

Fact Sheet:

Autism and the Environment



Autism Spectrum Disorders (ASDs) are group of developmental disabilities caused by problems in the brain and cause problems with social interaction, communication and behavior. The three types of ASD's are *Autism or Autistic disorder*, *Asperger Syndrome* and *Pervasive developmental disorder*– not otherwise specified.

What causes Autism?

The exact cause of Autism is unknown. However, research studies suggest genetics, gender, and environment may play in the role of development and progression of Autism.

What are the manifestations of Autism?

There are three characteristics of autism:

- Deficits in Social Interaction
- Verbal and nonverbal communication deficits
- Fixated interests and/or repetitive behavior

What is the prevalence of Autism?

The CDC estimates 1 in 110 children have Autism.

What Environmental Hazards are Associated with Autism?

There are a number of environmental toxicants that are linked to developmental disabilities other than autism. This include chemicals as diverse as lead, methylmercury, polychlorinated biphenyls (PCBs), and organophosphate pesticides.

Some studies suggest exposure to Hazardous Air Pollutants (HAPs) may increase Autism risk. HAPs contain a variety of potentially harmful compounds such as benzene from gasoline and diesel emissions from cars.

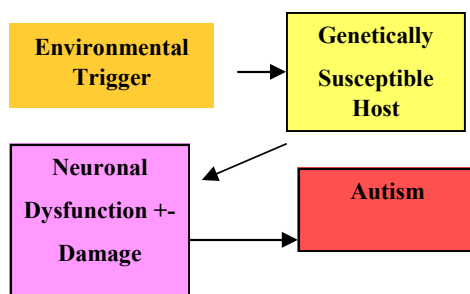


Figure 1: Pathogenesis of Autism
S, Swedo, NIH, 2007

Do vaccines cause Autism?

No. Extensive studies have not shown an association between any vaccine (including MMR) or vaccine component, such as Thimerosal, and the development of Autism.

What can school nurses do to help?

Know and understand the student's health history (physical and or psychological conditions).

Have a list of all medications the student is currently taking as well as any alternative therapies that the family may be using to treat autism symptoms.

Know the student's educational plans for behavioral interventions so that the school nurse can support and use the techniques and interventions.

Understand the characteristics of autism as well as the specifics of a student can be helpful in avoiding or managing upsetting situations.

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Citations

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