

Editorial

Football for children should be banned

California sports advocates can no longer ignore this grim reality: Tackle football puts young children at risk of permanent brain damage.

Safer alternatives, including flag football, exist. It's time that California did away with the high-impact sport for kids until they reach high school.

That said, a good case can even be made that tackle football should be banned at all public schools at all age levels. But for now we'll settle for keeping the pee-wee players off the gridiron.

Assemblyman Kevin McCarty, D-Sacramento, and Lorena Gonzalez Fletcher, D-San Diego, publicly acknowledge the risk. They have introduced the Safe Youth Football Act, which would outlaw 7,500 California youth from playing Pop Warner football. Ultimately, that could include teams such as our local Pioneer Jr. Patriots and Junior Wolves.

The organizers of our local groups stress the safety of their programs and the efforts undertaken to protect young players. Both groups are also, according to their mission statements "dedicated to the athletic and academic development of our student athletes through football and cheerleading" as well as "teach children the fundamentals of football and the art of cheerleading while promoting discipline, dedication and teamwork in a fun and safe environment. Provide youth with organized competition in a safe environment."

Both groups also want to teach players the fundamentals of football such as "running, kicking, blocking, and tackling" along with "sportsmanship, discipline and love of the game."

But both local groups also note they want to act as "feeders" for Pioneer and Woodland high schools, which means that those who run, kick, block and tackle that hardest will advance, which puts them at risk of greater injury at a younger age.

Pop Warner officials argue that youth football is safer than soccer, noting that youth

football has 12 percent fewer injuries per capita among 5-15 year olds. And we have no doubt our local groups are well-intentioned.

But that's not the issue. The concern is the long-term brain damage caused by repetitive tackling, hitting and blocking.

Every parent of a child playing or thinking about playing football should read two Boston University studies released in the past 15 months.

The first, conducted by researchers at the university's Chronic Traumatic Encephalopathy Center, showed that "participation in youth football before age 12 increased the risk of problems with behavior regulation, apathy and executive functioning by two-fold and increased the risk of clinically elevated depression scores by threefold."

The researchers studied former football players, some of whom played only through high school and others who played only through college. Their average age was 51. The results showed greater later-life emotional and behavioral impairment from those who started playing before the age of 12 than those who started playing at age 12 or later. It builds on a previous study showing players who had started tackle football before age 12 had worse memory and mental flexibility, as well.

The second study is equally alarming. Researchers writing for the Jan. 18 issue of the neurology journal *Brain* revealed further evidence showing the onset of CTE is caused by repeated hits to the head, rather than concussions. It explains why 20 percent of football players who had never experienced a known concussion were found to have serious CTE issues.

The researchers spent seven years studying the brains of youth who had died at a young age. They concluded that as dangerous as concussions can be, the number of hits young players sustain is even more concerning.

NFL player data has revealed that 30 percent of former professional football players will develop Alzheimer's or dementia during their lifetime. Interesting also is that more NFL players are not allowing their own sons to play youth football, opting to wait until they are in high school.

Everything researchers have discovered to date clearly shows that children under the age of 12 have no business playing tackle football.

Cartoonist's take



Another view

The low-down on our school carpeting

By Liza Grandia

Superintendent Pritchard has vouched for the safety of the Beamer carpets. But something stinks, and it's not just the carpet.

In letters to the Superintendent and trustees August 28-31, 2017, I warned the school district about health concerns associated with a chemical called 4-PC, and why they should be skeptical of the carpet industry's self-policed "Green Plus" Label.

Unbeknownst to me, the district commissioned secret air tests for my daughter's classroom (Room No. 22) on Sept. 5. This was after tripling the air circulation on August 31. Even with the manipulated air flow, that test showed disturbing levels of toluene, ethanol, and other chemicals. If I had known of or seen the test, I would have immediately pointed out that they didn't test for 4-PC.

4-PC or 4-phenylcyclohexane is the chemical responsible for the acrid smell of new carpet. It's a byproduct of the styrene-butadiene latex to bind fibers to backing.

Like other chemicals in the U.S., 4-PC was not tested for safety before the carpet industry began producing it. It was one of the 62,000 chemicals in commerce that Congress grand-fathered into law in 1976 without even basic toxicity testing.

So how do we know 4-PC might be a problem?

In 1987-88, the Environmental Protection Agency installed new carpet at its DC headquarters. As the rugs rolled out, roughly 600 staff and scientists — about a fifth of the workforce — fell ill. Of those, about

sixty people became so hypersensitized that they could not return to work in the building.

Investigations showed the common denominator for the sickened EPA workers was exposure to elevated levels of 4-PC. After two years of organizing, reams of data and lawsuits, the scientists' union Local 2050 finally convinced management to remove the carpet. EPA no longer buys carpet containing 4-PC. But the carpet industry can still sell carpets to school districts with 4-PC.

From EPA data, we know that 4-PC levels are highest right after carpet installation, but then drop slowly and level out to a chronic low dose. Even though tests that Superintendent Pritchard secretly commissioned in January 2018 found 4-PC levels lower than the carpet industry's voluntary standard, the district cannot tell us to how much 4-PC children were exposed in August when the school carpets really reeked.

In 1991, EPA scientists recommended their agency set a regulatory level for 4-PC at less than 10 parts per billion. The carpet industry countered with voluntary proposal to self-police at 300 parts per million. You don't have to be a mathematician to note the difference.

That's how the "green label" was born in 1992. It was a marketing gimmick of the carpet industry to avoid regulation and induce consumers and institutions to trust that the actual roll they buy has been thoroughly tested and is safe. This could not be further from the truth.

On Dec. 14, I gave a summary and copies of a shocking report released by the Healthy Building Network in October

2017 called "Eliminating Toxics in Carpet" which found "green" label testing includes only one of the 44 hazardous substances that scientists discovered in carpet.

Beyond styrene (a known carcinogen linked to leukemias and lymphomas), these included: mercury, arsenic and lead from the incinerator fly ash used as carpet fillers; triclosan, an endocrine disruptor banned since 2016 in personal care products; PFAs and PFOAs ("forever chemicals") for stain resistance that are linked with everything from testicular cancer to thyroid problems; flame retardants — known to cause neurodevelopment delay; and PVC, phthalates (plasticizers), BPA, and other known endocrine disruptors that can disrupt children's hormonal systems.

Yet, the district has chosen to trust the word of the carpet industry over parent testimonies and the research of independent scientists. The number of sickened people is now in the double digits.

The truly sad thing is that the natural linoleum flooring alternative would save the district money.

If the carpet is safe, then why did the district deny my request for a sample removed from Room No. 22 to have it tested by independent university scientists for free? Instead, like the Grinch on Christmas eve, DFS Flooring (the same company that installed the carpet) carted away every last thread in the dead of night on Jan. 20.

Liza Grandia, Ph.D. is an associate professor at UC Davis. A mother of a child a Beamer, she is founder and coordinator of the Woodland Coalition for Green Schools.

Everything researchers have found shows children under 12 shouldn't play tackle football.