



Cleveland Clinic Children's
Hospital for Rehabilitation

Fragile X

CLINIC

Expert Help for Children with Fragile X Syndrome



Cleveland Clinic's Fragile X Clinic is one of only 26 such clinics in the United States. Experts in our clinic offer state-of-the-art evaluation for children and adults, and sophisticated, compassionate care for children and adolescents.

Fragile X syndrome is the most common inherited cause of intellectual disabilities in children. It is also one of the leading known causes of autism. Children who have fragile X syndrome may also have:

- Learning disabilities
- Attention-deficit/hyperactivity disorder (ADHD)
- Anxiety
- Seizures

Children with developmental delays, autism spectrum disorders and intellectual disabilities (previously called mental retardation) should be tested for fragile X. Some children with learning disabilities may also benefit from testing for fragile X.

Why fragile 'X'?

The X and Y chromosomes determine a baby's gender. Boys have one X and one Y chromosome and girls have two X chromosomes. A genetic defect on the X chromosome causes fragile X syndrome. Because boys only have one X chromosome, the symptoms of fragile X are often more severe for boys than for girls.



What our Fragile X Clinic offers

Evaluations. Our Fragile X experts are knowledgeable about developmental and behavioral pediatrics and communication disorders. Every evaluation involves a comprehensive medical history and physical evaluation, a social work assessment and a speech-language evaluation.

Specialty care. When additional care is needed, our team can utilize the world-class resources of Cleveland Clinic and Cleveland Clinic Children's to make referrals to specialists, including:

- Pediatric neurologists, psychologists and psychiatrists
- Pediatric physiatrists, and occupational and physical therapists
- Pediatric otolaryngologists (ENTs) and audiologists
- Cleveland Clinic Children's Center for Autism
- Genetics Clinic
- Pediatric cardiologists

Research. Cleveland Clinic is a member of the Fragile X Clinic and Research Consortium, an alliance of U.S. fragile X clinics supported by the National Fragile X Foundation and the Centers for Disease Control (CDC). This consortium is dedicated to advancing our understanding and treatment of children and adults with fragile X-associated disorders through research.

Family and community help. Education and other services are also part of our mission, and include:

- Educating the community, healthcare providers and schools about the needs of individuals with fragile X syndrome
- Helping families outside the hospital using community services and schools
- Increasing communication between families and healthcare professionals to foster new and better ways to treat children with fragile X

An opportunity to advance knowledge of fragile X

Any patients seen in our Fragile X Clinic can participate in the Forward Registry and Database Study if they wish. This multi-institutional study is supported by the National Fragile X Foundation and the CDC.

Researchers will be able to pool knowledge about fragile X syndrome and related disorders (such as fragile X tremor ataxia syndrome and fragile X premature ovarian insufficiency) through this study. The goal is to help as many people as possible today and in the future.

Families and individuals interested in participating in this study may contact Cynthia Antczak, LISW, in our Fragile X Clinic, at 216.448.6119.

Meet our Fragile X Clinic team



Carol Delahunty, MD, Director
Developmental and Behavioral Pediatrician

Dr. Carol Delahunty has extensive training and expertise in the diagnosis and care of children with fragile X syndrome. She attended medical school at the University of Virginia, completed her pediatric residency at the University of North Carolina, and completed a fellowship in developmental and behavioral pediatrics at the University of Colorado. Dr. Delahunty is board-certified in developmental-behavioral pediatrics and pediatrics.



Cynthia Antczak, LISW, Coordinator
Licensed Independent Social Worker

Cynthia Antczak, a social worker at Cleveland Clinic Children's Hospital for Rehabilitation, has extensive experience working with special needs children and their families. She is skilled in helping children with developmental disabilities or mental health issues. Ms. Antczak graduated from Cleveland State University with a bachelor's degree. She earned her Master of Science in social administration from Case Western Reserve University.



Beth Crumbaker, MEd, CCC-SLP
Speech-Language Pathologist

Beth Crumbaker obtained a bachelor's degree in Speech-Language Pathology from the University of Toledo in 1999. She earned a Master of Education in Speech-Language Pathology from the University of Toledo in 2001. Ms. Crumbaker worked for 12 years as a pediatric speech-language pathologist in public schools, private practice, hospitals and other settings. She is skilled in helping children with motor-speech disorders or developmental disabilities and is knowledgeable about augmentative and alternative communication.

To schedule an evaluation with our Fragile X team, please call 216.448.6119 or email antczac2@ccf.org.

Resources for families

CLEVELAND CLINIC CHILDREN'S RESOURCES

Fragile X syndrome information:
clevelandclinicchildrens.org/fragilex

Developmental-Behavioral Pediatrics at Cleveland Clinic Children's:
clevelandclinicchildrens.org/developmentalped

SUPPORT GROUP

Fragile X Alliance of Ohio: fragilexohio.org

NATIONAL RESOURCES

National Fragile X Foundation: fragilex.org

FRAXA Research Foundation: fraxa.org

Fragile X Clinical and Research Consortium: fxcrc.org

Connect with Cleveland Clinic Children's



Sign up for *Parents Be Well*, our family health & wellness e-newsletter, at clevelandclinicchildrens.org/parentsbewell



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Explore our services, locations and more at clevelandclinicchildrens.org



Find a wealth of family health & wellness tips at clevelandclinicchildrens.org/healthhub



Cleveland Clinic Children's

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Cleveland Clinic Children's provides comprehensive medical, surgical and rehabilitative care for infants, children and adolescents. Our more than 300 pediatric physicians accommodate more than 800,000 outpatient visits and 18,000 inpatient admissions per year at the children's hospital and outpatient facilities on our main campus, at the Cleveland Clinic Children's Hospital for Rehabilitation and outpatient facilities on our Shaker campus, and at community hospitals, family health centers and other locations across Northeast Ohio. Cleveland Clinic Children's & Pediatric Institute is one of 27 institutes at Cleveland Clinic designed to offer highly integrated care and conduct innovative research across multiple settings. It is backed by the full resources of Cleveland Clinic, a nonprofit academic medical center ranked among the nation's top hospitals (*U.S. News & World Report*).

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