Additional Head & Brain Trauma Information

In terms of concussions and CTE, The Concussion Legacy Foundation (CLF) began researching CTE in 2007 and did not make any recommendations on participation in youth tackle football because there was not yet enough science. In the last 10 years, there have been numerous studies done that has led the CLF to recommend that youth delay participating in tackle football until age 14 at the earliest.

- The concern is not necessarily on concussions, but sub concussive impacts – defined as head impacts that don't cause concussion symptoms.

- Tackle football requires both tackling and blocking, and both activities cause regular head impacts, even when proper form is used.

- Studies show tackle football causes more repetitive head impacts than any other youth team sport.

- Head impacts are more dangerous for children than they are for adults. Children are at a disadvantage playing tackle football for two main reasons:
    - 1. Brain development
    - 2. The Bobblehead Effect

BRAIN DEVELOPMENT:

- In the pre-adolescent and adolescent years (age 8 to age 13), the brain undergoes dramatic changes and maturation that are responsible for the transition from child to adult brain function. Head impacts during critical developmental windows appear to impair normal brain development and function throughout the rest of life.

THE BOBBLEHEAD EFFECT:

- Youth football players are slower and smaller than adults, which can make it appear that head impacts in youth tackle football are inconsequential

- Using helmet sensors, researchers unexpectedly discovered that a youth player experiences head impacts that rival those of college football players

- Experts in human development and biomechanics have suggested that the head hits are similar for three reasons:

    - 1. Children have dramatically larger heads relative to the rest of their body than adults.
    - 2. A child's football helmet may be 10 percent of their bodyweight. (That would be the equivalent of an NFL lineman wearing a 30-pound helmet!)
    - 3. Children have smaller, weaker necks relative to adults

When combined, those three elements create a perfect storm. The reason our eyes deceive us is that it's not the speed a youth football player brings to the tackle that causes the severity of the head impacts; it's the fact that they cannot slow their proportionally giant, heavy head down after it's been impacted, creating a Bobblehead Effect.

Source: The Concussion Legacy Foundation