

## **Holland Bloorview comments on U.S. report on autism**

The U.S. government [announced yesterday](#) an association between autism and the use of acetaminophen during pregnancy. Acetaminophen is the active ingredient in Tylenol and one of the most widely used medications used for pain relief. The administration also stated leucovorin, also known as folinic acid, can be used to treat speech-related challenges in autism.

Holland Bloorview Kids Rehabilitation Hospital's Autism Research Centre (ARC) conducts vital research aimed at improving outcomes and quality of life for children with autism and related neurodevelopmental conditions and their families.

[Dr. Evdokia Anagnostou](#), vice president of research, Dr. Stuart D. Sims Chair in Autism and co-lead of ARC provides commentary on the announcement:

On the underlying causes of autism: "There isn't one single cause of autism spectrum disorder (ASD). A wealth of scientific evidence shows that autism arises from a complex interplay of genetic and environmental factors. We already know that genes play a role in least 15 to 25 per cent of autistic children and youth, and researchers are still studying how genetic factors may interact with each other and the environment. Exploring environmental factors is important because they may help us understand additional ways of intervening to improve outcomes and quality-of-life for autistic children and youth."

On the link between using acetaminophen during pregnancy and autism: "Acetaminophen is the safest option we have for treating fever and pain during pregnancy. It is recommended by experts and is backed by science. Moreover, untreated fever or pain can be harmful and can lead to complications to both mothers and their baby. To be clear, the evidence on autism being related to acetaminophen exposure during pregnancy is very weak. While early, smaller studies may have suggested there could be a connection, newer and large-scale studies have not found strong evidence to support this link."

On using leucovorin as a treatment for autism symptoms: "The use of leucovorin as a treatment is unproven and requires more research before being widely used as a treatment. At this point, large randomized controlled trials are needed before a recommendation can be made."

On vaccination and autism: "Science is clear autism is not caused by vaccination. Families should get all their vaccinations to protect themselves and their communities from conditions like the measles. Vaccinations save lives."

On advocacy for the dignity of autistic people: "As we take in this announcement made yesterday, it is important to remember that autism is a condition associated with unique

strengths and challenges. Using language that ignores the richness that autistic people bring to our communities is both stigmatizing and harmful. Every autistic person deserves dignity and respect. We should recognize autism as a valuable expression of human diversity, while also recognizing every individual's unique needs." Families should seek advice from a medical professional if they have questions about autism diagnosis and treatment.

Media inquiries: [Mediarelations@hollandbloorview.ca](mailto:Mediarelations@hollandbloorview.ca)