

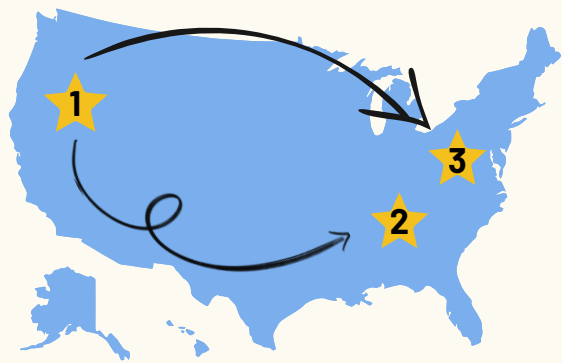
The Maternal Immune System & Autism



Maternal Autoantibody-Related Autism (MAR-ASD)

MAR-ASD is a subtype of Autism, which accounts for approximately 20% of all Autism cases. During pregnancy, a mother's autoantibodies (antibodies directed against the body's own proteins) mistakenly react to the proteins in the baby's brain, leading to behaviors linked to autism.

The number of ASD cases varies across the United States






- 1 UC Davis- MIND Institute
- 2 Children's Hospital of Philadelphia (CHOP)
- 3 Arkansas Children's Hospital and Research Institute (ACHRI)

Researchers from the University of California Davis partnered with 2 clinical sites with diverse populations from the DBPNet to see if MAR-ASD is consistent across the United States

Developmental-Behavioral Pediatrics Research Network (DBPNet)

68 mothers of autistic children aged 2 to 12 were included in this study. The following data was collected:

-  Blood Samples
-  Behavioral Questionnaires
-  Child's Diagnostic Autism Evaluations

16 of 68 blood samples were MAR positive (+MAR), affecting 23.5% of mothers

- Higher autism ratings in children of +MAR mothers
- No difference in IQ, daily living skills, or other behaviors
- MAR ASD may be linked to higher autism characteristics

There were similar rates of MAR-ASD in Northern California and the two other states

Testing for MAR ASD patterns has the potential to be used as a tool for earlier diagnosis of Autism

Further study is needed to find out why mothers develop these antibodies and how long these antibodies may continue to exist