

GREATER MANCHESTER MULTI-AGENCY

# SENSORY PROCESSING *DIFFERENCES* TOOLKIT



Greater Manchester

# CONTENTS

PURPOSE AND ACKNOWLEDGEMENTS	03
WHAT IS SENSORY PROCESSING?	04
WHEN TO USE THE SENSORY PROCESSING DIFFERENCES TOOLKIT?	05
HOW TO USE THE SENSORY PROCESSING DIFFERENCES TOOLKIT	06
WHY YOU SHOULD USE THE SENSORY PROCESSING TOOLKIT	08
WHAT YOU NEED TO DO	08
SUPPORTING RESOURCES	09
VIDEOS	10-11



# PURPOSE AND ACKNOWLEDGEMENTS

**This Toolkit was originally developed in Derbyshire by a multi-agency team of professionals including specialist teachers (early years, autism, and special educational needs specialists), Paediatric Occupational Therapists and Educational Psychology. It has been reviewed and adapted locally by Occupational Therapists for use in NHS Greater Manchester.**

It is not an assessment or diagnostic tool; however, it draws on the experience and expertise of these professionals to enable schools/settings to consider environmental factors and presentations which may have a sensory basis.

The toolkit is a guide for schools/settings/practitioners on how to support children with sensory differences, in order to remove or reduce the impact of this on their learning.

It is intended to be used with individual children in a child-centred approach rather than groups of children such as whole classes.

It can be used across all educational, therapeutic and community settings and age groups e.g. Early Years, Mainstream, Special Schools, Colleges, Swimming, Cubs, Judo, Dance, Respite Care etc.



## WHAT IS SENSORY PROCESSING

We use our eight senses, proprioception, interoception, tactile, vestibular, auditory, vision, smell, and taste, in order to explore and make sense of our experiences and the world around us. Information from our senses is received by our brain which filters out all that is unnecessary and formulates a response to the information it receives.

Interoception, vestibular and proprioception are interoceptive sensory systems (meaning from within the body)

Vision, auditory, tactile, olfactory and gustatory are exteroceptive sensory systems (meaning from outside the body)

Children and young people (CYP) with sensory processing needs may have a difference in the way their brain receives and makes sense of the information that it gets from their senses.

Some CYP receive too much information from sensory experiences whilst others will not receive enough. They will have the same experiences as their peer group but perceive them quite differently.

**There are children and young people who have sensory processing differences such as over responsive sense of smell, yet it does not present as a barrier to their learning and everyday functioning. For others their sensory processing differences present as a significant barrier to their learning and everyday functioning.**



## WHEN TO USE THE SENSORY PROCESSING DIFFERENCES TOOLKIT?

CYP with sensory processing differences may take longer to learn new skills and routines which can impact on their learning. This can lead to anxiety which often impacts on presentation, confidence, and social skills.

A CYP's processing and the responses that we observe may be a response to sensory differences. The Sensory Toolkit aims to identify and address sensory processing differences. Namely, over responsiveness (receiving too much information and therefore avoiding sensory stimulation), under responsiveness (passively unaware of sensory information not received) and sensory seeking (under responsive but actively seeking sensory stimulation).

These are broad terms that are not diagnostic in any way but help us to describe children's presentation and their responses that we see. We must remember

that how children present and their response can change dependent on their stress levels, the environment they are in, their developmental levels and changes within their sensory systems.

When we have different sensory experiences, our brains store information for the next time. If it was not a positive experience our reaction might be defensive the next time. These reactions can be magnified in a CYP who has some underlying sensory processing differences or learning difficulties.

Do not try to define a CYP just by using an umbrella term, remember, you are going to react to what you see and offer activities that either feed or re-direct a sensory difference.



## HOW TO USE THE SENSORY PROCESSING DIFFERENCES TOOLKIT?

When identifying a CYP's sensory differences, it is important to spend time observing them in a range of environments and gaining information from all professionals and carers involved to be able to ascertain not only whether they are over/ under responsive to which sensory systems but also why/ when/for how long.

Sometimes it is difficult to work out what the triggers to certain presentations are as they are not evident at the time, e.g., a change in family circumstances, or they are not visible e.g., an unfamiliar smell. It is therefore really important to discuss and observe in great detail before making assumptions such as 'there are no triggers' or 'that presentation has no function and happens randomly'.

The result of this holistic assessment would enable you to report that for example:

Thomas requires a 2-minute multisensory activity involving tactile, vestibular and visual input every 15 minutes in order to remain engaged and ready to learn.

Peter needs to move in order to concentrate so sits on a wobble cushion or a hokki stool during lessons.

Sally becomes distressed during loud activities such as assembly. She requires a 3-minute calming proprioceptive activity ahead, tactile items throughout and a 5-minute calming proprioceptive activity afterwards.

On the days that Billy has spent the night at dads he needs 15 minutes quiet time as he enters school before going into lessons.

A CYP may present as being over-stimulated and in a constant state of high arousal (fight, flight or freeze). It may be difficult, at least initially, to pick out which senses are over responsive at which times.

It is vitally important that effort is spent adapting the environment, activities and expectations placed upon them by others.

This will hopefully reduce the levels of stimulation and stresses reducing instances of sensory overload and or 'shut down'.

Therefore, when devising a plan to meet a CYP's sensory differences, those which are identified as over responsive/defensive should be addressed first and 'balancing' (calming) proprioceptive input provided to facilitate a reduction in overloading experiences.

The aim of a sensory plan should always be for the CYP to independently meet their own sensory differences where possible.

A positive result would be a CYP understanding their individual sensory differences, what resources/activities work for them and recognising when and how to access these in order to maintain sensory regulation.

This may initially rely upon adult facilitation, providing new/alternative experiences and resources and making adjustments to the environment/expectations.

For those with cognitive and or physical challenges, adult facilitation may be prolonged and having the tools to communicate their sensory differences should be prioritised.

Any sensory plan should be person centred and reviewed regularly.

The Sensory Tool Kit will support both the identification of a CYP's individual sensory differences and addressing them using a graduated response.



**IDENTIFICATION OF SENSORY PROCESSING DIFFERENCES AND SENSORY SMART ENVIRONMENTS**

## WHY YOU SHOULD USE THE SENSORY PROCESSING TOOLKIT

Best practice involves initial consideration of the impact of the environment upon the individual CYP within it.

It is important to ensure that CYP have had hearing/ vision assessments to ensure that any difficulties are not associated with hearing/visual loss. A CYP may also have visual perception difficulties that may need investigating.

The strategies provided may not be sensory processing specific; however, will support the needs of a range of CYP.

# THINK!

### • PERSON

What are the CYP's patterns in the day?  
What do they need and when?

### • PLACE (ENVIRONMENT)

What is the environment like?

### • ACTIVITY

What are you asking the CYP to do? Is this reaction to an activity that is too hard, or is not offering enough stimulation / has it gone on too long, or not long enough?

## WHAT YOU NEED TO DO

When completing the Sensory Processing Toolkit you can refer to the resources on the [Sensory Padlet](#) and the 'what you might see' document that provides some of the most common types of presentation and the 'eight sensory systems' document which provides more in-depth information on each sensory system and supporting strategies.

1. Complete the environmental checklist
2. Support the CYP to complete the 'my views' document dependent upon developmental level/ability
3. Develop a plan to support the individuals sensory processing differences identified. Implement strategies identified from the supporting resources as deemed appropriate. Review the plan within 6-8 weeks, to understand the impact of the strategies put in place and make further adaptations if needed.

## SUPPORTING RESOURCES

This Sensory Environment Checklist has been developed as a guide to help think about the sensory responses to a setting that some CYP might experience and consider some of the reasonable adjustments that might therefore be implemented.

This checklist does not cover all aspects of an individual's sensory profile. However, it does seek to provide an understanding for families, caregivers and staff working with individuals with sensory processing differences about how a setting might be altered if they find their environment to be impacting upon their occupational performance and participation.

The sensory planning document will facilitate the identification of what is happening, when. Very often practitioners, teaching staff and parents report that certain presentations can occur for no reason 'out of the blue'.

Completing the sensory planning document will ensure that everyone has a much clearer understanding of what the challenges are and why they might be happening. The exemplars included are just that, you should adapt the charts to fit the CYPs day/session/environment etc.

The 'my views' document facilitates the collection of the CYPs own views about what their sensory processing challenges are, how they feel in response

to their sensory environment and what currently helps them to feel better/reduce the impact upon them/ self-regulate. Again, the exemplars should be adapted to fit the individual CYPs environment/day/level of understanding.

As with all practice within the SEND or Early Years sector, it may be difficult to gain the CYPs views directly and practitioners/teaching staff/parents may need to use their knowledge of the CYP and their observational skills to make best guess assumptions about these.

Practitioners/teaching staff/parents can refer to the Sensory Padlet and the 'what you might see' documents that provide some of the most common types of presentation (although by no means definitive), as a starting point to identifying which sensory systems are presenting as barriers to them learning, engaging, and functioning.

There may be one obvious sensory system that is a priority to be addressed, however each CYP's sensory differences require a holistic overview, and if several sensory systems are identified they must be considered within the context of each other, the barrier they present and the environment.

The visual resources included are examples and again these can be adapted/swapped to best meet the preferences, abilities, and ages of the CYP involved.



# VIDEOS

Please be aware that NHS Greater Manchester is not responsible for many of the videos within this recommended list and as such cannot be liable for their contents. However, care has been taken to select those that reflect good practice and the recommended strategies within our graduated response to meeting sensory processing differences.

It is important to add that differing language has been used to describe sensory presentations.

**Sensory processing needs** (sensory processing difficulties/preferences)

**Over-responsive** (over-sensitive/reactive, hyper-sensitive/reactive)

**Under-responsive** (under sensitive/reactive, hypo sensitive/reactive)





# Greater Manchester

## AUTHORS

**Lisa Anderton** - Early Years SEN Service - Derbyshire County Council

**Sally Bayford** - Support Service for SEN - Derbyshire County Council

**Dr Fatima Bignell** - Educational Psychology Service - Derbyshire County Council

**Barbara Jones** - Occupational Therapy Service - Chesterfield Royal Hospital NHS Foundation Trust

**Elaine Rickett** - Occupational Therapy Service - NHS Derbyshire Healthcare Foundation Trust

**Amanda Towers** - Autism Outreach Service - Derbyshire County Council

## REVIEWED AND ADAPTED LOCALLY FOR USE IN GREATER MANCHESTER BY

**Sam Kenworthy** - Specialist Occupational Therapist/Sensory Integration Practitioner/Sensory Team Leader - Rehabilitation for Independence

**Hannah Cook** - Associate Occupational Therapist/Advanced Sensory Integration Practitioner - Rehabilitation for Independence

**Marina Nixon** - Commissioning - NHS Greater Manchester Integrated Care Board