ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

Majority (202) 225–2927 Minority (202) 225–3641

May 4, 2016

Mr. Scott Hallenbeck Executive Director USA Football 45 N. Pennsylvania St. Suite 700 Indianapolis, IN 46204

Dear Mr. Hallenbeck:

At a House Energy and Commerce Committee roundtable in March, the National Football League (NFL) acknowledged for the first time that there is a link between football and degenerative brain disorders. As the NFL recognizes the risks posed by concussive and subconcussive hits that are inherent to the game of football, we are writing to understand how USA Football plans to prevent and mitigate the risks of degenerative brain disorders for your student-athletes.

There is significant scientific evidence to support a link between concussive and subconcussive hits and degenerative brain damage. Repetitive hits to the head—even in the absence of the clinical signs of concussion—can have cumulative, long-term effects on brain function and physiology. Researchers have found that athletes who had no observable symptoms of concussion but who nevertheless sustained repeated impacts to the head performed worse than their non-athlete peers on memory tests, displayed altered brain function on fMRI scans, and showed evidence of altered brain chemistry.

¹ Expert Consensus Document: Mind The Gaps—Advancing Research Into Short-Term and Long-Term Neuropsychological Outcomes of Youth Sports-Related Concussions, Nature (Apr. 2015).

² Thomas M. Talavage et al., Functionally-Detected Cognitive Impairment in High School Football Players Without Clinically-Diagnosed Concussion, Journal of Neurotrauma (2013); Nicola Marchi et al., Consequences of Repeated Blood-Brain Barrier Disruption in Football Players, PLOS One (Mar. 6, 2013); Inga K. Koerte, et al., White Matter Integrity in the Brains of Professional Soccer Players Without a Symptomatic Concussion, JAMA (Nov. 2012).

Mr. Scott Hallenbeck May 4, 2016 Page 2

Researchers have also discovered pathologic and clinical evidence of long-term neurological effects—including the development of degenerative diseases like amyotrophic lateral sclerosis (ALS) and chronic traumatic encephalopathy (CTE)—related to collision sports like football.³ Boston University (BU) researchers have found CTE in the brains of 90 out of 94 NFL players, in 45 out of 55 college players, and in 26 out of 65 high school players who donated their brains to the BU Brain Bank.⁴ Additionally, new research suggests a link between participation in amateur contact sports during youth and the development of CTE.⁵ Researchers at the Mayo Clinic recently found that close to one-third of the brains donated to the Mayo Clinic Brain Bank of young males who participated in contact sports during youth had CTE.⁶ Notably, the Mayo Clinic study found zero instances of CTE in the brains of 198 individuals who had no history of playing contact sports, and neuropathologists studying CTE have similarly never found the disease in brains that were not subjected to repetitive head trauma.⁷

The statement by Jeff Miller, Senior Vice President of Health and Safety for the NFL, at the Committee's March 14 roundtable acknowledging that there is a link between football and degenerative brain disease represents a significant change in the League's policy. Commissioner Goodell has confirmed that Miller's statement is consistent with the NFL's position. We look forward to seeing how this new approach manifests in increased safety, education, and awareness for professional athletes, coaches, and the public.

Accordingly, we seek to understand what rule or policy changes USA Football is considering to address the risks posed by both concussive and subconcussive hits. While changes at the professional level are important, football organizations across all levels, as appropriate, should consider rule changes and educational outreach to ensure the safety of all

³ Ann C. McKee et al., *TDP-43 Proteinopathy and Motor Neuron Disease in Chronic Traumatic Encephalopathy*, Journal of Neuropathology and Experimental Neurology (Sept. 2010); Daniel H. Daneshvar et al., *Long Term Consequences: Effects on Normal Development Profile after Concussion*, Physical Medicine & Rehabilitation Clinic of N. America (Nov. 2011).

⁴ *Id*.

⁵ Evidence Suggests Amateur Contact Sports Increase Risk of Degenerative Disorder, Mayo Clinic News Network (Dec. 2, 2015) (online at newsnetwork.mayoclinic.org/discussion/mayoclinic-cte-fl-release/); Brain Damage Study Shows Student-Athletes May Risk Same Injuries as NFL Players, Bloomberg Business (Dec. 1, 2015) (online at www.bloomberg.com/news/articles/2015-12-01/brain-damage-found-in-one-third-of-former-student-athletes).

⁶ *Id*.

⁷ *Id.*

⁸ Committee on Energy and Commerce, *Roundtable on Evaluating the State of Concussion Research and Implications for Public Health*, 114th Cong. (Mar. 14, 2016).

⁹ Roger Goodell Calls C.T.E. Link to Football Consistent With N.F.L.'s Position, New York Times (Mar. 23, 2016).

Mr. Scott Hallenbeck May 4, 2016 Page 3

athletes and their developing brains. Additionally, we need to ensure that parents have accurate, up-to-date information necessary to make informed decisions about their children's participation in football and other contact sports.

To assist our inquiry, please provide a briefing with responses to the following questions by May 25, 2016:

- 1. Concussion management protocols and protocols governing return to play after a concussion are certainly important components to protecting athletes from head trauma. However, such protocols do little to address the issue of subconcussive hits. As referenced above, subconcussive hits, even in the absence of a concussion diagnosis, have been linked to decreased cognitive functioning and changes in brain chemistry.
 - a. What is USA Football doing to address the risks of subconcussive hits to youth players?
 - b. What is USA Football doing to ensure that parents are made fully aware of the risks of subconcussive hits and the linkages between repetitive head trauma and CTE?
- 2. In addition to the above-referenced studies linking CTE to subconcussive impacts, research has shown that children as young as six years old can experience collision impacts as severe as college football players.¹⁰ Additionally, a new study has shown that former NFL players who began their careers prior to age 12 were more likely to exhibit cognitive impairment than those who began after age 12.¹¹
 - a. Does USA Football believe it is safe for children as young as five years old to engage in high-impact collisions during practices and games? Please explain how your organization ensures that children under the age of 12 who participate in tackle football are protected from the risks of early exposure to repetitive head trauma.
- 3. In 2012, USA Football initiated its Heads Up Football program to increase concussion awareness, improve equipment fitting, and teach the Heads Up Tackling technique. The program has been widely adopted in youth leagues.¹²

¹⁰ Ray W. Daniel et al., *Head Impact Exposure in Youth Football*, Annals of Biomedical Engineering (April 2012).

Julie M. Stamm et al., Age of first exposure to football and later-life cognitive impairment in former NFL players, American Academy of Neurology (2015).

¹² Questions about Heads Up Tackling, ESPN (Jan. 13, 2014) (online at espn.go.com/espn/otl/story/_/id/10276129/popular-nfl-backed-heads-tackling-method-questioned-former-players).

- a. In addition to concussion awareness, how does the Heads Up Football program incorporate prevention and mitigation of the potential long-term effects of subconcussive hits for young athletes?
- b. How does USA Football ensure that the safety measures taught during practice are implemented during games?
- c. What data is there to support the safety and efficacy of the Heads Up Football program?
- 4. Is USA Football considering any new rule changes, protocols, or initiatives to protect youth players from concussive and subconcussive hits?
- 5. Communication and outreach to parents of children interested in playing youth tackle football is a serious responsibility. The ability of parents to make fully informed choices about the risks associated with football is paramount to the integrity of the game.
 - a. How does USA Football communicate the safety risks associated with football to parents, coaches, and community leaders?
 - b. In what ways does USA Football advertise and recruit for no-tackle or flag football leagues? Does USA Football actively promote no-tackle youth football as an alternative to tackle leagues?
 - c. How does USA Football coordinate with other youth sports leagues, including school teams, to ensure that the parents of youth and young adult athletes receive consistent messages about ways to prevent and mitigate the risks of contact sports?

Your assistance in this matter is greatly appreciated. If you have any questions, please contact Una Lee or Elizabeth Letter of the minority committee staff at (202) 225-3641.

Mr. Scott Hallenbeck May 4, 2016 Page 5

Sincerely,

Frank Pallone, Jr. Ranking Member

Gene Green Ranking Member

Subcommittee on Health

Pina Detette

Diana DeGette Ranking Member Subcommittee on Oversight and Investigations Jan Schakowsky Rapking Member

Subcommittee on Commerce, Manufacturing, and Trade