

Outlook • Perspective

School shootings are extraordinarily rare. Why is fear of them driving policy?



By David Ropeik March 8

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The first recorded school shooting in the United States took place in 1840, when a law student shot and killed his professor at the University of Virginia. But the modern fear dawned on April 20, 1999, when Dylan Klebold and Eric Harris killed 12 classmates and a teacher, and then themselves, at Colorado's Columbine High. Since then, the murder of children in their classrooms has come to seem common, a regular feature of modern American life, and our fears so strong that we are certain the next horror is sure to come not long after the last.

The Education Department reports that roughly 50 million children attend public schools for roughly 180 days per year. Since Columbine, approximately 200 public school students have been shot to death while school was in session, including the recent slaughter at Marjory Stoneman Douglas High School in Parkland, Fla. (and a shooting in Birmingham, Ala., on Wednesday that police called accidental that left one student dead). That means the statistical likelihood of any given public school student being killed by a gun, in school, on any given day since 1999 was roughly 1 in 614,000,000. And since the 1990s, shootings at schools have been getting less common.

The chance of a child being shot and killed in a public school is extraordinarily low. Not zero — no risk is. But it's far lower than many people assume, especially in the glare of heart-wrenching news coverage after an event like Parkland. And it's far lower than almost any other mortality risk a kid faces, including traveling to and from school, catching a potentially deadly disease while in school or suffering a life-threatening injury playing interscholastic sports.

We sometimes seek protection from our fears in ways that put us in greater peril. In responding to the Parkland shooting, we may be doing just that to our kids.

Statistics seem cold and irrelevant compared with how the evil of a school shooting makes us feel. The victims are children, and research on the psychology of risk has found that few risks worry us more than threats to kids. Parents who send their precious children to school each morning are relinquishing control over their safety; that same research has found that lack of

control makes any risk feel more threatening. The parents at Columbine and Sandy Hook and Stoneman Douglas placed their faith in the school systems, trust that was cruelly violated — and mistrust fuels fear, too, for the parents and all of us.

We don't really think about risk in terms of 1 in 10, or 1 in 100, or 1 in 1 million in the first place. And when we do see such numbers, the only thing we think is, "My kid could be the one," so even the tiniest risk appears unacceptably high. That powerful combination of psychological characteristics moots any suggestion that fear of a certain risk is irrationally excessive. Numerically, maybe. Emotionally, not at all.

That's the thing about risk. We assess it less on the likelihood of the outcome and more on the emotional nature of the experience involved in getting to that outcome. The probability of dying doesn't matter as much as the way you die. That's why the infinitesimally low risk of being eaten by a shark scares millions of people out of the ocean, and why vanishingly rare plane crashes scare travelers into their cars and trucks (a statistically riskier way to get around). School shootings also trigger powerful emotions that swamp the odds.

And the more frightening a risk feels to you and me, the more coverage it usually gets in the news media, which focuses on things most likely to get our attention. Rare events with high emotional valence often get coverage disproportionate to their likelihood, further magnifying our fears. As a result of what the cognitive sciences call "the awareness heuristic" — a mental shortcut we use to quickly assess the likely frequency of things we don't know much about — the more readily an event leaps to mind from our memory, or the more persistently it's in the news, the more emotionally powerful and probable it feels. School shootings and the debate about gun control are prime examples. A threat feels more threatening if it's getting a lot of attention.

The constant drumbeat of negative news in general — the possibility of nuclear war, terrorism, a bad flu season, hate crimes, climate change — makes the world feel like a darker, more threatening place than it actually is, which makes us more fearful overall. (Media analyst George Gerbner called this "mean world syndrome.") School shootings don't happen in isolation but in the context of worrying news about all sorts of things.

The problem with all of this is what our excessive fears could lead to. Having more guns in schools, as President Trump advocates — or more guns anywhere — increases the likelihood of gun violence. At a Georgia high school this month, social studies teacher Randal Davidson locked himself in a classroom and fired his handgun through a window when authorities tried to open the door. In 2014, a Utah teacher carrying a concealed handgun shot herself in the leg in a school restroom. There are many other similar examples. The Parkland tragedy itself teaches that more guns don't automatically mean more safety: The school was patrolled by an armed guard.

Another effect of this disproportionate fear is to direct attention to the risks we're most afraid of and away from those that actually pose the greatest threat. Far more kids are shot outside school than in one — 7,100 a year between 2012 and 2014, or 19 every day (compared with about 60 shootings at schools each year, according to the Gun Violence Archive). More than 1,000 of them die. Fear focused on military-style "assault" rifles diverts attention from the larger issue of gun control, which has much more to do with the lethality of guns generally than with what the machine looks like.

Fear also leads us to do things in pursuit of safety that may do more harm than what we're afraid of in the first place. Think about the psychological effects on kids from all those lessons about when to run, how to hide, directions from their parents to

An essay like this often concludes with solutions: We should look at the facts and try to keep the risk in perspective. We should worry about statistically bigger threats. We should more rationally weigh the costs and benefits of the ways we try to make schools safer. We should reduce our exposure to dramatic and upsetting news coverage of such events and avoid what might be called “awareness poisoning” by not watching or reading every story for days on end and posting it all on social media.

But all of that is more easily recommended than done. The psychology researchers who study this — Daniel Kahneman, Paul Slovic, Baruch Fischhoff, Melissa Finucane and many others — are cautious about just how well we can use reason to overcome our instincts and emotions, especially the instincts that evolved to help us survive. Just as surely as there will be another school shooting, it will prompt another flood of outrage and fear. That fear, while understandable, will distract us from greater threats and lead to behaviors that do greater harm. The real lesson we need to learn is this: We need not just reasonable gun control, but also a bit more self-control over our emotions and instincts if we want to keep ourselves and our kids safer.

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