

## Recommendations for use of Ear Defenders

Young children typically have more sensitive hearing than adults.

Ear defenders can be used to mask environmental sounds. They are recommended for use for young children exposed to loud sounds, e.g. at an air show, or festival where there is loud noise or music. They are also used to support children who become stressed, frightened or freeze when they encounter a loud, unexpected sound.

Ear defenders are widely available from the internet and should cost between

£10.00 - £20.00.

To ensure that ear defenders are not over used and become a tool by which children can live apart from their environment in a sound 'bubble', some basic recommendations are made below:

- Limit wear, to critical events such as the walking journey to/from school, going in to the school dining room or assembly, being near a busy road, going in to a public toilet where there are hand driers, or when the vacuum cleaner/food mixer is used.(see desensitisation)
- Wear for 5 minutes and see if the child can tolerate their removal. If not allow another 5 minutes.
- When taken off place the ear defenders where the child can reach them and put them on if they need them. Easy access to the ear defenders will reduce anxiety that the child might experience about possible trigger events, and enable them to have control over their auditory/hearing environment; however it is important that children are exposed to challenging sounds in a way that enables them to learn how to cope with the sounds when not wearing the ear defenders.

### **Desensitisation:**

Preparation using calming techniques (tactile and proprioceptive) should always be used. See 'Calming Activity' advice sheet as reference.

In order to desensitise to sounds that cause distress or a defensive response, children need to experience the sound in a safe way. The most effective way of desensitising is to record the sound and introduce it to the child at a very low volume. This can be as part of a game, identifying noises, playing sound snap (having pictures of noise events and matching the picture to the sound) or as part of a social story (see link).

Once the child is happy with the sound at this very low level, increase the sound slowly, it often works to give the child the control of this process. It is **VERY** important not to rush this process as this could increase the anxiety for the child.



**IF** during the desensitisation process the child becomes fearful or demonstrates that the noise is becoming more impactful; go back one or two stages in the plan and allow the child to recover confidence before moving on again.

**Some** children will need to desensitise to the impact of the sensation of wearing the ear defenders. Again tactile and proprioceptive preparation can be used effectively to enable to child to cope with the impact of the feel of the head-phones/ear defenders. Gradually introduce deep pressure touch to the ear area using hands in a firm (non-tickling manner), hold this touch briefly and slowly increase the time thus desensitising the child to this sensation. **DO NOT** squash the ears. Use social stories to support this process if required.

**Note:** For older children, it is possible to use personal stereos, with small or large ear phones instead of ear defenders to support the child when in challenging auditory/sound environments. It is important to protect the child's ears if listening to music through headphones. The volume should always be low, as a rule of thumb, if the child is listening to music through their headphones an adult should not be able to hear the music at a volume that would enable them to identify the track playing when sitting beside the child, if you can hear the music it is **TOO LOUD!** Adults must monitor this to ensure that the volume does not creep up!

It is recommended that children only listen to music through headphones for short periods of time, see above recommendations for ear defenders. Ideally a child will only listen to music at low volume, for a maximum of 30 minutes at a time.

**THINK! Safety:** Please ensure that your child is safe to leave with ear defenders or personal stereos before leaving them unsupervised with these items. Headphones are often connected to the personal stereo/MP3 player etc via a cable; safe use of this must be assessed before parents leave their child with these items. If there is any doubt do not allow your child to use these items without being supervised by yourself or another responsible adult.

**Schools THINK!** According to Bromley, Hare, Davison and Emerson (2004), 70% of children who have an Autistic Spectrum Disorder (ASD) are hyper-sensitive to auditory stimuli. Dickie, Baranet, Shultz, Watson and McComish (2009), found that for this population, common triggers for extreme responses to auditory stimuli included fire alarms. Schools should consider planning fire alarm tests when these children are NOT close to alarms e.g. in the class room or moving along corridors, but are outside on the playing field or playground. If the child wears ear defenders/head phones ensure that they will be wearing them at the time of the fire alarm test/drill. This simple strategy will enable the child to experience the fire alarm test/drill without causing undue distress that will impact upon the child for the rest of the school day. Experience shows that once a child with ASD has been distressed by the experience of the fire alarm test/drill this can become a repetitive anxiety that impacts on the child daily for a long period of time. This will then influence the child's ability to focus and attend to lessons.

**Links:**

**Ear defenders:**

<https://www.amazon.co.uk/Edz-Kidz-Ear-Defenders-Blue/dp/B001D0YI7M>

<https://www.cheapdisabilityaids.co.uk> › *Special Needs Daily Living*

**Social stories:**

<https://www.autism.org.uk/about/strategies/social-stories-comic-strips.aspx>

<https://www.twinkl.co.uk>

**Sound Games:**

Letters and sounds (environmental sounds lotto) by Ibuzzybea ...

<https://www.tes.com/teaching.../letters-and-sounds-environmental-sounds-lotto-60377...>

<https://www.yellow-door.net/products/tune-into-environmental-sounds/>

[www.sparklebox.co.uk](http://www.sparklebox.co.uk) › *Literacy* › *Alphabet and Phonics*

Tune In to Environmental Sounds Listening Game CD; Or similar approximately: £15.00

References:

Ikuta, N., Iwanaga, R., Tokunaga, A., Nakane, H., Tanaka, K., Tanaka, G. (2016) Effectiveness of earmuffs and noise-cancelling headphones for coping with hyper-reactivity to auditory stimuli in children with autistic spectrum disorder: a preliminary study. *Hong Kong Journal of Occupational Therapy* 28, 24-32.

Bromley, J., Hare, D. J., Davison, K., & Emerson, E. (2004). Mothers supporting children with Autistic Spectrum disorders. *Autism*, 8, 409-423.

Dickie, V. A., Baranek, G. T., Schultze, B., Watson, L. R., & McComish, C. S. (2009). Parent reports of sensory experiences of preschool children with and without autism: a qualitative study. *American Journal of Occupational Therapy*, 63, 172-181.