Brandon Osborne

On a bright, sunny afternoon a local recreation league youth football team can be seen practicing at Blacksburg Middle School. A loud pop is heard as one of the players is hit to the point that he falls on his back. The children, despite their diminutive stature, still can deliver a strong hit.

What their parents might not realize is that the force exerted is the equivalent to when a college or professional football player delivers a hit on an opposing player.

At least 50 high school or younger football players have been killed or sustained serious head injuries since 1997. The concussion rate in football is on a steady climb in youth, college and professional according to research by The New York Times.

Concussions in athletes under 18 take longer to recover from, according to Dr. Brent Johnson.

Johnson is is a part of the sports medicine group that helped to develop protocols for concussion management in the New River Valley. “Of course the concussion severity is also related to the force delivered and the individual susceptibility of the person.”

As for long term effects Johnson said, “Long term effects of a single or multiple concussions have not been exclusively identified. There certainly is data that suggests changes in the brain from mood disorders such as depression to encephalopathy similar to that seen in aging which results in dementia.”

Recognition is very important when it comes to concussions. “The importance in diagnosing a concussion promptly is the risk of further injury to the athlete,” Johnson said.

This may not be further brain injury, such as second impact syndrome, but also physical injury due to a possible compromised cognitive or neurologic state.”

Because of the severity of concussions football leagues from Pop Warner to the NFL are adopting new rules and regulations.

Brian Lambert, who is in charge of Christiansburg Recreational football league, has a special section of the rulebook devoted to concussions. “We have a seminar each year about concussions; it’s taught by Virginia Tech trainer Mike Goforth.” He feels that it is very important to have referees and coaches who know about concussions.

There are many ways to prevent head injuries in football from proper tackling technique to having safer equipment according to Johnson.

The Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences did a study on helmet research to find which football helmets were the safest.

“Were putting accelerometers inside the helmets and recording data for each head impact” Research Assistant professor Steven Rowson Jr. said.

Rowson started out by studying helmet impact over the past decade on Virginia Tech football players but they have now started studying youth football players. Last year he began to study the Auburn Eagles youth football team.

Their research showed that younger players experience less impact on their heads than the Virginia Tech players during practice and games. “One of neat things that came out of the study was that we were able to identify where all those hard impacts were coming from and what drills they were associated with,” Rowson said.

Because of this Pop Warner changed its rules to outlaw certain drills that teams were practicing that involved players running straight at each other to work on tackling. No helmet can prevent all injuries but a helmet can reduce how much of an impact is felt on the head and help reduce the number of concussions.

Rowson says he thinks that using better helmets can help reduce the number of concussions by 50 percent.