



BRAIN HEALTH BOOST



Climate Change is a Brain Health Problem

*The Brain Health Initiative (BHI) is working to develop brain healthy communities, creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health, optimizing brain performance, and preventing and fighting brain illness across the lifespan for the Florida Suncoast region and beyond. **Today we are talking about the impact climate change has on our brain health, especially the brain development of children.***

We can see the effects of climate change all around us in rising global temperatures and sea levels and decreased agricultural outputs. Climate change impacts the air we breathe, the water we drink, the food we eat, the land on which we live, and our brain health.

In October, *The Lancet* released its annual [Report of the Lancet Countdown on Health and Climate Change](#). A companion brief focused on conditions in the United States says the health impacts of a shifting climate, — such as illness from extreme heat, drowning from floods, shifting infectious-disease patterns, worsening allergies, and asthma — are already being seen in the U.S. and rapidly growing severe. Flooding and droughts are also associated with elevated levels of anxiety, depression, and post-traumatic stress disorders.

Children are especially vulnerable to climate change. Children are even more likely to experience trauma-related symptoms following a weather event, but the changes in air quality due to climate change can have a significant impact on their health and brain development. According to the [Center for Climate, Health, and the Global Environment](#) at Harvard’s T.H. Chan School of Public Health, warming temperatures and higher levels of carbon dioxide in the air are contributing to longer and more intense pollen seasons, which can worsen allergy and asthma symptoms in children. But air pollution and higher temperatures can also have an impact on children’s cognitive skills and their brain development.

Research suggests the particulate matter in our air that comes from burning fossil fuels can harm developing brains. Studies have found that children who live near major roadways, where particulate matter is high due to traffic, had lower IQs and poorer hand-eye coordination. In addition, studies found that students scored lower on tests when temperatures were high — something that can be offset by air conditioning in the classroom. Installing air filtration systems in our homes (or at least kids’ bedrooms), and schools, limiting outdoor activities to the early

morning and evening — especially during the summer, and making sure we drink plenty of water can also help protect our children’s brain health and development.

WHAT YOU CAN DO TODAY TO PROTECT YOUR BRAIN HEALTH

While the impact of climate change may seem overwhelming, there are ways to improve the health of your family that have immediate health, including brain health, benefits. Here are some simple suggestions from the BHI and the Center for Climate, Health, and the Global Environment.

- **Plant trees.** Trees provide shade and vegetation helps improve the air quality where you live.
- **Leave the car at home.** Walk, bike, carpool, or use public transit whenever possible. If you are buying a car, think of an electric car or at least one with better fuel economy —the lower the gas mileage the more harmful air pollution a car generates. Added bonus, physical activity also improves your brain health!
- **Reduce, reuse, and recycle.** The less you buy new, the more you reduce your carbon footprint. Renewable energy sources, such as wind and solar, can save money and reduce your carbon footprint even more.
- **Educate yourself.** Learn about environmental issues and start a conversation about protecting the environment, the planet, and the brain health of your family.
- **BE BRAIN HEALTHY and adopt a lifestyle** that includes thoughts, behaviors, emotions, responses, and language that promote brain health protective factors:
 - Stress resilience
 - Nutrition
 - Physical activity
 - Sleep
 - Social connection
 - Emotional wellbeing
 - Meaning and Purpose
 - Cognitive stimulation and creativity
 - Engaging with nature
 - General health
 - Positive impacts

About the Brain Health Initiative (www.brainhealthinitiative.org)

The Brain Health Initiative (BHI) is a cutting-edge approach to protecting brain health, promoting brain performance, and preventing and fighting brain illness across the lifespan. The BHI is building brain healthy communities, cultures that foster brain health protective factors and address risk factors, thereby improving brain health and optimizing brain performance outcomes for the Florida Suncoast region and beyond. Join the **Be Brain Healthy** movement, **because brain health matters, and lifestyle makes a difference.** To view all Brain Health Boosts [click here](#).