



Let's protect their
precious brains

As a result of frequent head impacts in sports, research suggests that neurocognitive changes can occur in children without any evidence of a concussion, resulting in learning problems and poor memory. There is also the risk for psychiatric symptom development, sleep disturbance, and irritability.

– Dr. Christine Greiss, American Academy of Physical Medicine & Rehabilitation

Football players who sustain concussive injuries have a 9-year risk of developing clinical depression after quitting play.

– Dr. Kelly Russell, Journal of Neurotrauma

Football players ages 8 to 13 that sustained blows to the head in the course of one season were found to have changes in their brain's white matter (bundles of neurons that facilitate communication between different areas of the brain.)

– Wake Forest University

Find More Information about
Chronic Traumatic Encephalopathy at:

StopCTE.org

**Too many of our kids may be
lost to collision sports.
PLEASE DON'T LOSE YOURS!**

Please visit and join
our important cause at

StopCTE.org

Or write to:
3 Atkinsons Drive
Doylestown, PA 18901
215-348-8308



A win on a youth sports field or arena is nothing compared to a child's right to a good quality of life and a healthy brain.

PATRICK RISHA
**CTE AWARENESS
FOUNDATION**

StopCTE.org

We are a Registered 501(c)(3) Not-for-profit
Charitable Foundation. Donations are Welcomed.

**Contact Sports
Will CHANGE
Your Child's
BRAIN**



**Learn about the dangers and risks of
CTE. Discuss your children's activities
with their pediatrician.**

StopCTE.org

Why Every Bump Matters

There is too much talk about concussions. For children, EVERY bump matters. Scientists are now discovering that the human brain is much more fragile than we ever imagined. In fact researchers are now trying to determine how many hits a brain can withstand before damage occurs. Studies are being performed in youth athletic sports where children are receiving multiple blows to the head, and the results are alarming. In collision sports, brain trauma is happening in almost every play and in practice. It doesn't take much to cause damage to the human brain, especially in someone under the age of 18. There are white matter changes, connectivity impairments, and inflammation. Some scientists are connecting the inflammation to a disease called CTE (Chronic Traumatic Encephalopathy). This disease grows very slowly in the brain ultimately destroying it. At this time there is no cure for CTE.

In order to keep children safe and give them the best potential for a bright and happy future, we need to protect their brains from undue trauma. Domestically abused children who suffer from repeated hits to the head can develop unhealthy brains. So can children who participate in collision sports such as football, hockey, bull riding, etc.

People whose brains have sustained too many bumps can present themselves as having mood disorders, ADHD, irritability, headaches, suicidal thinking, addiction issues, and problems with schoolwork and life. Sometimes these symptoms take years to present themselves.

We didn't know twenty years ago when we were signing up our children for collision sports that it was unsafe for brain health.

Now we know.

90% of confirmed CTE cases were in athletes who began their careers between the ages of 11 and 19.

– Sports Legacy Institute

Researchers have discovered a significant and surprising amount of CTE in males who had participated in amateur contact sports in their youth. About one-third of those brains studied had evidence of CTE pathology.

– Kevin Bieniek, *The Mayo Clinic*

Make a Great Call!



Researchers in a recent study of youth (age 9 to 18) playing football for just one season, found significant decreases in gray matter pruning (needed for brain health) in the frontal default mode network, which is involved in higher cognitive functions, such as planning and controlling social behaviors.

– University of Texas Medical Center

As many as 50% of children develop ADHD symptoms after brain injury.

– Biological Psychiatry Journal

Children who play tackle football before age 12 have an earlier onset of cognitive, behavioral and mood symptoms by an average of 13 years, compared to those that start after age 12. Younger brains are less resilient.

– Dr. Ann McKee, *Annals of Neurology*

Adolescent contact sport athletes are 50% more likely to abuse pain killers.

– American Journal of Public Health

But my kid has the best helmet...

Helmets do not prevent CTE and may even contribute by causing a false sense of security and add to the velocity of the collision



The Aspen Institute recommends that all youth tackle football programs switch to flag football and that high school and college teams minimize non-game tackling and offer flag football as an alternative.

Athletes who played contact sports before the age of 12 doubled their risk of developing behavioral issues and tripled their chances of suffering depression.

– Boston University

Serious and potentially fatal brain swelling after a brain injury is more common in children than adults.

– Clinical Sports Medicine

21% of high school football players, 91% of college, and 99% of professional football players have been found to have CTE.

– Journal of the American Medical Association

Know Their Risk. Learn More at:

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