

Vision, Hearing, Smell and Taste

CYP may also experience over and under-responsive reactions within any of their other senses, hearing, vision, taste, and smell. Generally, if the foundation sensory systems of proprioception, interoception, vestibular and tactile, are in a calm 'just right' state, the presentation of issues within the other sensory systems is likely to be much less significant. However, if a CYP is experiencing sensory needs within these sensory foundation systems, they are more likely to present with and experience difficulties within the other systems.

If you are seeing a CYP who is displaying anxiety or fear around smells or sounds within the environment some of the core strategies associated with the tactile and proprioceptive systems will help to alleviate these difficulties. Refer to the '[Activities to help balance the sensory systems](#)' table.

If you are seeing behaviours representing needs with the other sensory systems, the first consideration should be **environment or place**. Check that all the strategies recommended in the Environmental audit have been considered and reasonable adjustments made to support the CYP.

Hearing (auditory)

Some CYP are very fearful of loud and unexpected noise this can elicit a fear response and heighten arousal. For some CYP their journey to school can trigger this difficulty as traffic noise or specific noises such as lorries or motor bikes might cause anxiety or fear responses. See Ear Defenders activity sheet.

CYP sometimes explain that a noise hurts, do not dismiss this as we are not able to feel responses as others experience them and sensory responses can be interpreted by the brain as pain if they are at too high a level for the CYP to organise and regulate them.

What you Might See

As described in the 'What you might see' overview

If a CYP is **seeking** more noise (auditory stimulus) they may:

- Make lots of noise with resources and voice
- Gravitate towards noisy places/activities/people
- Stamp feet when walking
- Sit very close to speakers when listening to music/watching TV
- Play music very loudly into earphones/headphones
- Need to have auditory stimulation in order to concentrate on other tasks such as listen to music through earphones during reading and writing tasks

If a CYP is **under responsive** to noise (auditory stimulus) they may:

- Appear to have a hearing impairment
- Love crowds and busy places
- Not meet verbal requests/follow verbal instructions
- Have delayed reactions to auditory information such as startle later than would be expected following a sudden sound
- 'Zone out' during group activities such as storytelling/seminar where most information is provided verbally



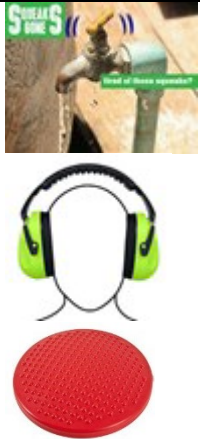
Step 2 Hearing (auditory)

If a CYP is **over responsive** to noise (auditory stimulus) they may:

- Be distressed by high pitched, multiple and /or complex sounds
- Be distracted by sounds others may not notice
- Cover their ears
- Avoid noisy situations/places
- Be anxious before, during and after events
- Hum in order to mask external sounds

Step 2 Hearing (auditory)

You can support these **auditory** sensory processing needs by using some of the following activities:

| What you see | Initial activities | When/how long for?/Techniques | What to be aware of | Images |
|---|--|--|---|---|
| <p>CYP becomes distressed when loud unexpected noises occur.</p> <p>Over responsive</p> | <p>Ear defenders can be worn to reduce the impact of noise levels (see use of ear defenders)</p> <p>Use social stories to talk about the noise and to reduce the fear and anxiety</p> <p>Listen to the sound at very low levels, allowing the CYP to increase the volume</p> | <p>Use specifically for trigger events, like the walk to/from school, OR in preparation for the fire bell etc</p> <p>This is a gradual process, with regular sympathetic exposure, at the CYP's pace of lower volumes and intensity of the noise</p> | <p>Do not let the CYP wear them all of the time, as this might enable the CYP to withdraw and exist in a bubble and will not resolve the issue</p> <p>Do not enforce exposure as this will lead to emotionally tagging the event and increase rather than decrease the issues for the CYP</p> |  |
| <p>CYP might make their own noise, a hum, whistle or teeth grind Indicating they are using to mask environmental sounds</p> <p>Over responsive</p> | <p>Deep proprioceptive and or tactile input from the calming information or 'heavy work' can resolve this</p> <p>Chewing can also help</p> | <p>Observe the frequency of this response and see if there are any environmental links that can be addressed</p> | <p>This might be a behaviour response, if so, a sensory solution will not alter it</p> |  |
| <p>The CYP reports hearing an environmental sound that doesn't bother anyone else</p> <p>Over responsive</p> | <p>Ear defenders can be used if this is impacting on focus and attention</p> <p>Proprioception preparation, 'heavy work' can help to reduce the impact of these situations</p> <p>Using a wobble cushion can provide additional sensory feedback that dampens the response to the noise.</p> | <p>During focussed activities</p> | <p>This can be a very real and incessant irritant for the CYP</p> <p>CYP may become over stimulated whilst sitting on the cushion or stuck with wobbling and unable to focus on the taught activity.</p> |  |

Hearing: Additional activities sheet

These lists are by no means definitive but a good starting point to discover what does and does not work for individuals.

It is important to bear in mind age and appropriateness to setting when choosing activities from the lists. Some activities will be more appropriate for younger children and others for young adults whereas some will be more appropriate for home, nursery, school, outdoors etc.

Sensory Seeking

- iPad apps to show the level of noise made
- Opportunities to make noise vocally and with resources such as instruments/microphone etc.
- Opportunities to listen to music/sounds
- Use of ear/headphones to listen to music/sounds
- Banging/stamping activities e.g. Bear hunt
- Banging/crashing activities such as drums, symbols, sticks on fence
- Listening to environmental sound cd's and identifying sounds heard using pictures
- Encourage loud clapping to a rhythm
- Make bottle shakers containing bells, pebbles, pasta, rice etc.

Under Responsive

- Make sure eye contact is given before calling name etc.
- Provide visual support for spoken instructions such as signing
- Use gestural cues such as tap to shoulder or hand before interacting to ensure attention is gained
- Use a visual cue (e.g. placing a coloured card on desk; holding up a visual cue) to gain attention before giving new work, instructions or directions
- Use a visual support to aid registration of instruction e.g. typed notes on a handout, pictures, keeping instructions on a board
- Allow a longer time to respond when asking questions. Some people may need extra quiet time to process information before responding to a question.
- Interrupting during this processing time can confuse their thought process
- Break complicated directions into fewer parts and give time to complete the first step before going on to the next part. Use visual reinforcements such as bullet points for them to refer to
- Give demonstrations and written or visual information to support verbal instructions
- Prior to activities such as stories, discussions etc., write down two or three main points to listen out for; then check for memory and understanding of those points
- Active listening activities

Over Responsive

- Minimise verbal instructions
- Use ear defenders/plugs for short periods

Step 2 Hearing (auditory)

- Allow to wear headphones/listen to favourite music
- Provide quiet space to focus/retreat to
- Avoid noisy environments where possible
- Be aware of the acoustics in rooms
- Ask people to talk quietly where possible
- Wear hat with earmuffs etc. when walking by busy roads

Desensitisation

- Introduce 'quiet' song time with lots of actions rather than sounds, generally build upon sounds tolerated in songs with lots of visual cues to allow anticipation
- Introduce 'quiet noise' activities to encourage involvement in types of play child would normally avoid. Gradually swap resources used to increase level of noise generated. Such as exploring cotton wool in tough spot to shredded paper to tinsel to rice to pasta and shaking bottles filled with pom poms to polystyrene chips to cardboard strips to rice to pebbles
- Introduce 'scratchy boards' made from a variety of materials that produce sounds of different levels when scratched. Encourage the child to take control and explore sound production as they feel able to tolerate. Materials could include AstroTurf, corrugated cardboard, scourers, space blanket, metal tray and sandpaper etc.
- Introduce a program around disturbing noise/sounds to include wearing of ear defenders etc. in presence of sound, social stories about why/when sound might occur and what child might do to develop anticipatory skills and opportunities to self-regulate.
- Record sounds and play back initially on low volume, increasing as toleration improves
- Slowly desensitise to new noisy environments such as group/new school/park with social stories, recorded sounds and short regular visits
- Introduce social stories for unexpected sounds such as fire alarms, telephone ring etc.

Easily distracted by background noise:

- Seat student away from classmates who tend to be chatty and noisy
- Move to a quiet area when doing focused work: this could be a quieter area of the classroom, or even another room
- If a quiet room is not available, use ear defenders, headphones or ear plugs. (These should only be worn when there is a high level of auditory distractions, and should be part of an auditory desensitisation programme)
- Visual cues to control the noise in the classroom e.g. a volume control icon or a traffic light system
- Access to a workstation in a quieter area
- Access to music via headphones so child can control background noise

Seems to ignore instructions or is slow to follow instructions:

- Use a visual cue (e.g. placing a coloured card on desk; holding up a visual cue) to gain attention before giving new work, instructions or directions
- Use a visual support to help the understanding of verbal instruction e.g. bullet points, visual work system, typed notes on a handout, pictures, keeping instructions on board etc.

Step 2 Hearing (auditory)

- Wait for the room to become quiet before giving instructions.
- Keep instructions short and break into separate steps. Wait for each step to be completed before giving the next instruction
- Speak clearly, with a moderate rate, and stand in one place, preferably face to face
- Give additional time and allow longer to respond when answering questions or responding to instructions
- Allow extra quiet time to process information before responding. Interrupting during this processing time can confuse the thought process
- Simplify/explain new vocabulary; visual cues and images may help.
- Encourage asking for help or clarification and provide a tool to do this without drawing attention to themselves e.g. using a help card; a coloured symbol.
- Use of familiar routines and visual cues for everyday activities, e.g. start of the day
- Teach a 'Get, set, go!' routine that can be followed to begin every lesson, with visual support
- Assist in completion of some parts of a task in order to get started on the learning task quickly, for example, provide own box of equipment, stick in lesson objectives rather than writing down, help to log onto computer

Difficulty participating in group work discussions/projects

- Provide a quiet area away from the noise of the rest of the group. They could work in a quiet room, resource area or even in the corridor if safe and appropriate
- Differentiate activities/ tasks and replace with those which do not involve a high level of verbal interaction. For example, researching information on the computer, recording findings provided by a group experiment or actions to imitate rather than sounds.
- Give a specific role and clear objectives to carry out within the group
- Teach 'ground rules of group work' to all (e.g. only one voice at a time).
- Provide visual or written notes to reinforce important content

Dislikes noisy settings:

- Prepare before entering a noisy environment by placing it on the visual schedule or verbally warning about sounds that will be encountered.
- Allow the use of ear defenders to reduce the noise input. These should be used as part of a desensitisation programme working towards gradually becoming used to noise. For example, the ear defenders are removed for the last minute of assembly, and when tolerable they are removed for the last 2 minutes, then the last 3 minutes and so on
- Provide a visual scale, for example: the thermometer scale to indicate when they are becoming distressed and need a calm quiet area
- Designated quiet areas in larger areas such as the dining hall
- Designated quiet areas on the playground
- Access to a quiet classroom, library or activity club over lunch time
- Explicitly teach appropriate phrases to use when feeling distressed by noise e.g. "I am finding it very noisy here". "Could you please speak more quietly?"
- Reduce the volume and amount of speech you use. Use visual strategies instead when giving instructions
- Provide opportunities to leave the room for short breaks to carry out jobs etc.
- Consider having designated quiet areas in larger areas such as the dining hall

Step 2 Hearing (auditory)

- Teach emotional regulation strategies e.g. 5 Point Scale
- Access to time out card or other activity to promote self-regulation
- Sensory diet approaches to maintain optimum regulation
- Social story work to reassure and reinforce agreed management strategies

Dislikes a specific sound:

- Allow to ear defenders during the distressing noise
- If possible, warn when the noise is about to start and use a visual timer to indicate when it will end
- Provide a visual prompt card/ help card to request to leave the room when feeling overwhelmed by the noise
- Teach emotional regulation strategies e.g. 5 Point Scale
- Sensory diet approaches to maintain optimum regulation
- Social story work to reassure and reinforce agreed management strategies

Dislikes a sudden, unexpected noise:

- Explicitly teach about the fire alarm and tests
- Consider allowing opportunities to press the alarm button under supervision to provide control over the noise. This may support understanding of where the noise comes from and the fact that it will end
- Explicitly teach an appropriate way to respond to an unexpected noise by covering ears, putting on ear defenders, humming etc.
- Teach calming strategies to use when there is an unexpected noise e.g. breathing exercises, deep pressure exercises
- Teach emotional regulation strategies e.g. 5 Point Scale
- Access to time out card or other activity to promote self-regulation
- Sensory diet approaches to maintain optimum regulation
- Social story work to reassure and reinforce agreed management strategies

Sensitive to noises not noticed by others (clocks ticking, projector humming, etc.):

- Remove or replace unnecessary noises e.g. use a digital clock instead of a ticking clock, remove buzzing light bulbs and turn off screen projectors when not in use

If it is not possible to remove the distracting noises, allow the use of ear defenders or headphones when particularly distressed by the noise or when completing focussed work. However, it is important to gradually reduce the amount of time the ear defenders are worn to assist the desensitisation to sounds. [See guidance around use of ear defenders](#)