



**BASEBALL WINTER  
MEETINGS**™

**SAN DIEGO**

**2019**

# Association Between a Rule Change to Reduce Home Plate Collisions and Mild Traumatic Brain Injury and Other Injuries in Professional Baseball Players

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# Disclosures

Gary Green and Alex Valadka: Consultants to MLB

John D'Angelo and Jon Coyles: Employed by MLB

Ian Penny: Employed by MLB PA

John Golfinos: Consultant to MLB PA

## Rule 7.13 2014

A runner attempting to score may not deviate from his direct pathway to the plate in order to initiate contact with the catcher (or other player covering home plate). If, in the judgment of the Umpire, a runner attempting to score initiates contact with the catcher (or other player covering home plate) in such a manner, the Umpire shall declare the runner out (even if the player covering home plate loses possession of the ball).

Unless the catcher is in possession of the ball, the catcher cannot block the pathway of the runner as he is attempting to score. If, in the judgment of the Umpire, the catcher, without possession of the ball, blocks the pathway of the runner, the Umpire shall call or signal the runner safe.

# The Process of Rule Change

- 2010: MLB adopts League wide EHR system for all Minors and Majors
- 2010: Conversations with Dr.'s Yocum and Adams
- 2011: Buster Posey Injury
- 2011: MLB convenes MTBI Committee
- 2012: MTBI data reviewed from 2011-12 season
  - 50% of MTBI occurred fielding- #1 Activity
  - 40% of fielding MTBI occurred in catcher- #1 position
  - 40% of catcher fielding MTBI occurred from collision- #1 cause
- 2013: Results shared with MLB Competition Committee
- 2014: Rule 7.13 Adopted

ASG 1970

## Reactions to Rule Change



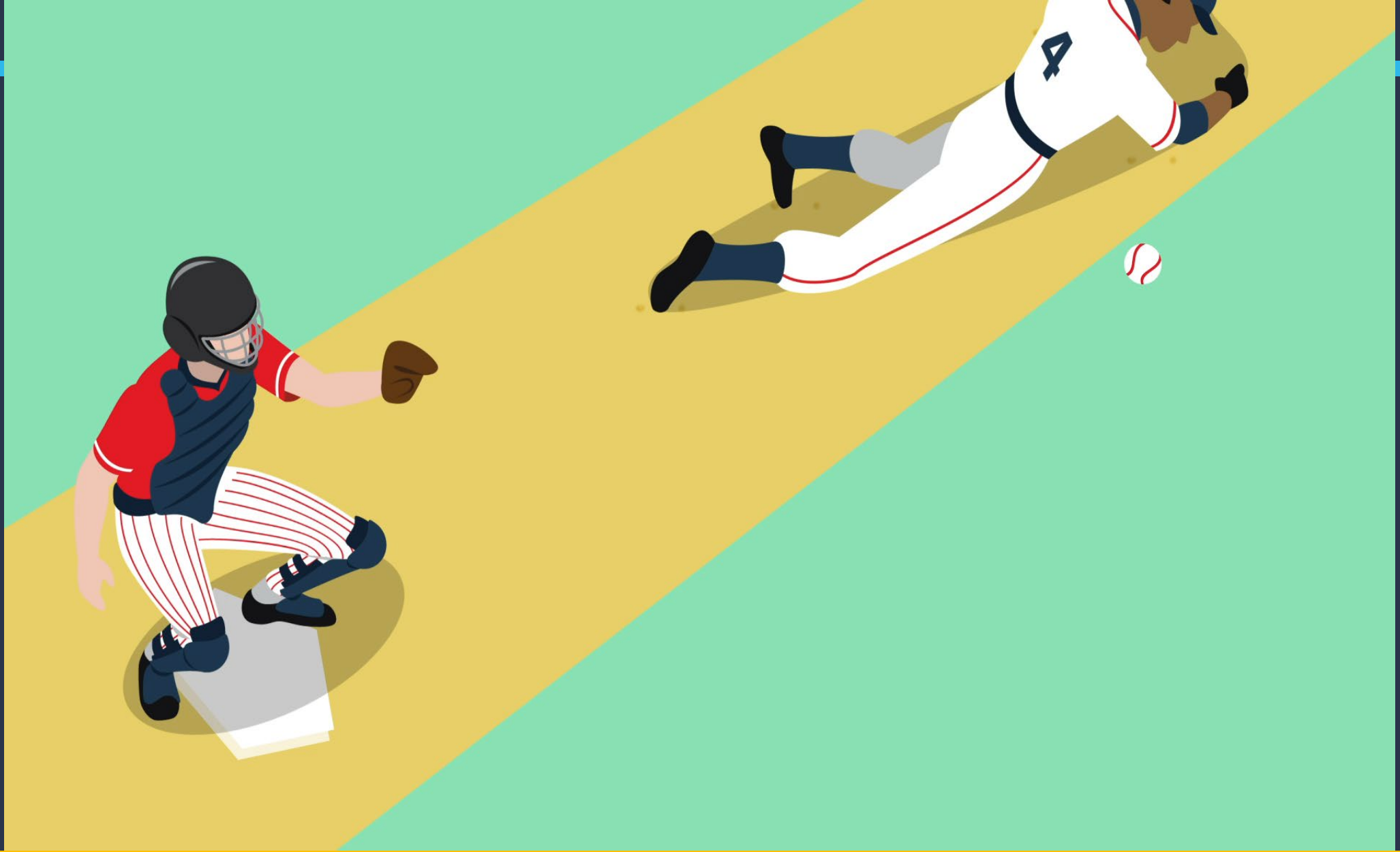
- “What’s the game coming to? Evidently the guys making all these rules never played the game of baseball.”- Pete Rose
- “I got light-headed how many times in my career?”- Pete Rose<sup>AA</sup>
- “No more home plate collisions? What is this?-Josh Reddick
- “Nothing better than getting run over and showing the umpire the ball- Tony Sanchez
- “A bunch of f\_\_\_ing nerds running the game”- Goose Gossage



# Mild Traumatic Brain Injury in Major and Minor League Baseball Players

Green GA, Pollack KM, D'Angelo J, Schickendantz MS,  
Caplinger R, Weber K,  
Valadka A, McCallister TW, Dick R,  
Mandelbaum B, Curriero FC

American Journal of Sports Medicine,  
43(5):1118-26, 2015.

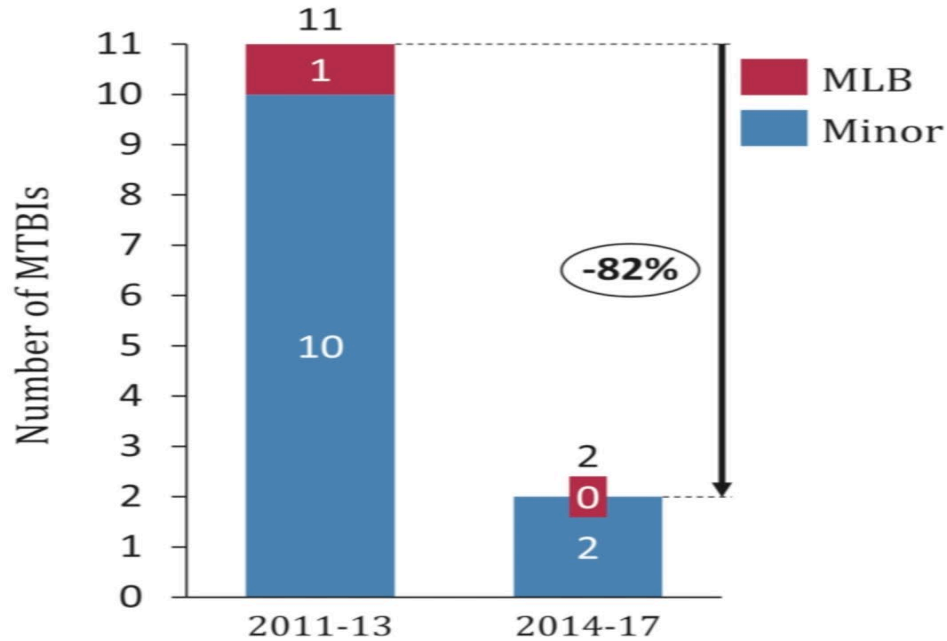


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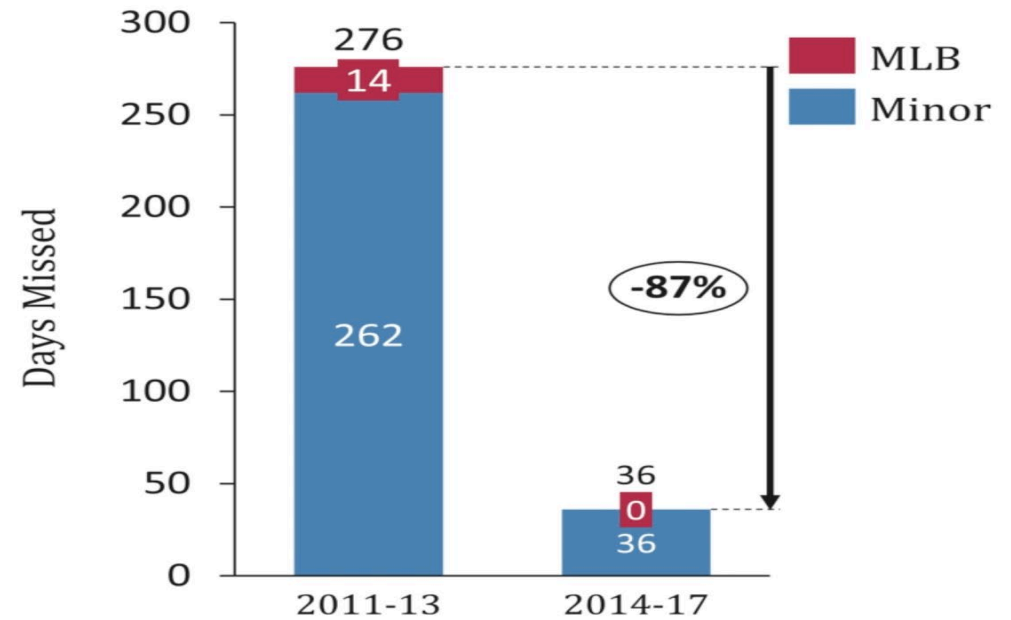


# MTBIs Due to Home Plate Collisions

MTBIs due to Home Plate Collisions, per Season

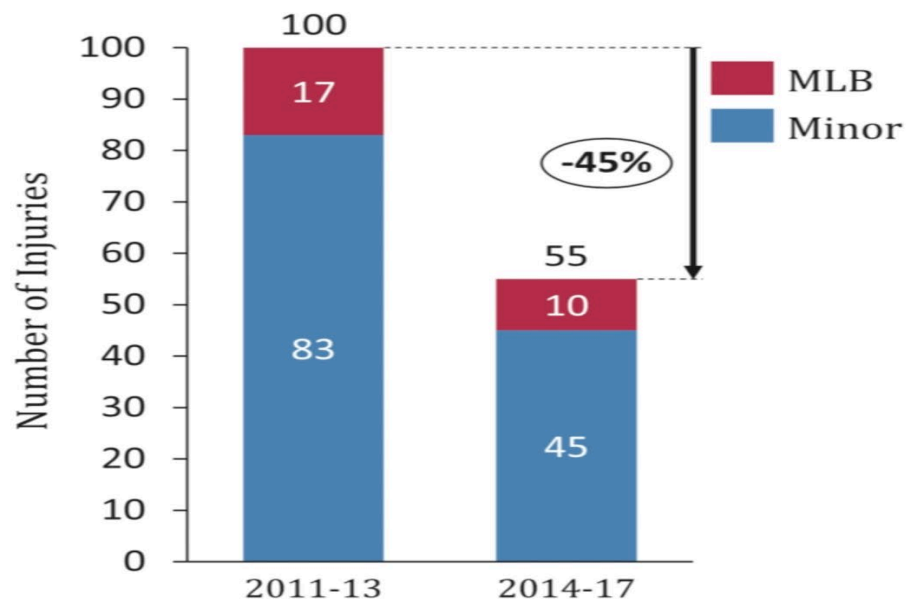


Days Missed due to Home Plate Collision MTBIs, per Season

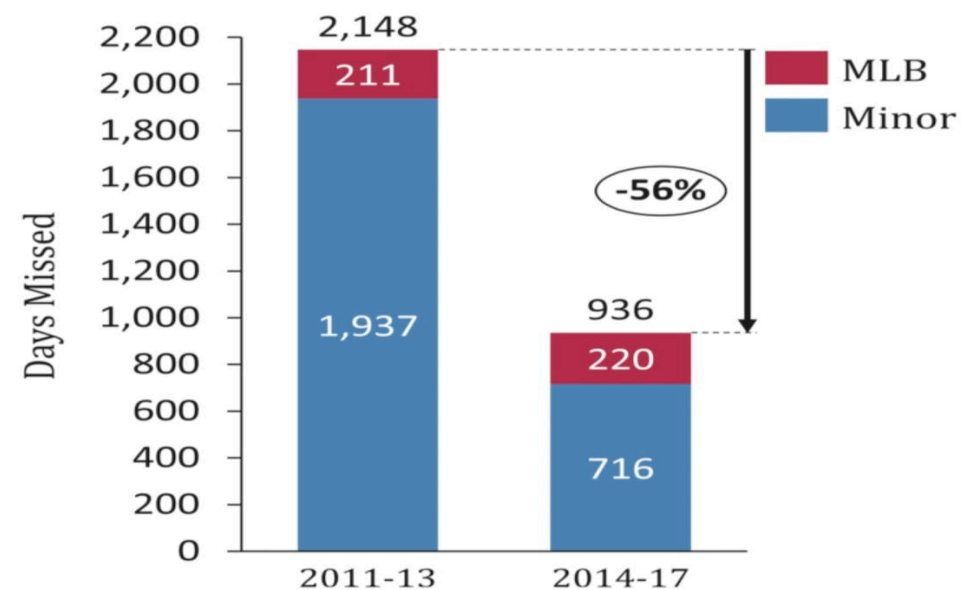


# Injuries due to Home Plate Collisions

Injuries due to Home Plate Collisions, per Season



Days Missed due to Home Plate Collision Injuries, per Season



# Strengths/Limitations

## •Strengths:

- Simple-one variable
- No other changes, e.g. equipment, other rules, #players, team, etc.
- Controlled environment
- Consistent MTBI and injury reporting systems

## •Limitations:

- Relatively small number of MTBIs
- Inability to account for season-ending injuries (19% vs 0%)
- Missed MTBI cases: catcher failure to report symptoms  
Missed diagnoses

# Conclusions

- Rule Changes can have major impact on injury patterns
- Rule Change in sports can be very challenging
- To effect rule change you need:
  1. Objective, well-researched data
  2. Support from sport governing body
  3. Collaboration with all stakeholders
  4. Excellent Research partners
  5. Patience

“Changing the direction of a large company is like trying to turn an aircraft carrier.” –*Al Ries*



# Change can happen!

"(Expletive)!!! MLB need to take action on this (expletive) play! (Expletive)! Praying for Lucroy! slide slide slide (expletive) !!! (Expletive) u if u think this is Ok .. (expletive) u!!!!" – Yadier Molina 7/7/19



# Thank You

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