Public Comment to the Interagency Autism Coordinating Committee

Support for the 2026–2028 IACC Strategic Plan: Advancing Research into the Causes, Biological Mechanisms, and Treatment of Severe Autism

Submitted by: Dr. Brian Hooker
Chief Scientific Officer, Children's Health Defense

November 15, 2026

Dear Members of the Interagency Autism Coordinating Committee:

On behalf of Children's Health Defense, I am writing to express our support for the 2026–2028 Interagency Autism Coordinating Committee (IACC) Strategic Plan. We commend the Committee's commitment to advancing autism research, improving medical care, addressing co-occurring health conditions, and prioritizing the needs of individuals with profound autism and high support needs.

We particularly support the Plan's recognition that autism research must extend beyond diagnosis and behavioral characterization to encompass the underlying biological mechanisms of autism, the medical conditions that frequently accompany it, and the development of more effective and individualized treatments.

We believe this direction represents an important opportunity to improve the lives of individuals with severe autism and their families.

Children's Health Defense encourages the IACC and the federal agencies responsible for implementing the Strategic Plan to give particular attention to three interconnected research priorities:

Investigating environmental and biological contributors to autism.

Understanding severe autism, including significant motor dysfunction and the proposed phenotype of motor autism.

Developing biomedical treatments that address the relationship between human physiology, gastrointestinal health, and the gut microbiome.

These priorities are intended to complement and strengthen the Strategic Plan, not replace its broader objectives.

1. Supporting the Plan's Emphasis on Biological Mechanisms and Environmental Contributors

We strongly support a comprehensive investigation of the biological mechanisms underlying autism, including interactions among genetic susceptibility, environmental exposures, immune function, metabolism, neurological development, and the gastrointestinal microbiome.

Although genetic factors are important, the development of autism cannot be adequately understood without investigating the potential contributions of environmental exposures and gene-environment interactions.

We encourage the IACC to support rigorous, independent research into the following categories:

Vaccines and vaccine components

We support transparent, methodologically rigorous research examining vaccine exposures and individual vaccine components, including adjuvants, preservatives, residual manufacturing materials, and other ingredients.

Specific research questions should include:

How do particular vaccine components or exposure patterns have measurable effects on immune, inflammatory, metabolic, or neurological pathways.

How do biological susceptibility, genetic background, or preexisting immune conditions influence responses to particular exposures.

Further investigation on timing, cumulative exposure, and interactions with other environmental factors.

How do identifiable biological subgroups demonstrate different responses to vaccine exposures.

We believe that specific, testable biological questions should be evaluated through appropriately designed studies, with independent replication and transparent reporting.

Herbicides and pesticides

We encourage expanded investigation into prenatal and early-childhood exposure to agricultural chemicals, including glyphosate-based herbicides, organophosphate pesticides, and other commonly encountered compounds. Research should examine cumulative exposure, developmental timing, chemical mixtures, and potential effects on mitochondrial function, oxidative stress, immune regulation, and neurological development.

Food and water contaminants

We support research into potential neurodevelopmental effects of environmental contaminants encountered through food and drinking water. Areas of interest include heavy metals, pesticide residues, persistent organic pollutants, endocrine-disrupting chemicals, and other contaminants. Where possible, studies should incorporate objective exposure measurements and biomonitoring rather than relying exclusively on retrospective exposure questionnaires.

Medications, including acetaminophen

We encourage continued investigation into early-infant and childhood medication exposures and their potential relationships to neurodevelopment. Acetaminophen deserves particular attention. Research should investigate potential associations with neurodevelopmental outcomes while carefully accounting for maternal illness, fever, dosage, duration, timing of exposure, and other potential confounding factors. We believe that this area warrants further investigation using prospective cohorts, appropriate comparison groups, and studies of potential biological mechanisms.

Our objective is to ensure that environmental and medication-related exposures receive appropriate scientific attention alongside genetic and other biological factors.

2. Supporting the Plan's Priority on Profound Autism and High Support Needs: Research into Motor Autism

We particularly support the Strategic Plan's attention to individuals with profound autism and high support needs.

This population has historically been underrepresented in many areas of autism research, despite facing substantial medical, developmental, and functional challenges.

We encourage the IACC to ensure that individuals with severe autism, including minimally speaking and nonspeaking individuals and those requiring lifelong assistance, are adequately represented in research cohorts, clinical trials, and longitudinal studies.

We also recommend a specific research emphasis on significant motor dysfunction in autism, including the proposed phenotype of “motor autism.”

Motor dysfunction can include impairments in motor planning, coordination, balance, gait, purposeful movement, and the ability to execute complex motor tasks. These impairments can substantially affect communication, independence, and quality of life.

Research should investigate:

Neurological mechanisms underlying motor dysfunction.

The relationship between motor impairment, communication, and adaptive functioning.

Potential metabolic, mitochondrial, inflammatory, and immune contributors.

Relationships between gastrointestinal dysfunction and motor symptoms.

Whether identifiable biological subgroups have distinct motor phenotypes.

Objective measures that can be used to evaluate motor function and treatment response.

We believe motor dysfunction deserves attention as an important dimension of autism rather than being routinely treated as a secondary or incidental feature.

We encourage the IACC to incorporate motor outcomes into its research priorities and to consider

dedicated studies of individuals with substantial motor impairments.

3. Supporting Research into Co-occurring Medical Conditions and the Gut-Brain Axis

We strongly support the Strategic Plan's emphasis on identifying, understanding, and treating medical conditions that commonly co-occur with autism.

Gastrointestinal disorders, sleep disturbances, epilepsy, immune dysfunction, metabolic abnormalities, and other medical conditions can substantially affect the health and functioning of autistic individuals.

We believe that research into the relationship between human physiology and the gut microbiome represents an especially important opportunity.

The gut microbiome interacts with multiple physiological systems, including the immune system, metabolic pathways, and the nervous system. Understanding these interactions may help identify biological subgroups and potential treatment targets in autism.

We recommend increased research investment in:

Gastrointestinal health and the microbiome

Characterization of gut microbial composition and function.

Intestinal barrier integrity and gastrointestinal inflammation.

Microbial metabolites and their potential neurological and immunological effects.

Dysbiosis and its possible relationship to clinical symptoms.

The relationship between gastrointestinal disorders and sleep, motor function, behavior, and adaptive functioning.

Mitochondrial and metabolic function

Research should investigate mitochondrial energy production, oxidative stress, metabolic abnormalities, nutrient deficiencies, and other physiological factors that may contribute to health challenges in severe autism.

Immune and inflammatory mechanisms

We encourage investigation of interactions among immune regulation, inflammation, gastrointestinal health, microbial ecology, and neurological function. These research areas should be approached as interconnected physiological systems rather than isolated topics.

4. Translating Biological Research into Individualized Biomedical Treatments

In addition to supporting the Plan's emphasis on biological research and improved medical care, we encourage the IACC to prioritize the translation of research findings into clinical trials of biomedical interventions.

Identifying biological abnormalities is only the first step. The ultimate objective should be to determine whether treating specific abnormalities can improve health, functioning, and quality of life.

Potential areas for clinical investigation include:

Nutritional interventions and correction of documented nutrient deficiencies.

Probiotic and prebiotic interventions.

Dietary approaches for individuals with identified gastrointestinal or metabolic needs.

Interventions targeting specific gastrointestinal disorders.

Microbiome-directed therapies.

Approaches addressing documented mitochondrial or metabolic abnormalities.

Treatments for identified immune and inflammatory conditions.

We emphasize the importance of well-designed clinical trials, appropriate control groups, safety monitoring, and objective outcome measurements.

Clinical outcomes should extend beyond conventional behavioral measures to include

gastrointestinal health, sleep, communication, motor function, adaptive functioning, and overall medical well-being.

Importantly, research should determine which individuals are most likely to benefit from particular interventions. A precision-medicine approach that recognizes biological heterogeneity is essential.

5. Supporting Accountability, Collaboration, and Measurable Progress

We support the Strategic Plan's emphasis on coordinated federal action, defined responsibilities, and measurable outcomes.

We encourage the IACC to ensure that its implementation efforts include:

- Adequate federal investment in research addressing environmental and biological contributors to autism.

Dedicated research opportunities for individuals with profound autism and high support needs.

Greater representation of individuals with substantial motor impairments in autism research.

Increased funding for research into gastrointestinal, immune, metabolic, and mitochondrial dysfunction.

Well-designed clinical trials of individualized biomedical interventions.

Collaboration among environmental health scientists, neurologists, gastroenterologists, immunologists, microbiologists, metabolic researchers, and clinicians.

Transparent reporting of research progress, clinical outcomes, and remaining knowledge gaps.

We also encourage the IACC to promote collaboration among federal agencies, academic institutions, independent researchers, and private research organizations to maximize the impact of available resources.

Conclusion: Implementing the Strategic Plan with the Needs of Severe Autism in Mind

Children's Health Defense supports the direction of the 2026–2028 IACC Strategic Plan and encourages its full implementation.

We particularly welcome its attention to profound autism, co-occurring medical conditions, improved treatment, and the need for a more comprehensive understanding of autism across the lifespan.

We believe the next important step is to translate these priorities into a robust research agenda that examines the full range of potential biological and environmental contributors to autism and develops treatments that address the medical and physiological needs of affected individuals.

Families of individuals with severe autism deserve more than a research agenda focused primarily on diagnosis and symptom management. They deserve a sustained commitment to understanding the underlying biology of autism, identifying potentially modifiable contributors, and developing safe and effective treatments.

This includes rigorous investigation of vaccines and vaccine components, agricultural chemicals, food and water contaminants, medications such as acetaminophen, and the complex relationship between human physiology and the gut microbiome.

It also requires recognizing motor dysfunction as an important area of study and ensuring that individuals with the most substantial support needs are not left behind.

We urge the IACC to carry these priorities forward as part of its implementation of the 2026–2028 Strategic Plan.

We appreciate the Committee's work and its commitment to advancing autism research, improving medical care, and supporting individuals with autism and their families.

Respectfully submitted,

Dr. Brian Hooker
Chief Scientific Officer
Children's Health Defense