publication. It endorses the sensible, proportionate, reasonable and balanced advice to owners on managing the risk from noise in kerbside glass collection during the waste-related activities as set out in the guidance.*

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### **Introduction and scope**

This Information Document is the second of a proposed series relating to noise issues arising from kerbside waste glass collections. Its content will supplement the other published document in the series “Noise in kerbside glass collection: using noise measurement to estimate noise exposure” The general principles in both the documents are applicable to other waste and recycling streams. This document is aimed at employers, managers and supervisors. It provides advice on how to protect workers from noise induced hearing loss caused by kerbside glass collection and sorting. It focuses on the selection and use of personal hearing protection and the provision of health surveillance.

## Kerbside glass collection – noise risk

High noise levels are created when glass:

- Is tipped from recycling boxes into slave bins
- Is tipped from recycling boxes into the kerbside collection vehicle
- Whilst being manually sorted at kerbside into a stillage vehicle.

The high noise risk areas of this work are well known and have been measured before. They are documented in:

- *WISH Waste 16 - Reducing noise risks from "kerbside" glass collection*
- *WRAP Report- Noise Exposure in glass collections for recycling. August 2012*

The level of noise created means that employees may develop noise induced hearing loss. The Noise Regulations require you to eliminate noise risks or reduce noise risks and noise exposures to as low a level as reasonably practicable. Therefore, the noise should be eliminated, or reduced and suitable hearing protection provided to protect against any remaining risk. It may also be necessary to have regular hearing checks (health surveillance).

Guidance on measures to control noise levels can be found in:

- *WISH Waste 16 - Reducing noise risks from "kerbside" glass collection*

Advice on the selection and use of personal hearing protection and the provision of health surveillance is summarised below.

## Hearing protection

Hearing protection should **not** be used as an alternative to control noise by technical and organisational means, but for tackling the immediate risk while other control measures are being developed. In the longer term, it should be used where there is a need to provide additional protection beyond what has been achieved through noise control measures.

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Many organisations have been reluctant to provide collection staff with hearing protection because they are worried that this will increase the risk of traffic accidents because workers may not hear moving vehicles. With proper selection of hearing protection, good staff training and correct use of hearing protection, this can be overcome.

## Selection

There are many types of hearing protection available. When choosing, consideration should be given to:

- Noise level and time spent in the noise (assessment of the risk)
- Working environment (safety, communication, hot, dusty, dirty, clean)
- User preference (comfort, pre-existing medical conditions, colour)
- Compatibility with other PPE
- Training and maintenance (when to use it, how to fit it, getting new ones)

The graphics below show some examples of different types of hearing protection and information which you may find useful when choosing hearing protection is given in the following text.

- A banded earplug is quickly and easily used. It is designed to only block the entrance to the ear canal, not be inserted into the ear. When not required it is simply worn around the operative's neck
- Corded flanged earplugs are inserted into the ear canal using the stalk. The part inside the ear canal does not need to be handled by the operative. When not required they are simply worn around the operative's neck. They can be filtered to allow speech and warning signals through



*Left to right: Example hearing protection. Banded earplug, corded flanged earplug, custom moulded earplugs, earmuff with level dependent facility*

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- Custom moulded earplugs will fit only the person for whom they are made. They can also be corded to wear around the neck when not required. They can be filtered to allow speech and warning signals through
- Earmuffs, with level dependent facilities, allow speech and warning signals to be heard whilst still protecting the operative's hearing. Earmuffs may be more suitable for operatives who are unable to wear earplugs

Remember when choosing hearing protection ***you must not overprotect***. Overprotection causes difficulties with communication and hearing warning signals. Hearing protection users can become isolated from their environment, leading to safety risks. Users also have a tendency to remove their hearing protection and therefore risk damage to their hearing. ***The single number rating (SNR) provided with all hearing protection will assist in the choice of hearing protection. The SNR gives an indication of the protection factor.***

- Further guidance on hearing protection can be found in Part 5 of HSE Noise publication - L108 Controlling Noise at Work (second edition 2005)<sup>4</sup>

## Training

Operatives must be trained how to use their hearing protection and why it is necessary. Many manufacturers provide good instructional charts and free DVDs. You don't need to be an expert to show someone how to use their hearing protection; you just need to follow the instructions.

Regular checks should be made to ensure that operatives are wearing their hearing protection and that it is fitted correctly. If it isn't, find out why.

## Hygiene

Working in recycled glass collections has the potential for exposure to a significant range of hazardous substances, including household chemicals, often due to the unknown use/re-use of old glass containers.

Due to the increased chance of cuts, the chance of infection can be high if operations are not adequately managed or supervised. Poorly managed / supervised operations may encourage workers to neglect good hygiene practices and / or fail to wear and adequately maintain their hearing protection.

Good hygiene practices, which are regularly reviewed, are supported through a programme of information, education and training. If you observe poor hygiene practise, find out why.

## Health surveillance

What is health surveillance? Health surveillance will:

- Identify when employees are showing early signs of hearing damage
- Provide an opportunity to do something to prevent the damage getting worse
- Check whether control measures are working

Health surveillance consists of:

- A hearing test to assess any hearing defects which may have been caused by exposure to noise at work
- A discussion between an employee and an occupational health provider about the results of their hearing checks
- Keeping health records
- An examination by a doctor where hearing damage is identified.

When is health surveillance required?

- It is required for people whose work puts them at risk of hearing damage (and should include those people regularly exposed above the upper exposure action value)
- Employees are entitled to attend health surveillance appointments within paid working time and the employer must bear the cost

Who provides health surveillance?

- The hearing checks need to be carried out by someone who has the appropriate training
- The whole health surveillance programme needs to be under the control of an occupational health professional/provider (for example a doctor or a nurse with appropriate training and experience)

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- The occupational health provider will keep individual medical records which are medical in confidence and not given to the employer
- The employer receives and keeps grouped, anonymised information which allows them to identify areas where noise risks need further control. The employer may also keep an employment history for individuals

How often should health surveillance be carried out?

- The law does not define how often health surveillance should take place. The recommendation is for employees to have a baseline hearing check when starting a (new) job with likely noise risks, then annually for the first two years, and then once every three years if the employee's hearing is stable.
- Further guidance on health surveillance can be found in Part 6: Health Surveillance for Hearing Damage of HSE Noise publication - L108 Controlling Noise at Work (second edition 2005)

## Disclaimer and WISH

This information document has been prepared by health and safety practitioners to assist health and safety improvements in the waste management industry. It is endorsed by the WISH (Waste Industry Safety and Health) Forum. This information document is not formal guidance and represents good practice.

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The Waste Industry Safety and Health (WISH) Forum exists to communicate and consult with key stakeholders, including local and national government bodies, equipment manufacturers, trade associations, professional associations and trade unions. The aim of WISH is to identify, devise and promote activities to improve industry health and safety performance.

## References

- Noise in Kerbside Glass Collection: Using Noise Measurement to estimate noise exposure
- WISH Waste 16 - Reducing noise risks from "kerbside" glass collection
- WRAP Report- Noise Exposure in glass collections for recycling. August 2012
- HSE Noise publication - L108 Controlling Noise at Work (second edition 2005)
- Health Surveillance for Hearing Damage of HSE Noise publication - L108 Controlling Noise at Work (second edition 2005)