

Do NFL players face a higher risk of early death?

February 1 2018, by Dennis Thompson, Healthday Reporter



(HealthDay)—The Philadelphia Eagles and New England Patriots

playing in Sunday's Super Bowl may have already taken a hidden hit before setting foot on the field, a new study suggests.

The new research says career NFL players have a slightly higher risk of early [death](#) than a group of replacement players who stood in for a few games during a short league strike in the 1980s.

The overall difference in death rates did not reach statistical significance, but NFL players were more likely than replacements to suffer deaths related to neurological disorders and drug overdoses, the study authors said.

The results "motivate a harder look at NFL and replacement players as they age, because I think we can really learn a lot," said study author Dr. Atheendar Venkataramani, an assistant professor at the University of Pennsylvania's Perelman School of Medicine.

Increasing evidence has shown that the repeated blows to the head suffered by [professional football players](#) can trigger the development of traumatic brain injury, Venkataramani said.

However, studies of retired NFL players have found they enjoy an overall lower death rate than the general population, as well as a lower rates of heart-related demise, the researchers noted.

"We were interested in that paradox, that on the one hand there are all these concerns and on the other hand there are these studies that show their longevity is high," Venkataramani said.

To create a more apples-to-apples comparison, "we needed a group of people who were similar to football players in a lot of ways, but didn't have the same exposure to the sport," Venkataramani explained.

The investigators found that group in a set of replacement players who joined the NFL for only a few games in 1987. These players had to train in the same way as full-fledged NFL players, but for whatever reason never made their way onto a regular team roster, Venkataramani said.

After comparing the two groups, the researchers discovered that more than 2,900 NFL players had a 38 percent higher risk of death compared to the 879 replacement players. But that result is based on a small number of deaths—4.9 percent of NFL athletes and 4.2 percent of replacement players.

When the researchers looked at causes of death, they found intriguing differences.

There were seven deaths from neurological causes in the career NFL group, and none among the replacements. All seven deaths were due to amyotrophic lateral sclerosis (ALS), or Lou Gehrig's disease.

Ten of 15 career NFL athlete deaths ascribed to unintentional injuries were caused by drug overdoses, Venkataramani said. But only one of the two replacement players' deaths due to unintentional injuries was chalked up to a drug overdose.

On the other hand, replacement players were more likely than NFL veterans to die from heart-related diseases, which was the most common cause of death in both groups. More than 51 percent of replacements had died from heart diseases, compared with 35 percent of NFL players.

While interesting, the findings are "kind of murky," said David Putrino, director of rehabilitation innovation at Mount Sinai Health in New York City.

It's difficult to form any strong conclusions, given that the players came

from a variety of backgrounds and faced a variety of injuries that largely depended on which position they played, said Putrino, who wasn't involved in the study.

"The one thing we can say for certain is that you can't make overarching statements about NFL players," he added.

On the other hand, NFL players are asked to do things that could jeopardize their health, Putrino acknowledged.

For example, players in some positions are encouraged to overeat, as they are "being sculpted to be big, heavy players who are hard to move and can hit tremendously hard," Putrino said.

"It's not a healthy diet, and they're not burning off the number of calories they need to remain cardiovascularly healthy," Putrino said. "Then, on top of that, they often don't change their eating habits after they finish playing the game."

The hits NFL players receive every game also do nothing to help their health, Putrino added.

"They take a lot of punishment, and it's not just the NFL, it's all elite sports," Putrino said. "The wear and tear on the body is significant."

The new study was published online Feb. 1 in the *Journal of the American Medical Association*.

Continued follow-up on the players could shed more light onto how professional football affects long-term health, Venkataramani added.

Such a long-range study could help protect the health of athletes in the future, said brain researchers from the University of Florida who wrote

an editorial accompanying the new study.

"We would like to have all of the involved—physicians, trainers, players—work together to prevent these [harmful] pathways, utilizing medical science as well as rules modifications, protective gear and guidelines," said editorial co-author Dr. Michael Jaffee, an associate professor of neurology at UF's College of Medicine.

The NFL said in a statement released Thursday that, "We closely follow any and all research focused on the health and wellness of [football players](#), especially those examining player morbidity and mortality. This new study seems to support other previous studies that have not shown an increase in mortality among NFL players when compared to similar cohorts."

Researchers from the U.S. Centers for Disease Control and Prevention "studied all NFL players who played for at least five seasons during 1959 to 1988 and found those players 'had a much lower rate of death overall compared to men in the general population,' including lower rates of cancer and heart disease," the NFL noted.

That finding was affirmed in a recent study that looked at a younger cohort of retired players and found "that while the leading cause of death among former NFL players was cardiovascular disease, 'the overall and cardiovascular mortality risk of this NFL cohort was significantly lower than the general U.S. male population,' " the statement said.

More information: Atheendar Venkataramani, M.D., Ph.D., assistant professor, University of Pennsylvania's Perelman School of Medicine, Philadelphia; David Putrino, Ph.D., director, rehabilitation innovation, Mount Sinai Health System, and assistant professor, rehabilitation medicine, Icahn School of Medicine at Mount Sinai, New York City; Michael Jaffee, M.D., associate professor, neurology, University of

Florida College of Medicine, Gainesville; Feb. 1, 2018, *Journal of the American Medical Association*, online, jamanetwork.com/journals/jama/.../1001/jama.2018.0140

For more on sports-related concussion, visit the [American College of Sports Medicine](#).

Copyright © 2018 [HealthDay](#). All rights reserved.

Citation: Do NFL players face a higher risk of early death? (2018, February 1) retrieved 5 May 2024 from <https://medicalxpress.com/news/2018-02-nfl-players-higher-early-death.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.