



# Introduction To Autism SPECTRUM DISORDER

**Ala Mishchanka**

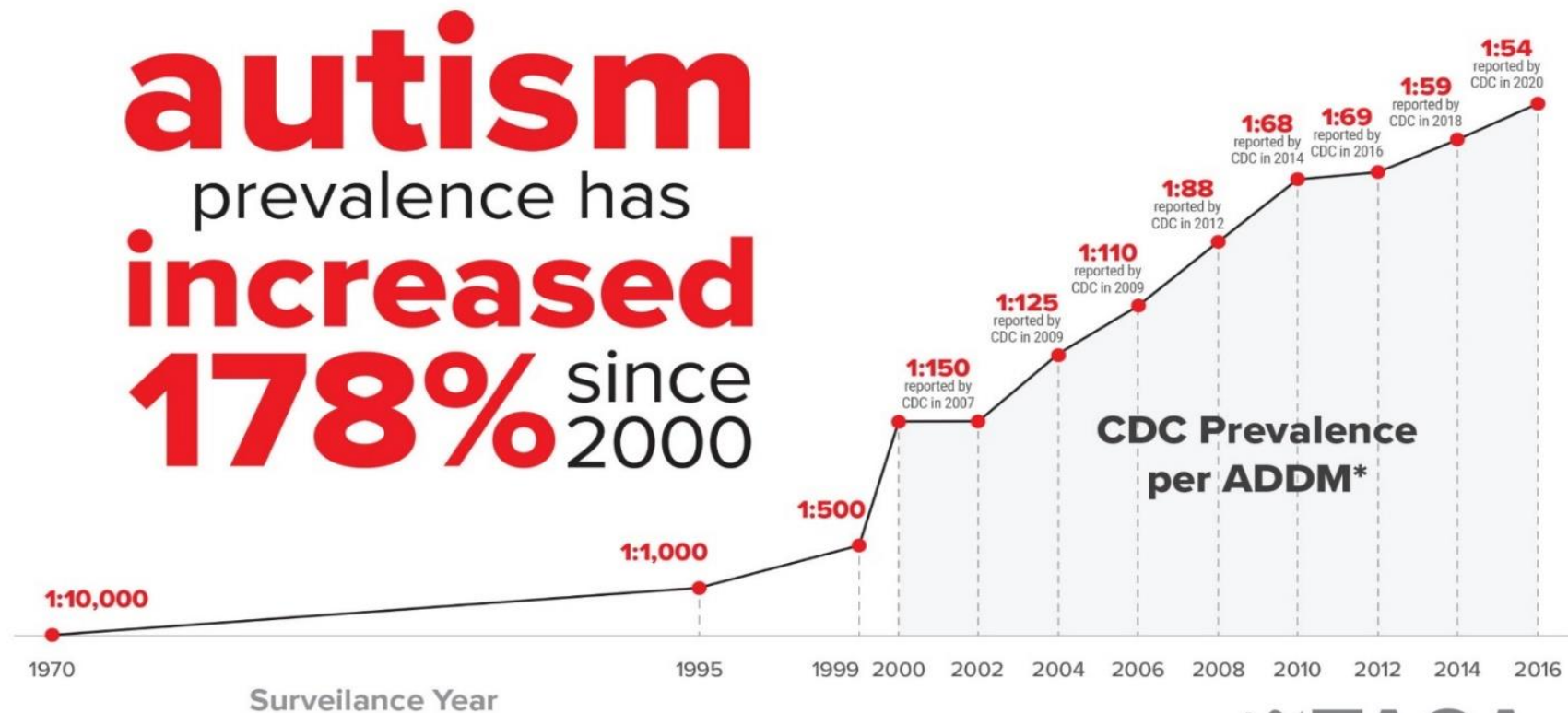
Special needs educational assistant (Canada)



**Autism is not  
a disability  
it is a different  
ability**

**-Stuart Duncan-**

# AUTISM PREVALENCE IN THE U.S.



\*ADDM (Autism and Development Disabilities Monitoring Network)



# AUTISM RATES BY COUNTRY 2021

## THE GLOBAL HEALTH DATA EXCHANGE

Countries with **highest** autism rates

Hong  
Kong  
1 in 27

South  
Korea  
1 in 38

United  
States  
1 in 54

Japan  
1 in 55

Ireland  
1 in 65

Qatar  
1 in 66

Canada  
1 in 66

Argentina  
1 in 68

Switzerland  
1 in 69

Australia  
1 in 70

Israel  
1 in 78

United Arab  
Emirates  
1 in 89

Oman  
1 in 93

Bahrain  
1 in 97

Saudi  
Arabia  
1 in 99

UK  
1 in 100

India  
1 in 100



# AUTISM RATES BY COUNTRY 2021

## THE GLOBAL HEALTH DATA EXCHANGE

Countries with the **lowest** autism rates

Poland  
1 in 3,333

Belgium  
1 in 167

Estonia  
1 in 167

Singapore:  
1 in 149

Denmark  
1 in 145

France: 1  
in 144

Portugal: 1  
in 142

Iceland  
1 in 139

Norway  
1 in 139

Italy:  
1 in 139

Germany  
1 in 139

Greece  
1 in 138

Austria  
1 in 138

Spain  
1 in 137

# DIFFERENCE BETWEEN ADHD AND AUTISM

## COMPARISON OF THE TWO CONDITIONS AND THEIR SYMPTOMS

	ADHD symptoms	Autism symptoms
being easily distracted	✓	
frequently jumping from one task to another or quickly growing bored with tasks	✓	
unresponsive to common stimuli (e.g., lack of response to a person calling the child's name)		✓
difficulty focusing, or concentrating and narrowing attention to one task	✓	
intense focus and concentration on a singular item		✓
talking nonstop or blurting things out	✓	
hyperactivity	✓	
trouble sitting still	✓	
interrupting conversations or activities	✓	
lack of concern or inability to react to other people's emotions or feelings	✓	✓
repetitive movement, such as rocking or twisting		✓
avoiding eye contact		✓
withdrawn behaviors		✓
impaired social interaction		✓
delayed developmental milestones		✓

# SENSORY PROCESSING DISORDER (SPD)

# I have Sensory Processing Disorder

I chew on everything

I overreact to minor scrapes and cuts

I hate having my hair  
washed, brushed or cut

I can be sensitive to  
loud sounds

I like to smell people  
and objects sometimes

I don't like tags on my clothes

I don't like to wear clothes

I enjoy being squeezed, I like pressure

I don't want my hands dirty

I have poor fine motor skills

I get overstimulated and meltdown

I get fearful and anxious sometimes

I don't like bright lights

Some smells really bother me

I am a picky eater

I can be clumsy and fall  
over things sometimes

I have poor gross motor skills

Sometimes I don't like  
to be touched

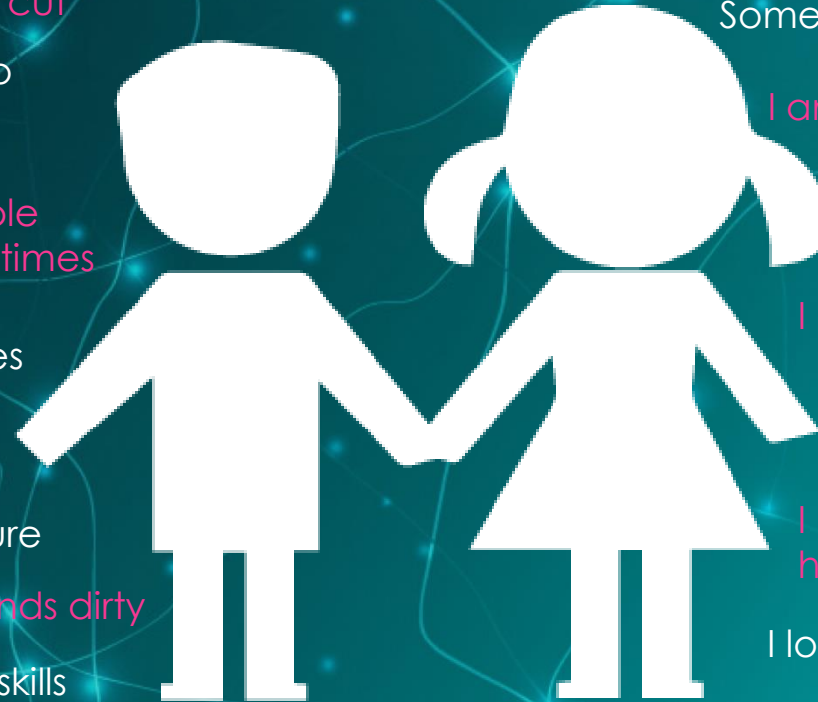
I like wearing the  
same clothes

I lose my balance

I crave fast spinning

Poor body awareness

I cling to adults I trust



## SPDPS



# TYPES OF SENSORY NEEDS IN CHILDREN WITH AUTISM

## 1. Movement

Children who are hypersensitive to movement may dislike swinging, spinning, rocking, riding in the car, while children with diminished vestibular sensation actively seek out these sensations but may have trouble with balance and coordination.

## 2. Sight

Children with sight hypersensitivity are often triggered by fluorescent lighting, bright colors, and visually busy environments. Children with sight hyposensitivity, on the other hand, enjoy observing moving objects, television, video games, and other exciting visual experiences.

## 3. Sound

Increased auditory sensitivity causes children to struggle in noisy environments. Children may become overwhelmed by loud noises or large amounts of background noise. Children with diminished auditory sensitivity frequently enjoy toys that make music or noise and turn television and music volume above safe levels.

# TYPES OF SENSORY NEEDS IN CHILDREN WITH AUTISM

## **4. Touch**

Heightened sense of touch is associated with an aversion to coarse fabrics, food textures, and being touched, held, or groomed. Children with a dulled sense of touch frequently enjoy tight clothing, weighted blankets, and other types of deep touch pressure.

## **5. Taste and Smell**

Children with increased sensitivity to taste and smell tend to dislike strong odors and tastes, and they often prefer bland and familiar foods over strongly flavored or new foods. Children with under-performing olfactory system may seek out strong odors and flavors for sensory stimulation.

## **6. Body Awareness**

Body awareness is a child's sense of where his body is positioned in relation to itself and the surrounding world. Poor body awareness manifests in weak posture, coordination, motor control, and spatial awareness.



# BENEFITS OF CHESS FOR CHILDREN WITH ASD

- ability to provide structured, predictable, and safe environment.
- ability to meet individual and unique sensory needs of a child.
- allows individuals with autism to participate in activities without social interactions that might cause stress.
- improves physical and mental health.
- provides opportunities for enjoyment, as well as increased self-confidence and motivation individuals on the spectrum.
- promotes inclusion and quality of life.
- Increases self-esteem and confidence.
- gives children the opportunity to make their own choices.
- provides satisfaction, enjoyment and pleasure.
- enables individuals with autism to become involved and feel like a part of their community.
- provides the opportunity to gain and develop new contacts and friends.
- reduces reliance on parents and other adults.
- increases independence which leads to increased opportunities.



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# CONTENTS

- Introduction
- What is Autism?
- World Statistics
- Treatment and Early Intervention for Autism
- What's the Difference Between ADHD and Autism?
- Needs of kids with Autism
- Conclusion