Ejections Through the Years and the Impact of Expanded Replay

Ejections are a fascinating part of baseball and some have led to memorable confrontations, several of which are readily accessible in various electronic archives such as the famous tirade of Earl Weaver against Bill Haller. Perhaps surprisingly, reliable information on ejections has been available only sporadically and there are many conflicting numbers in both print and online for even the most basic data such as the number of times a given player, manager or umpire was involved.

The first comprehensive compilation of ejection data was carried out over many years by the late Doug Pappas, a tireless researcher in many areas of baseball, including economic analyses of the game. He not only amassed the details of over 11,000 ejections, but he also lobbied intensely to have ejection information become a standard part of the daily box scores. He was successful in that effort and we have him to thank for something we now take for granted.

After Doug's passing, his ejection files made their way to Retrosheet where they were maintained and updated by the late David Vincent who expanded the database to over 15,000 events. In 2015, David used the expanded data in the Retrosheet files as the basis for an article which provided some fine background on the history of ejections along with many interesting anecdotes about especially unusual occurrences

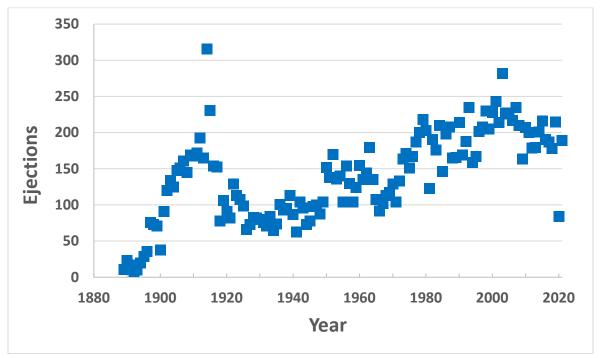
((https://www.retrosheet.org/Research/VincentD/EjectionsHistory.pdf). Among other things, David noted that ejections only began in 1889 after a rule change giving umpires the authority to remove players, managers, and coaches as necessary. Prior to that time, offensive actions could only be punished by monetary fines.

I took over the database following David's death and Retrosheet has continued to add more ejections and to make corrections/enhancements to previous information. As we continue backwards in compiling play by play accounts of games, we have been able to add almost 4000 more ejections in the last six years with the current (through the 2021 season) total standing at 18,554. This effort has been tremendously facilitated by the work of Rob Wood whose extraordinary attention to detail and exhaustive study of on-line newspapers has made our data much more accurate and complete than before. Our records are now standardized to an excellent degree and are much more useful as the basis for research.

This paper has two purposes. First, I present some updated lists of various types which will provide a basic summary of the ejections. There are some surprising results here. Second, I examine changes in ejection details over the last 133 years with special attention to the effect of recent changes due to the replay system on the type of play that leads to ejections.

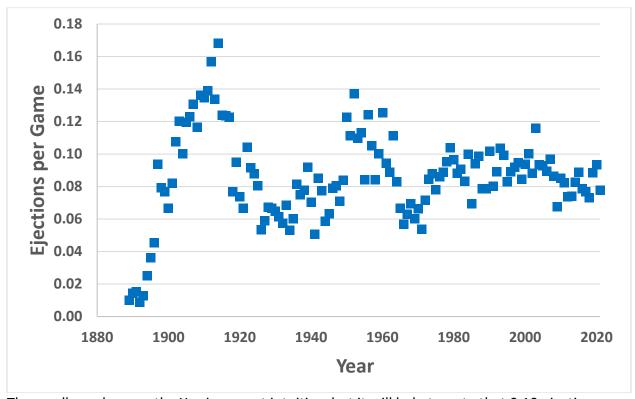
Figure 1 presents the number of ejections in each season, which shows wide variation over the last 133 years.

Figure 1. Total Ejections by Year



Of course, there were different numbers of games played in different years, so I normalized the data to ejections per game, presented in Figure 2.

Figure 2. Ejections per Game



The small numbers on the Y axis are not intuitive, but it will help to note that 0.10 ejections per game translates to one every 10 games, which is close to the midpoint on this axis. Up until just before 1920, ejections were quite frequent, with a peak in 1914, the first year of the Federal League, a season which saw an average of one ejection every six games. Beginning with the lively ball era, this rate decreased suddenly, dropping to one ejection in every 19 games in 1934. I have no obvious explanation for the apparently improved civility on the diamond in the roaring 20s, great depression and World War II. Following a dramatic increase in ejection rate in the 1950s, there was a steady increase in frequency with one occurring once in about 9 games in that decade. It is not at all clear why the 1950s saw such high rates, but we will return to this point. The trend of increasing ejections resumed its previous trajectory in the 1960s, reaching a level of one ejection for about 10 games in the 1990s. Beginning in 2000, ejections became less frequent with one every 13 games in 2021.

The next and perhaps obvious question to ask is what role were the ejectees playing when they were removed. Figure 3 presents the ejection rates per game for players, managers and coaches.

0.14 0.12 **Ejections per Game** 0.10 0.08 0.06 0.04 0.02 0.00 1880 1900 1920 1940 1960 1980 2000 2020 Year

Figure 3. Ejections per Game for Players (Red), Managers (Blue) and Coaches (Green

There are some very interesting patterns here Until 1920, players were ejected about three times as often as managers. The differences narrowed after that, with variation, until about 1960 when they became very close. During the next 40 years, there were several seasons in which manager ejections exceeded those of players, although the general pattern was still higher rates for the players. Since 2003 or so, the two values have become difficult to distinguish. It may be that managers are coming to the defense of their players and paying the price for their protection. It may also be that players have become more averse to being ejected since their value to the team is staying in the game. The ejection rate for coaches has been consistently low, although we must remember that in the early days there were not so many people designated as coaches, unlike modern times when there are 8-10 in uniform for each game.

Let's turn now to the totals for individuals which are frequently in the sports pages and websites although not usually broken down by the role of the person who was ejected. Note that the totals presented here often differ from other sources. For example, Retrosheet has 165 ejections for Bobby Cox, but his Wikipedia page puts the total at 158. I am confident in our total. The 20 most frequently ejected personnel are in Table 1.

Table 1. Most frequently ejected (includes players, manager and coaches)

Bobby Cox	165	Lou Piniella	78
John McGraw	137	Bruce Bochy	77
Leo Durocher	134	Bill Rigney	73
Frankie Frisch	99	Jim Leyland	73
Earl Weaver	97	Johnny Evers	72
Tony LaRussa	91	Bill Dahlen	70
Ron Gardenhire	86	Clint Hurdle	68
Joe Torre	85	Dick Williams	65
Paul Richards	83	Jimmy Dykes	64
Clark Griffith	80	Gene Mauch	64

The large majority of these "leading" individuals were managers and some were ejected both as players and managers. For example, Joe Torre, Major League Baseball's recent disciplinarian, was banished 85 times: 70 as a manager and 15 as a player.

Table 2 lists those men most frequently ejected as players. Most of those on this list did not play in the modern era with Gary Sheffield, Reggie Jackson, Bill Madlock, and Tony Phillips being the most recent.

Table 2. Players ejected most times.

Johnny Evers	58	Eddie Stanky	27
Heinie Zimmerman	44	Joe Kelley	26
Jimmy Piersall	36	Al Lopez	26
Bill Dahlen	34	Leo Durocher	24
Roger Bresnahan	34	Johnny Temple	24
Larry Doyle	33	Kid Elberfield	23
Gary Sheffield	33	Art Fletcher	23
Dan McGann	31	Tony Phillips	22
Red Dooin	29	Reggie Jackson	21
Mike Donlin	28	Bill Madlock	21

Table 3 has the 20 most frequently ejected managers. Note that John McGraw was ejected 15 times as a player and Leo Durocher 24 times as a player as well as 10 times as a coach.

Table 3. Managers ejected most times.

Bobby Cox	165	Clark Griffith	73
John McGraw	122	Joe Torre	70
Leo Durocher	99	Bill Rigney	69
Earl Weaver	97	Lou Piniella	64
Tony LaRussa	91	Clint Hurdle	64
Frankie Frisch	88	Joe Maddon	62
Ron Gardenhire	85	Dick Williams	58
Paul Richards	82	Sparky Anderson	57
Bruce Bochy	77	Gene Mauch	57
Jim Leyland	73	John Gibbons	53

The other side of the equation is, of course, the umpires. Given his status as the man with the most games umpired until passed in 2021 by Joe West, it is not surprising that Bill Klem leads the list. As an example of the extreme variation in currently reported ejection data, there are many different numbers for Klem's total, as summarized in Table 4. This total could certainly change as new information becomes available, but I am certain he had at least 347 and that value can only increase.

Table 4. Bill Klem ejection total according to different sources.

Wikipedia	251
Closecallsports.com	256
SABR Biography	279
Retrosheet, Fall 2019	315
Retrosheet, Winter, 2022	347

Table 5 lists the 20 umpires who ejected the most people, listed by raw total and normalized for the number of games officiated.

Table 5. Most ejections by an umpire, total and games per ejection.

	Total	Games/Ejection		Total	Games/Ejection
Bill Klem	347	15.8	Bob Emslie	158	26.8
Cy Rigler	279	15.1	Jocko Conlan	136	26.9
Hank O'Day	239	16.9	Jack Sheridan	130	16.9
Jim Johnstone	206	8.5	Bruce Froemming	124	42.6
Joe West	196	28.5	Augie Donatelli	124	30.5
Tommy Connolly	185	26.0	Derryl Cousins	122	37.5
Silk O'Loughlin	184	14.2	Frank Dascoli	119	17.3
Ernie Quigley	181	18.7	Bill Stewart	117	27.6
Bob Davidson	175	22.8	Gary Darling	112	30.0
Lord Byron	169	6.0	George Barr	111	25.1

Although Bill Klem's total was large, he only removed someone every 15.8 games, which would be a bit less than two per month. Others had much quicker triggers. Jim Johnstone averaged one ejection about every 8 games and Bill "Lord" Byron did so at an amazing rate of one every 6.0 games, or one a week! Byron, known as "The Singing Umpire" for the way he sang many calls and ejections, only umpired a little over 1000 games in seven seasons, but comes in at the 10th spot in total removals. Modern umpires have ejections much less frequently with Bruce Froemming only doing one every 42.6 games.

Specific ejection combinations of player/manager and umpire have always been of interest. In relatively modern times, the disputes between Baltimore manager Earl Weaver and umpire Ron Luciano are nearly legendary and existing video documents some ferocious arguments. However, as Table 6 shows, Weaver and Luciano don't make the top 20. In fact, they are tied for 31st on the combination list with 7. Furthermore, Weaver was also ejected 7 times by Marty Springstead, showing once again that individual memories can be tricky.

Table 6. Most common ejectee-umpire combinations

Johnny Evers	Cy Rigler	22	John McGraw	Hank O'Day	10
John McGraw	Bill Klem	15	Clark Griffith	Silk O'Loughlin	10
John McGraw	Bob Emslie	14	Red Dooin	Jim Johnstone	10
John McGraw	Jim Johnstone	14	Heinie Zimmerman	Bill Klem	10
Red Dooin	Bill Klem	13	Leo Durocher	Bill Stewart	10
John McGraw	Cy Rigler	13	Leo Durocher	Al Barlick	10
Clark Griffith	Jack Sheridan	12	Roger Bresnahan	Bill Klem	9
Bill Dahlen	Bill Klem	12	Heinie Zimmerman	Lord Byron	9
Larry Doyle	Bill Klem	12	Paul Richards	Larry Napp	9
Joe Kelley	Bob Emslie	11			
Johnny Evers	Bill Klem	11			
Frankie Frisch	George Barr	11			

The combination of Evers and Rigler leads by a sizable margin. In fact, Rigler accounted for 22 of Evers' career total of 72 (58 as player, 9 as manager and 5 as coach), a remarkable percentage. Bill Klem appears in no fewer than 7 of top 21, having ejected John McGraw 15 times. McGraw is here five times, or nearly one quarter of the leaders.

There have been 12 days in which the total number of ejections was 10 or more. They are presented in Table 7. Most are in modern times as there are now more games each day. There have been 350 days with at least 5 ejections.

Table 7. Most ejections on one day.

18
14
13
12
12
11
11
11
11
10
10

The next list, in Table 8, has the individual games with the most ejections. Amazingly, the top one on the list accounts for 17 of the 18 ejections on the day with the most. The details are extraordinary and are included as an appendix.

Table 8. Most ejections in single game.

Atlanta, August 12, 1984	17
Kansas City, June 2, 1998	12
Chicago AL, April 22, 2000	11
Milwaukee, August 24, 1993 (G2)	10
Seattle, June 30, 1990	9
New York NL, May 11, 1996	9
Cincinnati, July 30, 2019	8
New York NL, June 30, 1949 (G2)	8
Pittsburgh, May 31, 1960	8
Baltimore, June 6, 1993	8
Tampa Bay, August 20, 2000	8
Texas May 15, 2016	8
Detroit August 24, 2017	8

The most ejections for one person in one season is 11, done five times – twice by John McGraw in consecutive seasons. Table 9 lists the 15 times someone was ejected 10 or more times in a single season. McGraw is there four times, Bobby Cox three and Paul Richards twice.

Table 9. Most times ejected in single season.

	•	
1905	John McGraw	11
1906	John McGraw	11
1910	Bill Dahlen	11
1952	Paul Richards	11
2001	Bobby Cox	11
1909	Roger Bresnahan	10
1910	John McGraw	10
1911	Bill Dahlen	10
1913	Johnny Evers	10
1915	John McGraw	10
1956	Paul Richards	10
1975	Earl Weaver	10
1999	Bobby Cox	10
2003	Jerry Manuel	10
2007	Bobby Cox	10

The final list is for the umpires with the most ejections in a single season, presented in Table 10. Mal Eason leads the way with 33 in the 1914 season. Although he did not have the single biggest season, Bill Klem makes this list five times as did the quick-tempered Lord Byron who is tied for second with 31 in 1914. Byron's five seasons here were his first five in the NL of his Major League career of seven years.

Table 10. Most ejections by an umpire in single season

1914	Mal Eason	33	1915	Lord Byron	28
1914	Cy Rigler	31	1907	Cy Rigler	27
1914	Lord Byron	31	1905	Bill Klem	26
1904	Jim Johnstone	30	1912	Bill Klem	25
1910	Bill Klem	30	1915	Ernie Quigley	25
1916	Lord Byron	29	1911	Bill Klem	23
1917	Lord Byron	29	1912	Silk O'Loughlin	23
1903	Augie Moran	28	1913	Lord Byron	23
1907	Bill Klem	28	1950	Frank Dascoli	23
1909	Cy Rigler	28			

In addition to the above lists of people, it is interesting to examine the various reasons that ejections occur. There have been dozens of different provocations, many of which only occurred a handful of times. By far the two most common causes were calls on the bases and arguments on balls and strikes, together comprising about two thirds of the overall total. The causes of ejections are varied and some are quite unexpected, such as the 30 cases of removal of a team mascot or a camera operator. I divided the events into nearly 40 categories, with Table 11 showing the highlights. The reasons are summarized in Table 11.

Table 11. Most common reasons for ejections.

Balls and strikes (all types)	7000
balls allu strikes (all types)	7969
General	4868
Called third strike	2546
Check swing	553
Calls on bases	4428
Bench jockeying	969
Fighting	1085
Intentionally throwing at batter	757
Interference/Obstruction	562
Fair/foul	501
Balk	455
HIt by pitch	231
Catch/no catch	168
Home run	81
Replay	76
General	572

Includes:

Arguing about warnings

Managers protecting ejected players

Yelling to eject opponent, usually pitcher

Automatic ejection after warning

Continuing previous arguments (even previous game)

Bumping umpire

Obscene or abusive language

Unknown reason 265

Earlier I showed a figure demonstrating the different rates of total ejections over the years. It occurred to me that the implementation of the replay challenge system could change the frequency of ejection types. In particular, the replay system has two key features:

- 1. Arguing a replay decision is grounds for ejection
- 2. Ball and strike calls cannot be challenged.

As a result, I predicted that ejections arising from calls on the bases and other challenges on balls in play should be greatly reduced, but that disagreements over balls and strikes should not be affected.

Figure 4 shows the totals of the two types of ejection since 1900. The red points are those following arguments on balls and strikes and the blue those from calls on the bases. There have been many variations over the last 133 years, but these two types have clearly not changed together. In the last 50 years, there has been a fairly steady increase of ejections from balls and

strikes while those from calls on the bases were mostly steady. That changed dramatically in 2014 when the current regime of expanded replays went into effect. Since that time, the number of ejections after calls on the bases has almost completely collapsed. The maximum number of ejections for calls on the bases in these 8 seasons was 7. In 2019 there was only one ejection for this reason while there were 150 ejections for balls and strikes. Of course, the number of games each season has not been constant. Note, for example, the big spike in 1914, which was the first year of the Federal League which added another 620 games.

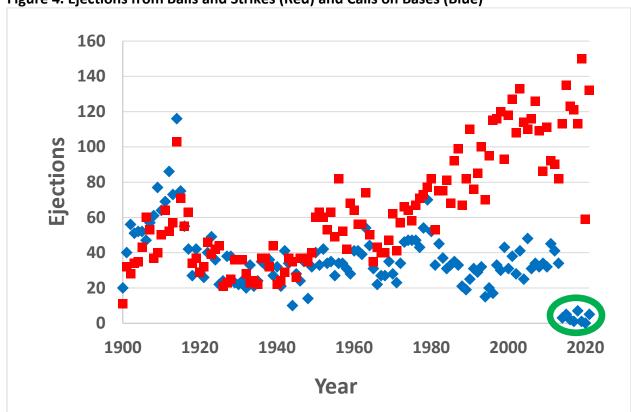


Figure 4. Ejections from Balls and Strikes (Red) and Calls on Bases (Blue)

Remember from the first graph that there was a big spike in total ejections during the 1950s. We now see that this jump was almost entirely due to ejections related to balls and strikes. After a drop through the 1960s, this rate has increased ever since with a fair bit of variation.

These trends may be seen more clearly in Figure 5 when the data are truncated to show just the seasons since 1970.

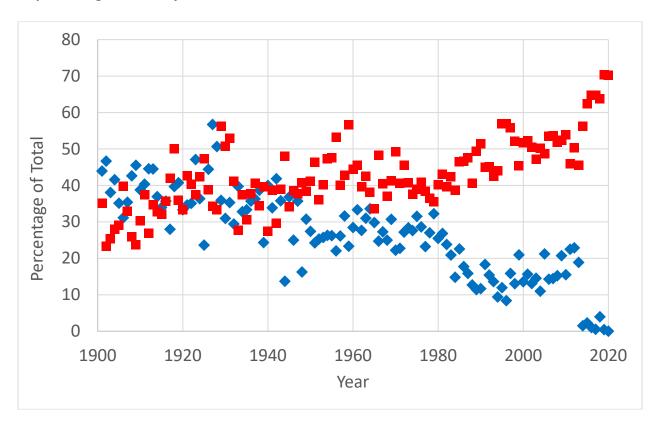
Ejections Year

Figure 5. Ejections for Balls and Strikes (Red Line) and Calls on Bases (Blue Line), 1970 – 2021

The patterns noted before are even clearer as the ejections for the two reasons occurred at similar rates from 1970 to 1980 but steadily diverged after that. Once again most of the difference is from an increase in ejections after ball and strike calls. The last eight years with very rare ejections after calls on the bases stand out dramatically.

One final way to examine the changes in the frequency of these reasons is to look at each as a percentage of total ejections on an annual basis since 1901. These results are in Figure 6.

Figure 6. Ejections for Balls and Strikes (Red Line) and Calls on Bases (Blue Line), 19701–2021 as percentage of total ejections.

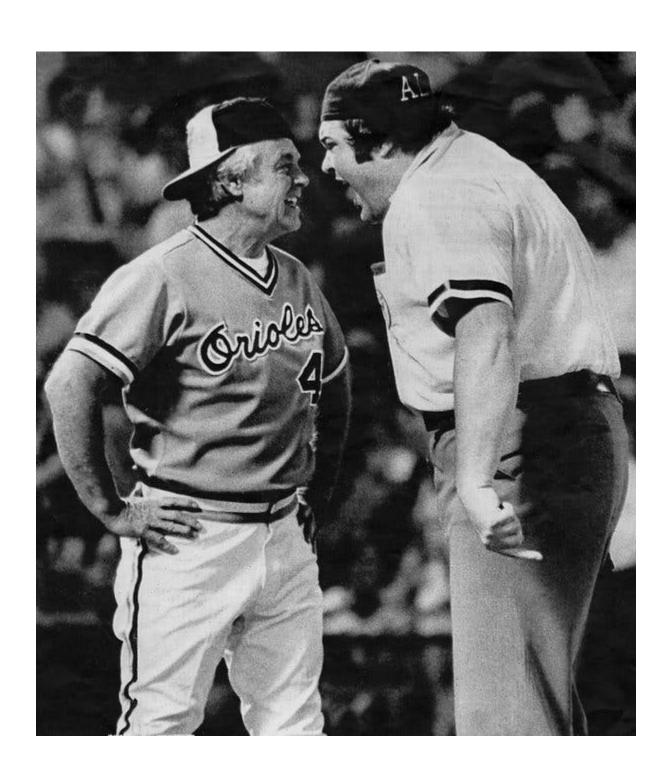


Although there is expected variation, it is remarkable how similar the two percentages were until the late 1940s. The divergence accelerated dramatically beginning in the early 1980s. When the previous results on total ejections are considered, it is clear that something changed in the last 35 years so that ejections for balls and strikes began to increase while those for outs on the bases dropped. Of course, the differences are very large since expanded replay began in 2014. Limited replay began in 2008 so that does not explain the difference in the 1980s and 1990s.

Conclusions

- 1. Ejections were much more frequent in the deadball era, then decreased a great deal through the 1940s
- 2. In the 1950s, ejections rose suddenly and then dropped to near-record low levels by 1970.
- 3. The spike in the 1950s was largely due to increased ejections following calls on balls and strikes.
- 4. Prior to the 1950s, calls on the bases and balls and strikes led to ejections with similar frequencies.
- 5. Beginning in 1970, decisions on balls and strikes have been much more likely causes for ejections than calls on the bases with the latter stable until 2014

- 6. Currently over 70% of ejections following disputes on balls on strikes. The historical average was around 40%
- 7. As expected, expanded replays have almost completely eliminated ejections following decisions on the bases.
- 8. The full ejection database is available on the Retrosheet website at https://www.retrosheet.org/Ejecdata.txt



Appendix. Ejections on 08-12-1984, San Diego at Atlanta

The Padres were in Atlanta on a Sunday afternoon and there were beanball incidents throughout the game which had a 90 minute rain delay at the start. Atlanta pitcher Pascual Perez hit Al Wiggins in the back with the first pitch of the game. When Perez came to bat in the 2nd, Padre pitcher Ed Whitson tried to hit him but missed, throwing a wild pitch in the process. Both teams were warned by plate umpire Steve Rippley and the benches cleared, but no one was ejected. When Perez batted in the 4th, Whitson threw three pitches at him, but missed with all three. Whitson and San Diego manager Dick Williams were ejected due to the earlier warning. When Perez batted in the 6th, the Padre pitcher, Greg Booker, again tried to hit him, but missed. He was ejected along with acting manager Ozzie Virgil who had taken over when Williams was ejected. When Perez batted in the 8th inning, Craig Lefferts was pitching and Lefferts succeeded in hitting Perez. Lefferts and the new acting San Diego manager, Jack Krol, were ejected as the benches cleared for a 10-minute brawl. Three Braves were ejected: Steve Bedrosian, Rick Mahler and Gerald Perry. Two more Padres, Bobby Brown and Champ Summers, were also ejected. When the brawl began, Perez retreated to the Braves dugout and Summers went after him there. His path was blocked by Atlanta's Bob Horner who was on the disabled list with a broken arm and watching the game from the press box until the 6th inning when he went to the clubhouse and put on his uniform. The bad blood continued in the 9th when new Braves pitcher Donnie Moore hit Graig Nettles with his first pitch, earning an automatic ejection for him and Braves manager Joe Torre. The benches cleared again and four more Padres were ejected: Kurt Bevacqua, Tim Flannery, Rich Gossage and Nettles. Fans came on the field and Bevacqua was hit on the head with a beer stein and he tried to get into the stands, but was restrained. Five fans were arrested and Crew Chief John McSherry ordered both benches cleared, threatening to forfeit the game. Five days later, National League President Chub Feeney announced fines and suspensions against 12 Padres and six Braves, a total of 28 days in suspensions and \$17,750 in fines. San Diego manager Williams was fined \$10,000 and suspended for 10 games. Although he was not ejected, Bob Horner was suspended for coming on the field while on the disabled list.