

EconoFact Chats: Gun Violence in the United States

Sara Heller (University of Michigan) and Max Kapustin (Cornell University)

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Michael Klein:

I'm Michael Klein, executive editor of EconoFact, a nonpartisan web-based publication of The Fletcher School at Tufts University. At EconoFact, we bring key facts and incisive analysis to the national debate on economic and social policies, publishing work from leading economists across the country. You can learn more about us and see our work at www.econofact.org.

Michael Klein:

The sad and terrible list of mass gun shootings in the United States has recently added three more incidents at the time of this recording. The murder of three University of Virginia students, the killing of five people at Club Q in Colorado Springs, and the fatal shooting of six people at a Walmart in Chesapeake, Virginia.

More generally, the overall homicide rate in the United States is about seven and a half times that of other rich industrialized countries, and guns were responsible for almost 80% of those deaths in 2020. In contrast, gun deaths represent about one-sixth of overall homicides in other rich countries. The suffering from gun violence in the United States is unevenly distributed with rates of gun violence consistently highest in poverty-stricken neighborhoods.

To discuss this issue, I'm pleased to have Sara Heller and Max Kapustin join me on EconoFact Chats. Sara and Max co-authored an EconoFact memo on gun violence. Sara is a professor at the University of Michigan, and Max is at Cornell University. Sara and Max, welcome to EconoFact Chats.

Sara Heller:

Thanks, Michael.

Max Kapustin:

Thanks so much, Michael.

Michael Klein:

I mentioned the high rate of homicides from guns in the United States as compared to other rich countries. I also alluded to how the effects of this are very uneven across different racial and ethnic groups. Can you comment on that?

Sara Heller:

Yes. The concentration of gun violence within demographic groups is really quite startling. So homicide is the leading cause of death for non-Hispanic black men between 15 and 24, killing more young black men than the nine other leading causes of death combined. And so this translates to a homicide rate that's more than 18 times the rate of their non-Hispanic white peers, and about five times the rate of young Hispanic men as well.

Michael Klein:

What's been happening over time to the number of homicides, and the numbers associated with gun violence?

Max Kapustin:

So in recent years especially, things have been kind of moving in the wrong direction. Homicide rates actually rose by 30% in 2020, and that's the single largest increase on record. And as you mentioned at the top of the podcast, Michael, about four out of five of these homicides actually occurred with a gun. We don't actually have complete data yet for 2021, let alone 2022, but there's no indication as of yet that this trend is reversing itself.

Michael Klein:

Has this been especially pronounced in certain cities or certain regions of the country?

Max Kapustin:

I think actually what's really notable about this recent increase is that it's incredibly widespread. It's been affecting both coasts of the country. It's been affecting urban and rural areas alike. And while it's still the case that the overall US homicide rate is below its previous peak set in the early '90s at the height of the crack cocaine epidemic, the homicide rates in many cities, and this includes places like Philadelphia, Milwaukee, Austin, Tucson, Portland, they have actually either approached or surpassed entirely their highest levels of homicide ever recorded since 2019. And the overwhelming majority of the homicides in these cities are due to guns.

Michael Klein:

So one policy response that's often mentioned is stricter gun laws. There are a variety of changes that are typically discussed, including laws that limit access to semiautomatic weapons that can be fitted with large magazines, and waiting periods between the time someone buys a gun and when that person can take possession. Is there evidence that these laws and others reduce gun violence?

Sara Heller:

Yes, there is. So your listeners might know that some research on concealed carry laws in particular has been controversial, with some earlier research suggesting that increased concealed carry deters violent crime, and then later studies calling that finding into question. But I would say that today, the best available evidence suggests that looser gun laws in general, both about carrying and about purchasing, will increase violent crime. And although it's not our focus here today, there's also evidence that making those laws looser will also increase suicide.

And so the evidence, I think, on top of that is clear that making guns more easily available will not just increase the amount of violent gun crime there is, but also how lethal a given amount of violence is.

Michael Klein:

Well, so the evidence points towards the efficacy of these laws. Is policy moving in that direction as well?

Sara Heller:

Unfortunately, no. So we had some tightening of gun restrictions in the 1990s, including the Brady Bill, and the Federal Assault Weapons Ban, which lapsed back in 2004. But recent policy has really moved in the other direction. So the Supreme Court's decisions in the 2008 Heller case, which has no relation despite my last name -- and in the 2010 McDonald case expanded the right to possess a gun.

By the end of 2021, 42 states had adopted either a right to carry or a permitless carry law, and then the court's recent Bruen decision seems likely to really further expand gun carrying outside the home as well.

Michael Klein:

So given that stricter gun laws don't seem to be on the horizon, are there other policies that can help reduce gun violence that might have a better chance of being enacted?

Max Kapustin:

Yeah, so I think one set of policies that often comes up in this conversation that could help reduce gun violence concerns the police. So there have been actually a very large number of studies at this point that have, I think, very credibly shown that increasing the size of the police force in a city can reduce violent crime, and that includes homicides, and the effects are actually larger in per capita terms for black victims.

However, I think an important thing to keep in mind is it's what police do in addition, to how many of them actually do it, that's also very important here. So aggressive policing strategies that prioritize, for example, street stops and low-level arrests have fairly questionable benefits. Meanwhile, the kinds of costs those strategies impose usually on the same people and the same communities that are most affected by gun violence already, it can be quite significant. Experiencing more street stops, misdemeanor arrests and uses of force can produce trauma and anxiety. They can reduce students' academic performance, and they can lower a community's trust in the police. And these strategies can also cast a fairly wide net and ensnare more people in the criminal legal system, possibly resulting in higher levels of imprisonment, which themselves can be quite harmful for minority families, and destabilize communities, and reduce employment prospects for the people who are formerly incarcerated.

So I think that just stepping back as we think about how we design policies for reducing gun violence, police certainly have a role to play. But we should be mindful to use them in ways that maximize their effectiveness, but minimize the kinds of costs that they impose.

Michael Klein:

Do some of these other policies that you were talking about, for example, the stop and search policies, I imagine those would also reduce people's trust of the police and that could set up a bad dynamic where people trust police less and then police are less effective and people then trust police even less for that.

Max Kapustin:

Yeah, I think that's exactly right. I think eroding that trust in policing can have these sort of cyclical effects that you mentioned where people are less willing to cooperate with the police that could further erode the police's ability to function effectively, and then just sort of exacerbate that problem. I think that's right.

Michael Klein:

So how could police activity be more narrowly targeted on gun violence? How would police go about doing this? And is there any evidence that there are effects of this that are beneficial?

Max Kapustin:

Yeah, so I think, you can think of as one potential example of this, of how policing can be more narrowly targeted at gun violence; you can imagine, for example, devoting more resources to investigating gun assaults. It's not a very widely known fact, but in most cities, you're actually much less likely to be arrested after committing a gun assault where the victim lives, than a gun assault where the victim does not.

Despite the two crimes being very similar, often the only thing that separates them is how quickly emergency responders can get to the scene and provide aid. For example, in Chicago, the arrest rate for a homicide in recent years has just been 30% to 40% roughly, and only 5% to 10% for a nonfatal shooting. And that low overall arrest rate, and the disparity between arrest rates for fatal and non-fatal shootings, to your point earlier, that can further erode confidence in the police, and encourage victims or their friends and families to seek justice on their own. And that can further contribute to this escalatory cycle of violence that a lot of these cities experience.

Michael Klein:

I would guess it would also make the perpetrators a little less reticent to engage in gun violence if the arrest rates are so low.

Max Kapustin:

I think that's most likely right. I think that sounds very plausible.

Michael Klein:

I know that both of you have been involved in researching other non-police methods to reduce gun violence. How did you become interested in these types of solutions to begin with?

Sara Heller:

Yeah, you heard Max mention some statistics from Chicago. He and I have both spent time there, and have really seen up close the enormous toll that gun violence can take, not just on the people who are directly involved, but also on their families and the broader communities. And I think the kinds of policies we've just talked about, like guns and policing are often the ones that first come to mind as ways to reduce shootings. But in practice, progress on implementing them has just been really slow. And in the meantime, people keep dying at just what feels like unacceptable rates. And so I think our interest in starting to look at some alternatives comes from a desire to find some way that that's informed by our own expertise in social science to make some progress towards stemming just the horrendous tide of gun violence that we have in this country.

Michael Klein:

I mentioned at the outset that you have an EconoFact memo on gun violence. And in that memo you discussed community-led efforts to reduce gun violence. What would these entail, and what's the evidence for their efficacy?

Sara Heller:

So one approach that you hear people talk a lot about is known as violence interruption. And so that involves mediating active disputes. So sort of directly interrupting the violence as it happens or is about to happen, along with fostering community norms of nonviolence. But one researcher who recently reviewed the evidence about it called it sort of mixed at best.

And so many cities are now trying to pursue and invest in complimentary approaches, which can involve different kinds of community violence interventions or what you'll hear people refer to as CVIs. And in particular, they're really trying to identify the small group of people thought to be at the highest risk of gun violence involvement, and then provide them with preventive programming or social services that are meant to change the kinds of behavior or ways people spend time that can lead to violence. And so we've seen some social programs prevent less serious types of violence successfully. so things like basic assault in a number of different settings. But the ability of these kinds of CVIs to both find people at high enough

risk of shooting or homicide to have some scope for a reduction, and then also to succeed in keeping them safe, remains really an open question and an active focus of research.

And so in a recent research paper that Max and I have with our co-authors, Zubin Jelveh and Ben Jakubowski, we look into that first point about just finding people, and we show that it is in fact possible using data like arrest and victimization records that cities already collect, to accurately identify specific people at extraordinarily high risk of being shot. And more importantly, we can do that without introducing the kinds of racial bias that are of most concern in algorithmic predictions.

Michael Klein:

So this sounds a little bit like the Tom Cruise movie, *Minority Report*. But instead of trying to predict perpetrators, you're trying to predict victims and you're using AI rather than in that movie, three clairvoyant humans suspended in a shallow pool under sleep inducing drugs that deprive them of external stimuli. I guess you couldn't find the clairvoyant humans. So you were stuck with AI. What is a profile, a typical profile of people who are under threat of being victims of gun violence?

Max Kapustin:

Well, I think a typical profile, if you're thinking about, for example, the setting of Chicago where Sara and I did that study that she just mentioned, we're talking about often young men of color often who've had a lot of prior exposure, not just to the criminal legal system in the form of arrests, but also who themselves have been victimized or whose family and friends have been victimized.

So folks who are kind of caught up in this really difficult situation, often living in, again, neighborhoods that are quite disadvantaged in a variety of ways. So that's sort of your modal example. But of course, gun violence touches more people than just the people I just mentioned. It touches their friends, and their family and their communities. But those are the ones who are at, if you had to paint a picture kind of at greatest risk for being a victim of gun violence.

Michael Klein:

Is there evidence that this approach works, this AI-based approach, works?

Max Kapustin:

Yeah, it actually does seem to work in identifying potential victims. For example, in the paper that Sara mentioned, we actually show that an algorithm trained on data from Chicago can identify, let's say, 500 specific people of whom 13% will go on to be the victim of a shooting within 18 months. And that's a rate of shooting victimization that's almost 130 times higher than the average Chicagoan.

So if you just think about the enormous social costs that gun violence imposes and how much gun violence these men will be, that these individuals will be involved are mostly men, if you could actually provide, let's say each of those 500 people with a social service that was capable of cutting in half their risk of being shot, you'd be justified in spending up to \$130,000 per person just to do that. And that's far more than we spend on preventative social services for this population as of right now. And just given how concentrated the risk of gun violence is, these 500 people for example, delivering preventative services to a relatively small group of people could even have a citywide impact on shootings in the short term. And that's all without involving any kind of law enforcement.

Providing these kinds of targeted services, which will often combine things like jobs or payments with some psychological interventions like the cognitive behavioral therapy for example, that's an approach that's actually being tried in a number of cities including Chicago. But we currently lack rigorous evidence about the effectiveness of this kind of approach. And so that's why in a related project, Sara and I, along with our co-authors, Monica Bhatt, Marianne Bertrand, and Chris Blattman, we're actually conducting a randomized trial of one such intensive targeted CVI called READI Chicago. And what we

find are some pretty promising, if not definitive, early results. In particular, providing men who are at the absolute highest risk of gun violence with 18 months of outreach, a job, and cognitive behavioral therapy, may actually reduce their arrests for shootings and homicides.

And because READI appears to actually reduce involvement in the most serious and most socially costly forms of violence, its benefit-cost ratio, we estimate to be at least 3.8 to 1. But we think that a bit more research is needed to really better understand whether a result like this one is replicable.

Michael Klein:

And just to reiterate the point, all of this is done without police intervention. This is a non-police form of intervention that you're showing, or seem to be showing, and your research seems to work.

Max Kapustin:

Exactly. This is intervention being delivered entirely by local community groups in specific neighborhoods in Chicago. And we know that other cities are thinking of experimenting with a very similar approach, also working with local organizations in their cities.

Michael Klein:

So all of these activities are centered on individuals, but what about the environment? What about policies that attempt to reduce homicides by changing the neighborhoods in which they happen, for example, by restoring vacant urban land, or remediating lead, or regulating alcohol sales or improving schools?

Sara Heller:

I mean, I think there's a lot to be gained from thinking broadly about solutions to this problem. Gun violence is complex, and so it's likely to take a whole package of complex solutions to address. There is convincing evidence that the kinds of policies you mention do reduce gun crime. Some of them in the shorter term, and some of them like improving education, or remediating lead might take a few more years to come to fruition. And so I think the sort of thinking broadly about targeting gun violence in particular is useful. I also have other research that shows it's possible to reduce violent crime more generally, not just gun crime among less disconnected populations than the ones that Max were talking about in terms of our READI project. So from summer jobs programs for young people, to interventions based on cognitive behavioral therapy in high schools, and across the board, the policies you've mentioned. And these work cost effectively, that is, they generate more benefits for society than they cost to implement.

And so I think that's promising. And maybe if we can try to end on a little bit of an optimistic note that there is evidence, that it's possible to make a difference and do it cost effectively. But I think there's no single panacea. We likely need to keep investing in the kinds of well targeted individual and community level interventions that have been shown to work along with pursuing better policing and feasible gun regulation, and even broader systemic change to address really the more root causes of violence if we want to try to reduce gun violence in the US.

Michael Klein:

And of course, the things that you were mentioning, Sara, they will reduce kinds of violence other than gun violence. But even more so, these are important in and of themselves; of making schools better, of restoring vacant urban land or remediating lead. These are things that on their own are important and the added benefit is reducing violence, and especially perhaps reducing gun violence.

Sara Heller:

That's right.

Michael Klein:

So Sara and Max, I want to thank you very much for joining me today on EconoFact Chats to discuss this very important issue that touches so many Americans, and really makes America an outlier as compared to other industrial countries, an outlier in a very unfortunate way.

Max Kapustin:

Thanks so much, Michael, for having us.

Sara Heller:

Thanks.

Michael Klein:

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