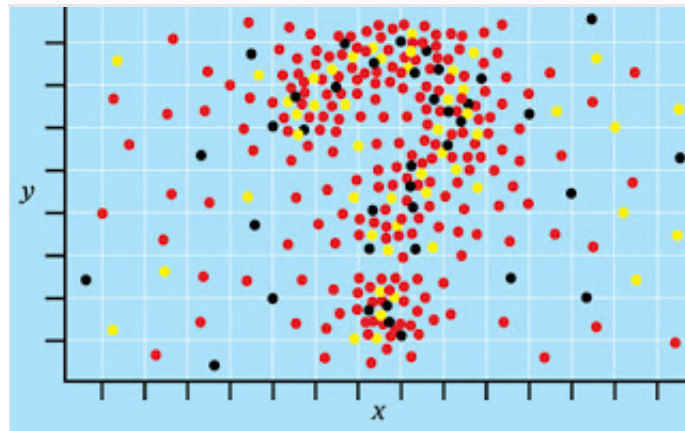


SCHOOL SHOOTINGS: WHAT ARE THE ODDS?



What can data tell us about the prevalence of school shooting incidents in the United States, and can we use that information to predict the likelihood of a school shooting taking place at your child's school next year?

In order to attempt an answer to that question, let's focus on 2012 first. This year, there have been four shootings at K-12 schools (note: I had to ignore two shootings on US college campuses to come up with this number). Here are the incidents:

- 1. February 10, 2012:** A student shot and killed himself in front of 70 classmates at a public high school in Walpole, New Hampshire.
- 2. February 12, 2012:** A former student killed three students and injured six in a shooting at a public high school in Chadron, Ohio.
- 3. March 6, 2012:** A disgruntled former teacher shot and killed the headmistress of a private religious high school in Jacksonville, Florida.
- 4. December 14, 2012:** 27 people, including the shooter, were killed in a Newtown, Connecticut public elementary school. The shooter also killed one other person at his home prior to going to the school.

But really, how common are school shootings in the United States? Four seems like an excessive number. After culling through the incidents from the last thirteen years, here are the number of US school

shootings per year (data from infoplease.com):

2000: 4
2001: 5
2002: 2
2003: 3
2004: 0
2005: 2
2006: 4
2007: 2
2008: 3
2009: 0
2010: 1
2011: 2
2012: 4

It appears that 2012 is on the high end, although it is not completely atypical. Taking a strict average over the last thirteen years, the US experiences 2.46 school shootings per year.

It is also interesting to note that these shootings have taken place all over the country and in all regions. There does not seem to be a difference between socioeconomic status or rural/urban setting. However, most school shootings take place at high schools. Of the 32 US school shootings from 2000 through 2012, 23 of them took place in a high school. Only three took place in an elementary school. Five took place in a middle school. One took place in a one-room Amish K-12 schoolhouse.



Now that we have an understanding of the number of school shootings in a given year, we need to know how many schools there are. The best estimate from the Center for Education Reform is that there are about 132,656 K-12 schools, both public and private, in the United States. There are about 99,000 public schools, but I am including private schools in my calculation because a number of the school shootings over the last 13 years took place at private religious schools.

So, what are the odds that a school shooting will occur in your child's school in 2013? If you take the average number of school shootings per year and compare it to the number of schools in the US, you get 2.46:132,656. Reducing that down reveals the following statistic:

The chances of any particular K-12 school in the United States experiencing a shooting incident in any given year is approximately 1 in 53,925.

Breaking the numbers down a little further reveals the following statistics:

The chances of a school shooting taking place in a US high school in any given year: 1 in 21,000.

The chances of a school shooting taking place in a US elementary or middle school in any given year: 1 in 141,463. (data for the number of elementary and middle schools is not separated by agencies keeping track of such numbers)

Please note, this is not a scientific study. I relied on publicly available numbers and a probability statistic

calculation that is simple enough to be taught to middle school students. It is obviously much more complicated than I have presented it to be--there are a number of factors that would need to be examined prior to claiming that 1 in 53,925 is wholly accurate. And, not every shooting incident is as horrendous as the one in Newtown, Connecticut. In some shootings, only the shooter died. In other incidents, no one was killed. But, in each incident, at least one gun was fired in a school.

Also keep in mind, your chances of dying in a car crash in 2013 is approximately 1 in 7775, which is about the same as your chances of dying due to any type of gun violence in the next year.

The question we now need to ask ourselves is what is an acceptable level of risk? Are we willing to ride in cars? Are we willing to keep guns around? Are we willing to send our kids to school?

As far as the school shooting question goes, there is extremely little chance your child's school will experience a school shooting incident in 2013. But, we are virtually guaranteed to have a few school shootings somewhere in the US in the next year. It probably won't happen to us. It probably won't happen in our city. It probably won't even happen in our state.

But, it will happen to someone. It seems like we should do something about that, don't you think?

Thanks for reading-- Max Wachtel, Ph.D.

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ASK FACTCHECK

Spinning Statistics on School Shootings

Posted on June 25, 2014

Q: Have there been 74 school shootings since the Sandy Hook Elementary shooting in Connecticut?

A: No. The group making this claim uses a broad definition that more than doubles the number of school shootings.

FULL QUESTION

I'd really like to see an article on this "74 School shootings since Sandy Hook" stat that's getting traction today. It seems misleading to me, at the very least. First, it includes grade schools, elementary schools and colleges. It also doesn't seem to distinguish between a student at college accidentally discharging his gun in his dorm room, a child committing suicide in a school bathroom, two adults playing basketball after school hours who get into a fight that ends in gun violence, a fight between two students that ends in one of them firing a gun, a mass shooting, etc.

FULL ANSWER

The claim that there have been 74 school shootings since the [Dec. 14, 2012, shooting at Sandy Hook Elementary School](#) in Newtown, Connecticut, comes from a [report](#) by [Everytown for Gun Safety](#), whose mission is to "end gun violence and build safer communities." President Barack Obama appeared to reference the group's report in a [June 10 Q&A with David Karp, the CEO of Tumblr](#), when Obama said that school shootings happen "once a week." At that point, there had been 78 weeks since the Sandy Hook Elementary School shooting, meaning that, according to Everytown for Gun Safety, school shootings have occurred almost weekly.

The group's list (as of June 10), however, overstates the number of school shootings by including incidents such as [accidental discharges of firearms](#), [suicide attempts](#) and [incidents in which no involved party was affiliated with the school](#). The group's broad definition of "school shooting" is published at the bottom of the report:

***Everytown for Gun Safety:** Incidents were classified as school shootings when a firearm was discharged inside a school building or on school or campus grounds, as documented in publicly reported news accounts. This includes assaults, homicides, suicides, and accidental shootings. Incidents in which guns were brought into schools but not fired there, or were fired off school grounds after having been possessed in schools, were not included.*

FactCheck.org has written before about inflated claims of school shootings. In a [Dec. 20, 2012, article after the Sandy Hook shooting](#), we reviewed Rep. Donna Edwards' claim that "since Columbine, there have been 181 of these school shootings." Edwards based her claim on information from the [Brady Campaign to Prevent Gun Violence](#), which at the time reported that there had been 201 "major school shootings" since 1997. We reviewed the Brady Campaign list and documented 62 "major school shootings" — not 181 — since [the Columbine High School massacre](#) on April 20, 1999. For that article, we defined "major school shooting" as any shooting "that resulted in more than one student, teacher or school employee being killed or injured," since Edwards was referring to mass shootings.

For this new claim, we asked the Brady Campaign for [an updated list of "major school shootings."](#) The Brady Campaign defines "major school shooting" as any incident in which "the shooter was directly linked to the school and at least one person was shot on school property." It listed 33 school shootings since the Sandy Hook shooting on Dec. 14, 2012, to June 10, 2014. But we found that three of the 33 shootings on the Brady Campaign list did not fit the group's own definition. A Nov. 13, 2013, shooting in Pittsburgh, Pennsylvania, involved Brashear High School students, but it [occurred a quarter-mile from the high school](#) — not on campus. Two other shootings occurred on university campuses, but did not involve anyone "directly linked" to the schools. A [Jan. 16, 2013, shooting at Chicago State University](#) involved a high school student (the victim) and two adults (the suspects) who had no connection to the school. Similarly, a Jan. 28, 2014, shooting at Tennessee State University [did not involve anyone affiliated with the university](#).

That reduced the number of school shootings, by the Brady Campaign's count, to 30.

However, in reviewing the list published by Everytown, we found that there are four incidents that meet the Brady Campaign's criteria but do not appear on the Brady Campaign's list. Two incidents, those that occurred at [Madison Parish High School](#) in Louisiana and [Union University](#) in Tennessee, involved students of the school who were both victims and suspects. Two additional incidents, those at [New River Community College](#) in Virginia and [Edison High School](#) in California, occurred on campus, and the suspects were students at the school.

Everytown for Gun Safety is, of course, free to use whatever definition of "school shooting" it desires. But we find the group's methodology overstates the number of school shootings. By our count, as of June 10, 2014, there had been 34 school shootings — not 74 — since the Sandy Hook

shooting on Dec. 14, 2012.

– *Alexander Nacht*

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Categories: [Ask FactCheck](#)

'Active shooter' incidents on the rise

The number of incidents in which a shooter opens fire on a crowd of people more than doubled over the past seven years compared with the previous seven, the FBI found in a study made public Wednesday.

The Federal Bureau of Investigation analyzed 160 "active shooter" incidents from 2000 through 2013 to look for common elements that might guide law enforcement officers in preventing the shootings or responding more effectively.

The study found an average of six incidents per year from 2000 through 2006. The number rose to 16 incidents annually in the past seven years.

The 160 incidents studied began with the Dec. 26, 2000, shooting at Edgewater Technology in Wakefield, Mass., when Michael McDermott, 42, armed with several weapons, shot seven of his co-workers to death. Police found him sitting in a conference room. Researchers also examined the shootings at Case Western Reserve University, ConAgra, Red Lake High School, Fort Hood, Virginia Tech, the U.S. Holocaust Museum and Sandy Hook Elementary School, among others.



An Arapahoe High School security guard is speaking out about the recent school shooting that left one student, Claire Davis, dead. Cameron Rust is making allegations against the school, saying in part that the shooter was a "known threat." VPC

The FBI study defined "active shooters" as a person or people "actively engaged in killing or attempting to

kill people" in a "populated area." That is different from mass shooting incidents, which include any shooting in which more than three people are killed. It also excluded domestic violence and drug and gang-related violence. Of the 160 incidents studied, 64 fit the federal definition of mass killing.

Criminologist James Alan Fox disputes the FBI conclusion. Active shooting and mass shooting events are rare, and the data are too limited to conclude that active shooter incidents are increasing, says Fox, a professor of criminology at Northeastern University in Boston.

"Unlike mass shooting data, which come from routinely collected police reports, there is no official data source for active shooter events," Fox says. "It's not clear whether the increase in active shooter events is completely related to the actual case count or to the availability and accessibility of news reports to identify such events."

USA TODAY catalogued all mass killings -- more than three killed by whatever means -- from 2006 -13 and found FBI homicide data just 57% accurate in identifying them. USA TODAY's broader review showed the number is not increasing. From 2006 to date, 258 have occurred, about one every two weeks. More than half occur among members of a households and intimate partners, and 25% do not include a gun.

BEHIND THE BLOODSHED: [The Untold Story of America's Mass Killings](#)

More than two-thirds of the incidents analyzed by the FBI happened at businesses or schools. In many cases, they happened so quickly that the shooting was over before police arrived. Of 64 incidents analyzed, 44 were over in five minutes or less. Of those, 23 ended in two minutes or less.

In 28% of the incidents, police exchanged fire with the shooter, the study found. In nearly half of those incidents, police were killed or wounded. The shooter committed suicide at the scene before police arrived in 23% of the cases. Unarmed civilians successfully restrained the shooter in 13% of the cases.

The study found few common themes among the shooters. In about 10% of the incidents, male shooters targeted current and former wives and girlfriends but also shot bystanders. In about 9% of the incidents, shooters targeted family members.

In all but two incidents, the shooter acted alone. All but six of the shooters were male. The analysis found no age pattern but noted that in the vast majority of school shootings, the shooter was a student at the school.

The study did not address access to guns.

Almost all of the shooters had a "real or perceived, deeply held personal grievance," said Andre Simons, unit chief for the FBI's Behavioral Analysis Unit 2.

Many of the shooters took inspiration from attacks by other shooters, such as Columbine and Virginia Tech, Simons said.

"The copycat phenomenon is real," he said.

The FBI plans to study the data to identify behavior that might indicate that a person is heading toward committing a violent act and then educate people to see the warning signs, Simons said.

FBI Assistant Director James Yacone said he hoped the FBI could use the data to better prepare local police departments to respond to active shootings, determine what type of equipment could better protect them and learn how to identify and stop people who might resort to such violence.

"The motivations vary widely, but if there are themes, if there are pre-attack indicators, we want to identify them," Yacone said.