

Improving Preconception and Pregnancy Recommendations

The Challenge: Currently in the US, there are many pregnancy/birth complications, and over 30% of children born in the US develop chronic neurological and/or physical health conditions, including autism, ADHD, asthma, etc. (see table).

RATES OF PREGNANCY COMPLICATIONS

Infertility (Women) 6%	Low Iron/Anemia 20-40%*
Infertility (Men) 6%*	Caesarean Sections 33%
Inability To Carry Baby To Term 11%	Still Births 1%
Miscarriages 15-20%*	Low Birthweight 8%
Gestational Diabetes 9%	Pre-Term Births 11%
Preeclampsia 2-8%*	Post-Partum Depression 13%*

RATES OF CHILDHOOD HEALTH DISORDERS

Autism 1-2%	Asthma 9%
Birth Defect (heart, other) 3%	Childhood Obesity 17%
ADHD 11%	Depression 7%*
Learning Disabilities 8%	Bipolar Rapidly rising diagnosis

The Solution: To reduce these rates, the Neurological Health Foundation has developed a set of recommendations for parents (Healthy Child Guide, HCG) and medical professionals (Science Behind the Healthy Child Guide, SBHCG), available at www.neurologicalhealth.org.

Project for Mayo Students: We invite Mayo medical students to work on the 2nd edition of the HCG and SBHCG by conducting a critical literature review of additional research on any one of the 17 major recommendations. This can include both reviewing cited research studies, and searching for new research studies. The outcome of the project will be submitting recommended changes for the next edition of the HCG and SBHCG.

This project would be most relevant for students with an interest in OB/GYN, pediatrics, and childhood disabilities.

Contact: For further information, contact Prof. James Adams, chair of the Scientific Advisory Board of NHF and a professor at ASU, at jim.adams@asu.edu