

# Early signs of autism spectrum disorders

Even “normal” children exhibit some of these behaviors from time to time. The symptoms of autism and Asperger’s, by contrast, are persistent and debilitating.

- No pointing by 1 year
- No baby talk by 1 year; no single words by 16 months; no two-word phrases by 24 months
- Any loss of language skills at any time
- No pretend playing
- Little interest in making friends
- Extremely short attention span
- No response when called by name; indifference to others
- Little or no eye contact
- Repetitive body movements, such as hand flapping or rocking
- Intense tantrums
- Fixations on a single object, such as a spinning fan
- Unusually strong resistance to changes in routines
- Oversensitivity to certain sounds, textures, or smells
- Difficulty making friends
- Difficulty reading or communicating through nonverbal social cues, such as facial expressions
- No understanding that others may have thoughts or feelings different from his/her own
- Obsessive focus on a narrow interest, such as reciting train schedules
- Awkward motor skills
- Inflexibility about routines
- Mechanical, almost robotic patterns of speech



When diagnosed early, many children with autism respond well to intensive behavioral interventions. The result is higher IQ and improved language abilities for the child and a greatly enhanced quality of life for the family.

## Facts about autism

AND THE UNIVERSITY OF WASHINGTON AUTISM CENTER

**Autism is not a rare disorder.** It affects one in 167 people and is more common than Down syndrome, childhood cancer, and deafness.

**Autism is a neurologically based developmental disability,** not an emotional disorder.

Unlike many other disorders, autism **can be detected** with the proper knowledge as early as 18 months of age, offering **hope for intervention** during the time when the brain is most plastic. Most health professionals do not recognize autism until a child is 3 to 4 years old — when the optimal time for early intervention has passed. The UW Autism Center is addressing the need for earlier diagnosis by increasing community outreach and professional education opportunities.

Many children with autism show a **dramatic response to early intensive behavioral interventions**, and most are helped substantially. For example, early intervention can result in a significant increase in IQ and language ability and a decrease in support services needed later in childhood. Intensive early intervention yields a financial benefit, too, saving approximately \$2 million over a lifetime for each person affected with the disorder. The impact on quality of life is immeasurable for people with autism and their families.

**The University of Washington** has an **internationally recognized research program on autism**. A team of more than 35 UW scientists collaborates on research on early diagnosis and intervention, brain development, neurobiological and genetic bases of autism, and drug discovery.

The UW Autism Center serves the Puget Sound and South Sound regions and provides a **model of collaborative research and service delivery worldwide**.

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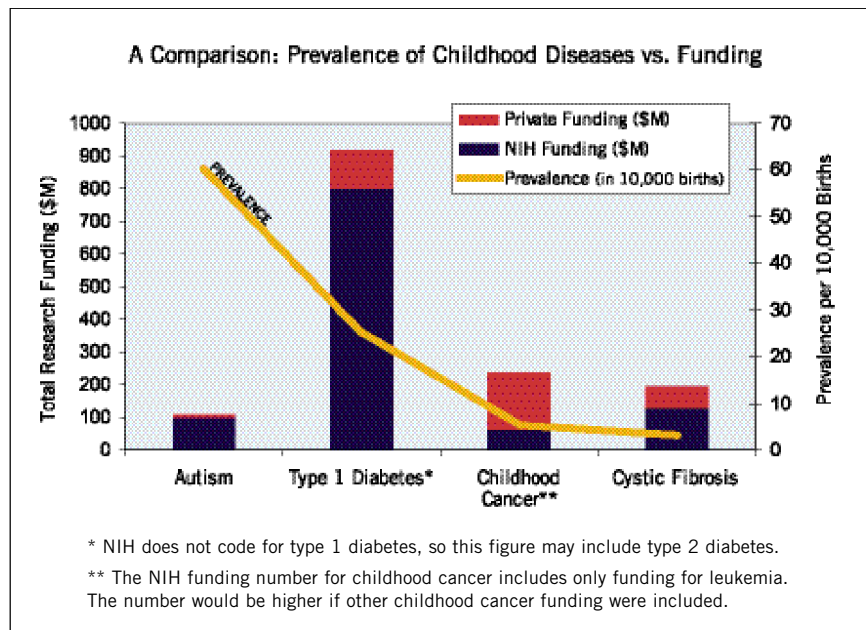
## AUTISM TOUCHES MANY LIVES

**The prevalence of autism** compared to other childhood health issues:

Cystic fibrosis: . . . . . 1 in 3,500  
 Childhood cancer: . . . . 1 in 2,000  
 Type 1 diabetes: . . . . . 1 in 400  
**Autism: . . . . . 1 in 166**

**How many Americans are affected?** Following are recent estimates:

U.S. children under 18 with  
 autism spectrum disorder . . . . . **450,000**  
 Americans of all ages with  
 autism spectrum disorder . . . . . **500,000 – 1 million**



## THE FUNDING CHALLENGE

Despite the increasing prevalence of autism, research in autism is funded at a significantly lower level than other childhood health issues. The graph above shows the disparity between the incidence of autism and the funding — both public and private — that is devoted to the search for cures and treatments.

Of its approximately \$25 billion budget, the National Institutes of Health (NIH) spends only \$100 million on funding for autism research.

In private funding, more than \$350 million is donated annually to juvenile diabetes, cystic fibrosis and childhood cancer — diseases that, when combined, still occur less frequently than autism. In contrast, about \$10.5 million is donated annually to autism research.

*Information on this page adapted from a presentation by Thomas R. Insel, M.D., National Institute of Mental Health, 2-25-05*