## https://www.nytimes.com/athletic/3587676/2023/06/08/mlb-new-rules-record-strikeouts/

Strikeout rates are at an all time high

## Reasons:

- 1. Pitchers are throwing harder than ever Which is also contributing to a rise in Tommy John surgeries.
- 2. Strikeouts and Home runs are being more optimized

https://www.espn.com/mlb/story/\_/id/10831700/is-mlb-midst-tommy-john-epidemic

There is an epidemic of pitchers needing Tommy John Surgery. With how much velocity pitchers are throwing nowadays, there is a lot of stress being put onto those arms.

In 2000 and 2011 fewer than 16 of those surgeries were used everywhere.

https://www.minnpost.com/community-voices/2024/09/fifty-years-after-the-first-procedure-tommy-john-surgery-is-more-common-than-ever/#:~:text=Since%20Tommy%20John%2C%20it's%20estimated,John%20surgery%20at%20some%20point.

Now there are nearly 2,500 professional baseball players per year needing Tommy John surgeries. And the number of procedures increase by 9%

There are also people who need multiple Tommy John surgeries.

https://www.mlb.com/news/mlb-pitchers-succeeding-without-high-velocity-in-2024#:~:text=The% 20current%20average%20four%2Dseam,still%20put%20up%20fantastic%20results.

In 2024 the average four-seam fastball velocities were 93.7 mph which is 2 mph more than the league average 15 years ago which was in the year 2009. Which translates to 91.7 mph.