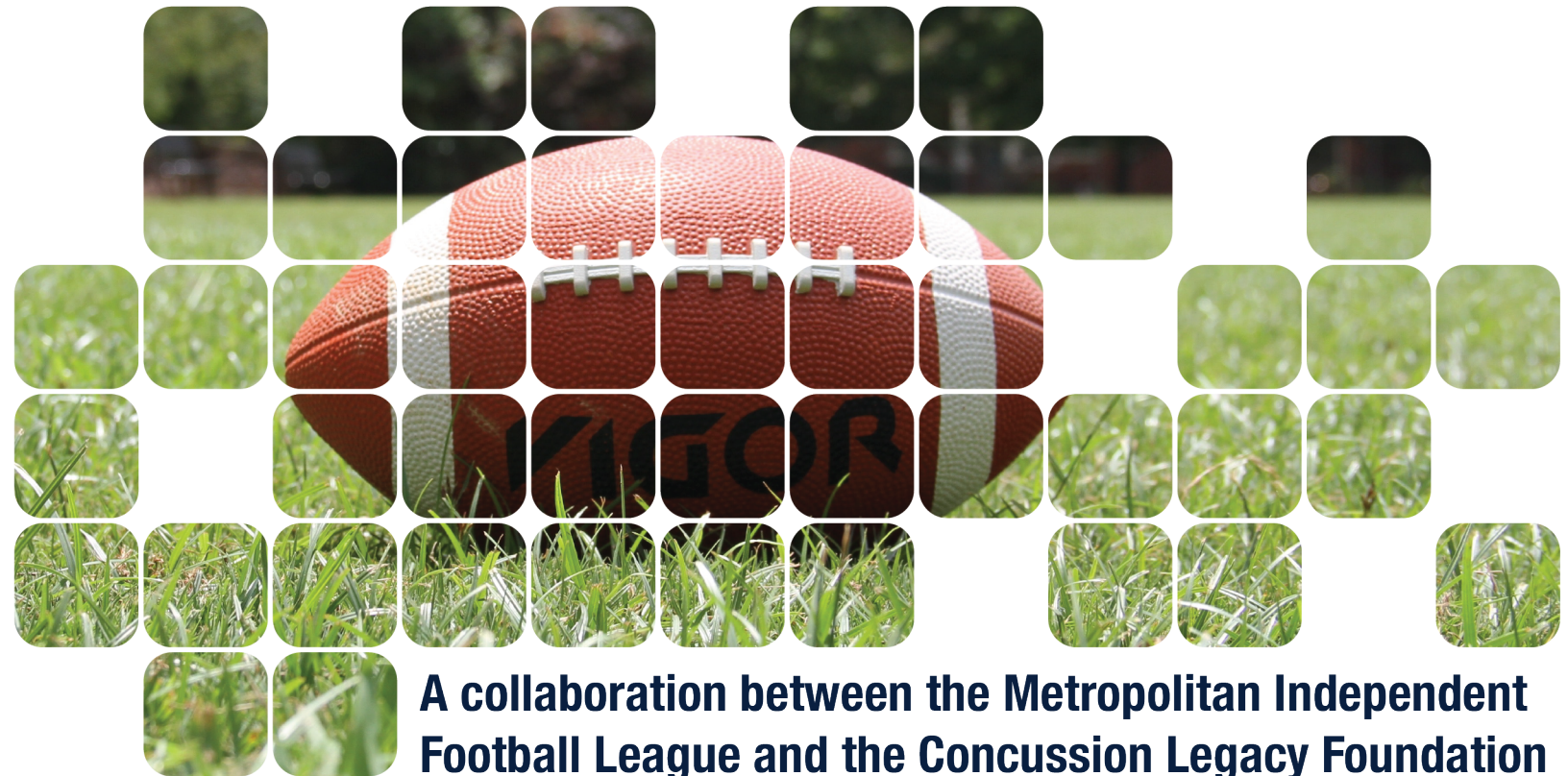


# S.M.A.R.T.E.R. FOOTBALL

SAFER ● MODIFIED ● APPROPRIATE ● RESILIENT ● TRUSTED ● EVIDENCE-BASED ● RESPONSIBLE



A collaboration between the Metropolitan Independent Football League and the Concussion Legacy Foundation

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# Letter from Riverdale

In 2018, John Pizzi, our Director of Athletics, reached out to the Concussion Legacy Foundation (CLF) in order to think about ways to reduce head injuries in all sports at Riverdale Country School, but with a specific focus on our football program. John and Chris Nowinski, the founder of CLF, started to work together to figure out ways to reduce the risk possibility of brain injuries in student athletes.

That work went so well that we decided to propagate some of these interventions, that led to decreased concussion levels in our football players, across the Metropolitan Independent Football League. With the generous support of the Mack Family, CLF has engaged in dialogue with all the teams and coaches, came up with interventions and plans to make football a safer game for all players, and collected data from the previous two seasons worth of play. We have been delighted to see an overall reduction in concussion injuries across the entire league. We hope that other schools enact these same guidelines and shifts in the rules in order to sustain football for future generations.

Yours,  
Dominic AA Randolph  
Head of School

John Pizzi  
Director of Athletics



# Letter from CLF

The mission of the Concussion Legacy Foundation includes promoting smarter sports and safer athletes through education and innovation. We have cherished our decade-long collaboration with Riverdale Country School, where the leadership has prioritized concussion education, prevention, and care for their athletes.

When the rules of football were created and training habits were developed, we did not appreciate the possible harms caused by concussions. We also did not recognize that years of repetitive head impacts in a sport like football can cause chronic traumatic encephalopathy, a degenerative brain disease.

We were thrilled to be invited to propose interventions that make high school football safer for young athletes' brains, while staying within the rules and preserving the experience. We worked closely with coaches, medical staff and athletic directors to develop evidence-based and football culture-appropriate reforms. We were confident this reduced the risk, while maintaining the benefits that are most important to the stakeholders. We are thrilled by the results and are excited to share our experience creating SMARTER Football to help other high schools play a safer, more sustainable, more responsible version of the game.

Sincerely,

Chris Nowinski, PhD  
CEO  
Concussion Legacy Foundation

Tim Fleiszer  
Executive Director  
CLF Canada

Jeff Brooks, PhD  
Sr. Director, Youth  
Programming  
CLF Canada



# Overview

In 2019, the Metropolitan Independent Football League (MIFL) invited the Concussion Legacy Foundation (CLF) to collaborate with the goal of creating the safest high school football league in the United States. New research on the risks of concussions and chronic traumatic encephalopathy (CTE) had inspired individual school-led safety reforms, but consistent media attention had also resulted in decreasing enrollment in football programs.

MIFL members wanted to make safety innovations uniform across the league to reduce the risk of concussion, as well as show players and parents they took brain safety seriously. What was created is a more sustainable model of high school football, which we are calling S.M.A.R.T.E.R. (Safer–Modified–Appropriate–Resilient–Trusted–Evidence-based–Responsible) Football.

Prior to the 2019 season, CLF conducted interviews with representatives from 8 schools in the MIFL and other innovators and stakeholders within the game of football. The ideas generated from these interviews shaped a Rule Change Watch List that was circulated before the 2019 season for coaches, athletic directors, and athletic trainers to consider. Postseason interviews provided data on support for specific rule changes that were negotiated at a meeting of all stakeholders in early 2020.

The schools agreed to implement three major rule changes prior to the 2020 football season:

- The removal of kickoffs, including onside kicks.
- To replace the onside kick, teams could choose to attempt to convert a 4th down and 12 situation from their 40 yard line. This can only occur in the final five minutes of the second and fourth quarters.
- Teams would be limited to 6 hours of full contact in the preseason and 20 minutes of contact per week during the regular season.

Due to the pandemic, these new rule changes were not enacted until the 2021 season. Upon the conclusion of the 2021 season, CLF conducted postseason interviews with 14 representatives from 9 MIFL schools.

The following report shows that S.M.A.R.T.E.R Football is effective in reducing concussion and increasing enrollment, and creates a more ethical and sustainable future for high school football. MIFL schools:

- Ethical Culture Fieldston School
- Hackley School
- Montclair Kimberley Academy
- Morristown Beard School
- Pingry School
- Riverdale Country School
- Poly Prep
- Rye Country Day School
- Hopkins School
- Long Island Lutheran
- Newark Academy
- Horace Mann School
- Greenwich Country Day School

# Concussion and Participation Results

## Concussions Reported



From 2019 to 2021, there was a **33% decrease in concussions** across the league. Seven schools had fewer concussions, one remained the same, and only two had increased concussions.



**7 schools had a decrease in concussions**

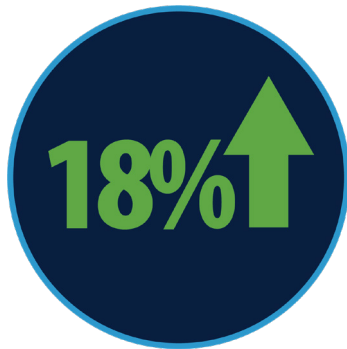


**1 school had no increase or decrease in concussions**



**2 schools had an increase in concussions**

## Football Enrollment



In that same time frame, there was an **18% increase** in participation across the league. Eight schools had increased enrollment, and only two decreased.



**8 schools had increased enrollment**



**2 schools had decreased enrollment**

## What They're Saying

"I really do think the adoption of the kickoff rule, as well as teaching tackling in a safer way, has been the key to reduced concussion numbers on our team." - **Joe Passaro, Pingry Head Coach**

When you compare the 2017 and 2018 numbers to this year, we cut concussions by more than half in 2021." - **Katie Gendron, Riverdale Athletic Trainer**

"The safety part is super important to our parents. I think the parents realize that we have so many safety protocols in place, and we're doing so many things that they felt comfortable letting their child play." - **John Pizzi, Riverdale Athletic Director**

"I think MIFL made the right decision. For schools like us, where parents are concerned about their kids playing football because of concussions, the changes clearly made it a safer program." - **Katie Jenson, Hackley Athletic Trainer**

# Kickoff Removal

## > The Problem

The kickoff is the most dangerous play in the game of football. In the NFL, kickoffs are five times more likely to cause a concussion than a play from scrimmage. In the Ivy League in 2015, kickoffs made up 6% of total plays, but 21% of concussions. In addition, exciting kickoff returns are more rare than people realize. From the 2011 to 2016 NFL seasons, 96.3% of kickoffs gave the returning team the ball between its own 10- and 40-yard lines.

In high school football, the kickoff is a play many teams will use to allow younger, less experienced, and less skilled athletes a chance to participate in a game. Already identified as the most dangerous play for high level athletes, this same play may provide an even greater risk for injury when less experienced and skilled athletes are on the field. When CLF interviewed representatives from all 8 MIFL schools, all 8 were in support of changing the kickoff, and 7 supported complete removal of the kickoff.

## > The Solution

MIFL removed the kickoff for the 2021 season. Each half, and plays after scoring, started with the appropriate team running an offensive play from their own 35 yard-line, and 20 yard-line for safeties.

Although there was a brief adjustment period, teams and athletes quickly adapted to this new change. Coaches continue to support the removal of kickoffs, as it provided them with extra time during practice to devote to other plays that otherwise would have been spent on kickoff cover and return.

## What They're Saying

I loved it. I'm a head coach and I'm also an offensive guy. The amount of time we've had in the past to actually practice kickoffs is so limited, so not having to spend time on practicing kickoffs was an enormous help and allowed us more time to work on our offense and defense. The removal of kickoffs also afforded our kids more time to rest during the course of the game, which is so important since so many of them are also playing both ways. - [Gus Ornstein, Ethical Culture Fieldston Head Coach and Athletic Director](#)

"The idea of having to put guys out there on kickoff was a lose-lose. You either put out tired players that don't give their all because they're playing both offense and defense. Or you're putting out younger players - that aren't as strong - in which case you're opening yourself up to big plays and potential injuries." - [Tim Fell, Morristown Beard Head Coach](#)

"The data doesn't lie. If you're seeing most of your concussive hits coming from kickoffs, kick returns, and onside kicks... we want to make the game as safe as possible. Take them out." - [Jason Edwards, Hackley Athletic Director](#)

# Onside Kicks

## > The Problem

The elimination of kickoffs requires the elimination of the onside kick, an important play when attempting to retain possession after scoring. Former NFL head coach Greg Schiano had created a lot of discussion with his proposal to replace onside kicks with a 4th and 15 offensive play from your own team's 30 yard line. The play has a similar success rate as an onside kick, since only 21.4% (125 of 583) of onside kicks have been recovered in the NFL since 2001 and 21.8% (17 of 78) of teams have converted 4th and 15 attempts.

## > The Solution

When CLF interviewed representatives from all 8 MIFL schools, 5 supported an onside kick alternative. Accordingly, MIFL removed onside kick attempts and replaced them with 4th and 12 attempts from the team's own 40 yard line. MIFL created additional restrictions for their use, requiring that these plays could only occur in the final five minutes of a half, and only if there was less than a 21-point difference between teams.



5 out of 8 schools supported an onside kick alternative



## What They're Saying

**"I think another offensive play is just a lot more exciting opportunity than an onside kick. Onside kicks are exciting. But there is the injury component there and you don't have time to rehearse them as much as you can your offensive plays." - Chris Reno, Long Island Lutheran Head Coach**



# Contact Limits in Practice

All 8 MIFL schools supported strict contact limits during preseason and practices. By consensus, the coaches agreed to limit full contact to 20 minutes of contact per week during the regular season, which is just slightly more than 15 minutes allowed in New Jersey, the leader on practice contact limits. The members agreed that during preseason, a maximum of six hours of contact is permissible, and that amount will be revisited annually to minimize repetitive head impacts but still allow for proper training to minimize injury.

For MIFL, full contact practice refers to both live blocking and tackling as well as “thud,” which is defined by the initiation of contact at full speed with no predetermined winner but no take-down to the ground. To help coaches with this transition, CLF and MIFL will focus on coach training to ensure coaches know the appropriate progression in teaching safe contact. This will prepare players for game situations without surpassing weekly contact limits.



## What They're Saying

**“Our coach spent so much time leading up to adding contact in the preseason - so focused on form and correct tackling - that by the time they were ready to add in those 20 minutes every week, the team had a good baseline of safe tackling education.” - [Katie Gendron, Riverdale Athletic Trainer](#)**

# Concussion and CTE Education



With no major changes to the rules planned for 2022, MIFL will next focus on education.

One priority will be concussion education for students. Baseline testing is not a substitute for concussion education, and young athletes need to be taught both the signs and symptoms of concussion and the importance of reporting. To help change the culture among players, MIFL will be participating in CLF's Team

Up Against Concussions campaign. Team Up Against Concussion encourages players to volunteer to serve as the team concussion captain, educate teammates on the signs and symptoms of concussion, and encourage both self-reporting as well as reporting concussion symptoms in a teammate.

All stakeholders will continue to be educated on CTE, especially in response to the National Institutes of Health (NIH) recognizing in 2022 that CTE is caused in part by repeated traumatic brain injuries. Reducing repetitive head impacts, and thus repeated traumatic brain injury, is a primary goal of S.M.A.R.T.E.R. Football, and coach education specifically allows them to continue to innovate and provide a safer environment.



## What They're Saying

**"In terms of concussion education for students — whether or not they're playing a sport — I think most students are only peripherally aware of concussions, and we could do more to teach them about signs and symptoms, management, and long-term implications." - Giovanni D'Onza, Athletic Trainer, Rye County Day**

**"I just think that on all levels, coaches should be required to take concussion education, for sure." - Joe Passaro, Pingry Head Coach**

## For More Information

We encourage other sports leagues to adopt S.M.A.R.T.E.R. football. If you'd like to learn more or invite our help to implement the program, contact us at [info@concussionfoundation.org](mailto:info@concussionfoundation.org) or visit [ConcussionFoundation.org/smarterfootball](https://ConcussionFoundation.org/smarterfootball).