The Definitive Guide to Acoustic Safety & Comfort In Contact Centres & Offices

By Polaris Communications Pty Ltd
the world-wide specialists in acoustic protection for headset wearers
“Call centre workers are more vulnerable to ASI [Acoustic Shock Injury] because they generally spend more time than other workers using a headset to make and receive calls. Modification of the workplace, use of equipment and comprehensive policies and procedures should be in place to protect your workers against ASI, if possible. Mechanisms should be in place to prevent further injury if there is an ASI incident.”

Australian Government - Comcare
‘Acoustic Incidents’
July 2011

“Acoustic trauma, also known as acoustic shock can occur when a person is subjected to an extremely loud noise or series of loud noises ….. If there is no protection to the ears, then the acoustic shock from the loud noise can cause irreparable hearing damage depending on the severity of the injury such as a perforated ear- drum.

... There has been an uptake in cases of acoustic trauma from call centre workers as this industry has grown in size …”

Industrial Deafness
‘Acoustic Trauma’
2014

www.industrialdeafness.org.uk/acoustic-trauma
People are the most important asset of any company, and Employers are responsible for protecting the health and safety of their employees by providing and maintaining a safe work environment.

In contact centres, and any other work environment that requires employees to use headsets, this responsibility includes the protection of people’s hearing.

There are two types of hearing damage that can affect headset wearers:

1. **Long Term Noise Exposure**

   Damage from long term noise exposure can occur when a headset wearer is continuously exposed to high levels of noise every day. Over time this may result in hearing loss.

   There is ‘overwhelming scientific evidence which indicates that exposure levels above 85 decibels represent an unacceptable risk to the hearing of those exposed.’ (NOHSC)

   In Australia, the National Occupational Health and Safety Commission (NOHSC) has set a maximum average daily noise exposure level of 85dB over an eight period in the workplace.

   The EU Control of Noise at Work Regulations requires employers to take specific action for exposure levels ranging from 80dB – 85dB.

2. **Acoustic Shock Injury**

   Acoustic shock injury is more immediate and is completely unrelated to long term noise exposure. It is caused by an unexpected, sudden and usually high-pitched sound transmitted through the headset. These sudden acoustic ‘shrieks’ can be caused by interference on the telephone (both landline and soft-phone), misdirected faxes, power supply failures or by man-made sources such as crying babies or malicious callers blowing whistles down the telephone line.

   The effects of acoustic shock injury are both short term and long term:

   **Short term symptoms:**
   - Headaches
   - Balance disturbances
   - Nausea
   - Pain (ear, head and neck)

   **Long term symptoms:**
   - Hearing loss
   - Tinnitus (ringing in the ears)
   - Hypersensitivity to high level sounds
   - Stress

   Current regulations regarding the prevention of acoustic shock injury are confusing and misleading because they do not address the issue adequately.

   The Australian Communications Industry Forum (ACIF) G616:2013 Acoustic Safety for Telephone Equipment Guidelines recommends a headset output limit of 102dB, while in Europe the recommended limit for ‘peak sounds’ is 135dB.

   However, **limiting sound output does not prevent acoustic shock injury.** Acoustic shrieks can, and do, happen at low volumes because acoustic shock is a nervous system response to a ‘sudden and unexpected’ sound.
Why is Acoustic Protection Important?

When a staff member suffers acoustic shock injury, not only does it directly affect that person's physical and emotional health, but there are other flow-on effects:

- In the short term the employee may need to take time off work.
- This affects company productivity.
- It also has a ‘ripple effect’ through the surrounding co-workers who start to feel vulnerable.
- The affected employee's performance and their ability to do their job properly may be affected for fear of another acoustic shock incident.
- In the worst case scenario, legal action may be taken against the company.

A study conducted recently in the UK estimated that nearly one in four contact centre agents believe they have experienced acoustic shock so acoustic safety is a serious matter.

Here's how to make a work environment acoustically safe:

- Reduce contact centre ambient noise levels by avoiding sound enhancing furnishings such as wooden or tiled floors. Use soft furnishings such as carpet instead.
- Ensure that adequate partitions are placed between staff member workstations.
- Equip contact centre agents with headsets that have a maximum average daily noise exposure level of 85dB over an 8 hour period in the workplace.
- Equip contact centre agents with headsets and/or devices that will completely eliminate any acoustic shrieks.
- Continuously monitor and manage the noise in your contact centre.

Acoustically Safe Headsets for your Workplace

Remember that limiting sound output does not prevent Acoustic Shock Injury and acoustic shrieks can, and do happen at low volumes. Unfortunately this is not widely understood by some headset manufacturers and their headsets are promoted as being acoustically safe when in fact they are not.

There is so much confusion relating to acoustic safety. Many contact centres invest heavily in headsets that they think will provide their staff with the very best protection, only to discover that acoustic shock incidents continue to happen.

To this day the only headset products that effectively protect contact centre agents are:

**Wireless Options:**
- **Soundshield Wireless Headset** (captures sound data)
- **HD Wireless Headset** (does not capture sound data)

**Corded Option:**
- **Soundshield 4G Acoustic Protection device & the Soundpro Wideband Corded Headset** (captures sound data)
The Polaris products are unique because they run the **Sonaron™ Patented ‘Shriek Rejection™ software** which uses a two-pronged approach when it comes to acoustic safety. It limits noise exposure to 85dB over an eight hour period and also provides total protection from acoustic shock caused by sudden and unexpected loud noises and high pitched sounds.

The Sonaron™ software that runs in every Polaris headset device detects and completely removes any dangerous tones in a few milliseconds, ensuring that they never reach the ear of a headset user and the risk of acoustic shock in completely eliminated. No other product does this.

**Analysing the Noise in your Workplace using Soundstat™**

In the Soundshield headset products, Sonaron™ software also captures sound data. Sound data (otherwise known as Noise Dosimetry) is the measurement of noise in decibels. By measuring noise it is possible to identify the amount and the loudness of noise that someone is exposed to over a period of time and whether they have been exposed to any sudden loud noises or high-pitched sounds.

Sound data can be uploaded from your Soundshield to a PC either periodically or upon demand using Soundstat™ software. Soundstat converts sound data into easy-to-read graphs.

Soundshield headset products are the only ones that give you the ability to effectively analyse the noise in your workplace.

**Other important features of the Soundshield & HD Wireless products:**

- Large intuitive touchscreen with easy call controls
- HD Wideband audio that delivers crystal-clear conversations
- Simple Supervisor / Training set up so that managers can quickly and easily listen to contact centre agent calls.
- PC / Desk-phone Connectivity for e-learning and Quality Assurance
- Longest battery life: 13+ hours
In Conclusion

It’s important to understand that ‘noise limiting’ in headset products does not protect a headset user from acoustic shock injury.

An organisation that is serious about protecting its headset users and demonstrating that it has discharged its ‘duty of care’, will find the Polaris headset range of products essential to safeguarding staff hearing health.

The Soundshield Wireless Headset, the Soundshield 4G Acoustic Protection device and the HD Wireless Headset have all been uniquely designed to protect headset users; specifically those intensive users in contact centres. They provide the highest level of acoustic protection of all headset products currently on the market.

Commitment to Quality, Service and Innovation
- that's what sets Polaris apart from the rest!