

Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS)

What is Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS)?

Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS) is a term for a disorder in children who have obsessive compulsive disorder (OCD), tic disorders, or both and who suddenly develop symptoms or have symptoms worsen after being infected with “strep” bacteria (Group A beta-hemolytic streptococcus or Group A Strep). Although the mechanism behind this disorder is unclear, researchers are investigating whether PANDAS is an autoimmune disorder triggered by Group A Strep infection (such as strep throat).

Who gets PANDAS?

PANDAS is most common in children younger than 13 years who have been infected with Group A Strep.

How is PANDAS spread?

PANDAS is thought to be the result of an individual’s immune system response to Group A Strep infection. PANDAS is not spread from one person to another.

What are the symptoms of PANDAS?

The symptoms of PANDAS include obsessive thoughts, compulsive behaviors and motor or vocal tics. These symptoms can be accompanied by a variety of other neuropsychiatric symptoms such as separation anxiety, moodiness/irritability, and anxiety attacks.

How soon after exposure do symptoms appear?

Children who develop PANDAS usually have a sudden onset of symptoms. The symptoms usually become more intense within 24–48 hours after the onset of their Group A Strep infection.

How is PANDAS diagnosed?

PANDAS is diagnosed by a healthcare provider after evaluating the patient. Although laboratory testing cannot identify PANDAS, it might identify a Group A Strep infection, which precedes PANDAS.

What is the treatment for PANDAS?

If a Group A Strep infection is identified, antibiotics might be prescribed to kill the bacteria. Other treatment might be provided based on the patient’s clinical condition, including cognitive behavioral therapy or anti-obsessional medications.

How can PANDAS be prevented?

The likelihood of PANDAS is reduced by limiting the spread of Group A Strep. The spread of Group A Strep can be reduced by following these tips:

- Wash your hands often with soap and water for 20 seconds, and help young children do the same. If soap and water are not available, use an alcohol-based hand sanitizer. Wash your hands especially after coughing and sneezing, before and after caring for an ill person and before preparing foods and before eating.
- Cover your nose and mouth with a tissue or shirt sleeve (not your hands) when you cough or sneeze and then throw the tissue in the trash.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact (such as kissing, hugging, sharing cups, or sharing eating utensils) with people who are sick, and when you are sick.
- Clean and disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
- Persons with Group A Strep infections should stay home from work, school, or daycare until they have taken antibiotics for at least 24 hours.

A vaccine for Group A Strep is not available.

How can I get more information about PANDAS?

- If you have concerns about PANDAS, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at <https://www.vdh.virginia.gov/local-health-districts/>.
- Visit the National Institute of Mental Health websites at <https://www.nimh.nih.gov/labs-at-nimh/research-areas/clinics-and-labs/sbp/information-about-pans-pandas.shtml> or <http://www.nimh.nih.gov/health/publications/pandas/index.shtml>.

Resources

- [PANS/PANDAS Evaluation and Treatment Algorithm](#)
- [PANDAS/PANS Parent Handout](#)
- [PANDAS/PANS School Systems Handout](#)
- [PANDAS/PANS Frequently Asked Questions \(FAQs\)](#)

Reports

- [2017 PANDAS/PANS Advisory Council Report to the General Assembly](#)
- [2018 PANDAS/PANS Advisory Council Report to the General Assembly](#)
- [2019 PANDAS/PANS Advisory Council Report to the General Assembly](#)