

A Public Health Approach to Gun Violence in America

SPEAKERS

Senator William Frist, Heather Howard, Dr. Chethan Sathya

Heather Howard 00:02

Hi, and welcome to the Princeton Pulse Podcast. I'm Heather Howard, professor at Princeton University and former New Jersey Commissioner of Health and Senior Services. On campus and beyond, I've dedicated my career to advancing public health. That's why I'm excited to host this podcast and shine a light on the valuable connections between health research and policy. Our show will bring together scholars, policymakers, and other leaders to discuss today's most pressing health policy issues, domestically and globally. We'll highlight novel research at Princeton, along with partnerships aimed at improving public health and reducing health disparities. I hope you'll listen in as we put our fingers on the pulse and examine the power and possibilities of evidence-informed health policy.

Heather Howard 00:51

Welcome, today's episode tackles gun violence in America, a serious and escalating public health crisis. According to the CDC, firearms killed nearly 50,000 Americans each year. And shockingly, firearms are now the leading cause of death for U.S. children and teens.

Heather Howard 01:08

Unfortunately, gun violence is often viewed as a political issue rather than a public health threat, which has prevented meaningful progress in fighting this epidemic. But that's beginning to change as policymakers, health care providers and other stakeholders search for ways to work together in the interest of safer and healthier communities.

Heather Howard 01:26

Here with me today are two staunch advocates for depoliticizing firearm safety and uniting for the common good. My first guest is Senator William Frist, a practicing physician and former U.S. Senate Majority Leader. Senator Frist thrust this issue into the spotlight through his ongoing work, including a recent op-ed proposing a shift in culture and bipartisan policies aimed at reducing firearm injury and death. Also joining me is Dr. Chethan Sathya, a pediatric trauma surgeon and director of the Northwell Health Center for Gun Violence. Under his leadership, the organization conducts gun violence research and pursues collaborative, health-focused interventions to stem this public health crisis. Together, we will explore a public health approach to firearm safety.

Heather Howard 02:14

Senator Frist, Dr. Sathya, welcome to the show.

Heather Howard 02:17

Let me start with you, Senator Frist. I think our listeners are familiar with your distinguished career as a heart and lung transplant surgeon, and then your time in the U.S. Senate, including as Majority Leader, in the health policy space. Your time in the Senate included enactment of the Medicare prescription drug benefit and PEPFAR, the global HIV initiative. But you're no longer in the Senate. Can you just tell us how you're staying involved in health policy since leaving the Senate?

Senator William Frist 02:47

You bet. And it's a real pleasure to be here with you on the panel today. I've been out for about 15 years. I was in the Senate for 12 years and focused on a whole range of policies, as you said. Since then, and over the last 15 or 16 years, I have stayed very involved in policy in a number of ways. I've been a senior fellow over at the Bipartisan Policy Center in Washington, the BPC, co chairing a health project and working side by side with former leader Daschle, two people working in a bipartisan way on a whole range of issues. I have led a lot of policy groups. Most recently, the Aspen Health Strategy Group. We meet annually on an issue, and this whole firearm injury protection was an issue of this past year. I've been involved with the Health Affairs Council on Health Care Spending in Value for three years, spent 10 years on the board of major foundations with health policy -- the Robert Wood Johnson Foundation, The Kaiser Family Foundation -- and am now working in policy globally with The Nature Conservancy, focusing on the intersection of health and wellbeing with nature and climate change and biodiversity.

Heather Howard 04:05

Wow, that's a lot. I'm so glad we're able to get you here today to talk about this pressing issue. And Dr. Sathya, if I can go to you. You're a practicing pediatric trauma surgeon. What does that mean in the context of these debates about gun violence? What do you see?

Dr. Chethan Sathya 04:19

I actually started off my journey in this area as a pediatric surgical trainee in Chicago. And first week on the job, I had to treat a six-month-old baby with a bullet wound. I had never seen an infant with a bullet wound prior to that. Unfortunately, it was not the last time that I would see that. I've seen kids with bullet wounds week after week. Even here in New York, we had a 350% increase in the number of kids coming in with bullet wounds at our Level 1 Pediatric Trauma Center. And it's heartbreaking. I still remember that six-month-old. I had both hands on the bullet wounds. The parents are in the trauma bay with you. And their expressions are horrific. This little baby still sticks with me. This baby survived after a big operation, but remains paralyzed to this day, really speaking to the devastating disability that these bullets cause. So that's why I'm here. I'm really honored to be here at this podcast and panel today.

Heather Howard 05:12

So you now direct the Northwell Health Center for Gun Violence Prevention. Can you tell me about the work that the center does?

Dr. Chethan Sathya 05:20

Absolutely. We are very focused on charting a public health approach to this crisis. First and foremost, we don't think this is a political issue. This is about firearm safety, and violence prevention. And we really want to get nuanced with the language that we use. I'd love to hear from the Senator on this as well, given his experience on having these discussions. I find one of the biggest issues, just conceptually, is around how we frame this topic -- and we want to frame it as a public health issue. We need to think about the language that we use. We talk about gun violence as one big bucket. But really what we're talking about is firearm-related suicide, unintentional injury, and homicide. And homicide can be further divided into violence or assault, and mass shootings. Each of them is so different in their possible root causes, preventative strategies, and policies. If we don't separate them, and we continue to have this discussion as a whole, we naturally polarize this conversation, right? No wonder why illegal gun owners say, "I'm not responsible for firearm violence in inner cities." We have to get nuanced because what I find, in frontline conversations, is that most Americans want the same thing, which is firearm safety and injury prevention. So our center is really focused on tackling this public health issue. We have a big research focus that I'll talk about a little bit later. We normalize the conversation. We actually screen all our patients for this. We think doctors have a significant role they can play in normalizing this conversation. We work hand in hand with community, gun owners, law enforcement, and so on. I'm looking forward to getting into some of the details.

Heather Howard 06:46

That's a great segue. Senator Frist, after the tragic Nashville's school shooting earlier this year, you penned an op-ed in Forbes, where you charted a path forward for bipartisan legislation and policy proposals to address firearm safety. Can you talk about why you decided to get into these treacherous waters. I'd also love to see if you want to react to some of those questions about language choice, that Dr. Sathya teed up?

Senator William Frist 07:15

I would love to. The discussion that I hope we leave people with is this reframing of the issue, which traditionally, 10, 15, 20 years ago, was around individual rights and the constitution and the like -- all of which are very important -- but framing it in the larger issue, the issue that it really has become, as we'll talk about with the data and statistics today, is very different than the issue of 20, 30, 40 years ago. I'd begun writing a piece on the public health approach to this issue about a year before the finished piece in Forbes, which went viral for all sorts of reasons. But I think it does reflect the interest in this whole firearm injury protection today. I started writing the piece and putting together this public health approach, and then I put it aside after Uvalde, because even though this whole issue had become the number one killer of kids, and we're facing a public health crisis, Congress was actually -- now a year and a half ago -- addressing the issue of firearm safety. And I didn't want to interfere with the process. Indeed, it should be pointed out that a bill called the Bipartisan Safer Communities Act was passed. And it did close some loopholes, in Washington, on background checks. And it expanded some funding for extreme risk protection order laws in states, which we can talk about in detail. But clearly, there's a lot more that we could do. There is not going to be any single law that's going to solve our public health crisis around firearm injury protection and gun safety. So I put together two pieces, including the one in Forbes. We simply laid out 11 possible policy actions that had not yet been taken, that could be taken at the federal and also at the state level. And then I wrote another piece, locally, after the tragic shooting, just a few months ago, in Nashville, which focused on the particulars -- and maybe the

peculiarities -- of being in a very, very red state, where the issue itself does, in many times, close the door to discussion because it talks just about individual rights and just about what's in the Constitution, without framing it in this larger population health, public health issue -- the fact that firearms today are the number one killer of kids and people under the age of 19.

Heather Howard 09:56

Senator Frist talked about reframing this and getting beyond just talking about individual rights and thinking about community safety, right? The CDC defines a public health approach to injury prevention as one that involves defining and monitoring the problem. You identify risk and protective factors, you develop and test prevention strategies, and then you disseminate them. How does that public health approach guide your work? Is that framing as community protection as opposed to individual rights important?

Dr. Chethan Sathya 10:28

Framing this as a community issue is, as you mentioned, "Public Health 101." Public health is about keeping our communities safe and, as a result, keeping individuals safe at the community level. So yeah, we do use those four tenets of public health as our guiding principles. We work heavily with community, as I was mentioning briefly earlier, whether it be law enforcement, gun owners, violence interrupters, Black and Brown minority communities, etc. We really have to work hand in hand with them to develop the solutions that work at a societal level. Because whether you're talking about firearm violence, mass shootings, or suicide prevention, it does take that community level approach to really make a difference. And we've seen that with other public health issues, such as substance use, the opioid epidemic that we're now battling. It is a very similar synergistic approach that you need to take. I will say, just to build on what you mentioned about those four tenets of public health -- and that we're going to get into a little bit later, I believe -- that because of the paucity of research that's been done in this area, we really do lack a lot of data when it comes to all four of those public health tenets. So I preface everything with saying that a lot more research needs to be done.

Heather Howard 11:39

And Senator Frist, can you just say a little bit more about why you use the language "firearm safety" in the pieces you've written? You've done polling, and you've done community outreach, and you've asked people. Is that the language that seems to resonate?

Senator William Frist 11:56

Yeah, you know, it's interesting. We're in a different world today than we were in the past. It used to be that guns, for the most part, in the late 1990s, 1980s, before 2000, were being purchased by hunters. And let me say that I'm a gun owner, I'm a hunter, I'm a strong defender of our constitutional rights to own firearms. I'll put that out front, because there's no lack of continuity between firearm injury protection, gun safety, and owning guns, for whatever reason you have today. It's really important to put that on the table for people, so you don't break people into two different populations -- on one side of the room, against any mention of guns; and on the other side of the room, we got to regulate, we got to control, we got to diminish the number. So how do you bring people together? This is the policy hat. And this is somebody who's spent a large part of my life and career bringing people together around contentious issues. It comes back to starting with the language you use to frame the issue. The

problem that we have is the clear-cut fact that firearms today are the leading cause of death for U.S. children and teenagers. Some people will say, "That couldn't be true." And you say, "No, it is true; here are the facts. And it's 10 times worse here than in any country that is anywhere close to us in terms of the developed world." So why is that? Then, to keep people in the room from a red state, like Tennessee, for example (not states like New Jersey, Massachusetts, and California), the framing is important. If we're talking about firearms being the leading cause of death, we're talking about firearms, not necessarily guns and weapons. Yes, they are guns and weapons, but by using the word firearms, people will stay at the table. And you talk about injury prevention. And you could also talk about safety. There is not going to be anybody listening to us today that's going to argue with the importance of preventing injury. In what can be a very contentious conversation around the country, in spite of a lot of good favorable polling and directional polling, it is important to get the language right. What I have found, and what polling shows, is that firearm injury protection, or some variation of that, will keep people in the room listening to the data, listening to the arguments, listening to the facts, and then formulating policy, which can establish the guardrails that we can all live by in order to reduce these tragic statistics that we will keep citing.

Heather Howard 14:51

So let's go there. Dr. Sathya, you mentioned that there's a lot we don't know, but let me tick through some of the statistics we do know, because I think that will then set up the conversation we want to have about possible policy solutions. The first is that for 2021, which is the most recent year for which we have clear data, there were nearly 49,000 firearm related deaths, the highest on record. Another statistic that I found really interesting is from recent Kaiser Family Foundation polling, showing that a majority of Americans say they feel the impact of the gun violence epidemic in their lives. So this issue is widely felt and pervades the lives of millions of Americans. This is not just in one corner of America or one group of people.

Heather Howard 15:42

Senator Frist, you mentioned that firearms are the number one cause of death among children, which, as you said, some people act shocked about. But we've been inching towards that, and then a couple of years ago we crossed that line. It surpassed traffic-related deaths, which had been previously the number one cause of death. But one fact that's worth exploring, Dr. Sathya, is that although mass shootings are tragic and capture the public's attention, they represent only a small portion of firearm-related deaths. Can you take us back to a point you made at the top and speak a little bit about how the majority of firearm-related deaths are actually suicide or accidents? So injury prevention is an area where we can focus a lot of policy.

Dr. Chethan Sathya 16:33

Absolutely. Senator Frist just mentioned this so nicely about language. Just wanted to point out a real life example of what he is talking about, which is in the screening that we do. We screen 30,000 patients now, and we ask questions about firearm access and violence risk -- two different things. If they screen positive for firearm access, we give gun locks/firearm safety counseling. And if they screen positive for firearm violence risk, that's where we tap into community violence interruption. We have found that framing the issue, just like Senator Frist said, around injury prevention and safety really works. As you know, our hospital system is located in Long Island and the five boroughs. We have a

ton of gun owners that come in, and they're not always receptive right away. But when you frame the issue around that [injury prevention and safety], I can tell you firsthand that 99% of the interactions are actually very positive.

Dr. Chethan Sathya 17:18

To your point about stats... As you mentioned, from 2019 to 2020 we had the largest ever spike in gun injuries and gun-related mortality in this country. We thought it was all due to extenuating circumstances from the COVID-19 pandemic. But unfortunately, we saw that those 2020 to 2021 numbers went up, and 2022 continued to go up, suggesting a very dangerous inflection point. Yes, the majority of firearm-related deaths in this country are suicide, roughly 6 in 10. I will say though, when you look at children, in particular, and our rising rates overall as a populace, most of these deaths tend to be driven by firearm violence. Unintentional injuries or accidental injuries account for a very small fraction and have remained stable. But it's still totally unacceptable. I think something like 8 to 10 children per day die as a result of accidental injuries. Firearm suicides have also remained relatively stable. It is the firearm violence piece, and homicide, that is really driving a lot of our numbers. This year we've seen an exceptional number of mass shootings, unfortunately. And that number has gotten worse, but does continue to still be a minority of the overall gun violence that we see. And your last point was about the Kaiser survey. It's been a long time since I've found a single American who isn't worried about this issue.

Heather Howard 18:41

Yeah, their research found that the majority of Americans take at least one step to protect themselves from violence. So they're thinking about violence in terms of where they're going. They're worried about their kids. It's really pervading American life. So, Senator Frist, I want to dive into some of the ideas you suggest, which are really informed by that research. One is safe storage, right? A recent survey found that more than half of gun owners are not storing their firearms safely. You point to ideas to promote safe storage as an opportune way to prevent injuries. Can you talk about that?

Senator William Frist 19:23

Yes. Safe storage is sort of obvious, but it's an important issue because it's one that has huge support among the American people. If you listed 15 things that can be done, it rises pretty close to the top. You can look at it as low hanging fruit, which minimizes the importance of it, but it's worth spending a little bit of time on. We have more guns than ever, and that's probably not going to change. People say let's just diminish the number of guns. That's probably not going to happen for all sorts of reasons, which we can come to later. But how we store them is a huge issue because people can steal the guns, they can take the guns, accidental shootings, homicides. Easy accessibility of the guns clearly has been shown to have a role, whether it's accidental shootings or suicides, arguments that turn deadly due to the presence of a gun, or something else. So accessibility is important. A recent study conducted by Rand analyzed state gun laws and their relationship with gun fatalities over a period of over 35 years, up until 2016, I think. And what they found is that implementation of stringent laws pertaining to child access -- things like mandating safe storage requirements for guns and for ammunition -- was associated with a 6% reduction of gun-related fatalities. I'll add, as I implied earlier, that there is huge public support for this approach as well. If you look at my home state of Tennessee, a red state, Vanderbilt University did a really fantastic statewide poll, released in early May. And it showed broad support, with 67% of

registered voters strongly or somewhat supporting laws that would require gun owners to securely store their firearms or face penalties. So an area that we need to move on from a policy standpoint is safe storage, having the firearm stored either in a safe or locked away place, or having a trigger lock, but kept where it's not easily accessible.

Heather Howard 21:56

And do you see, Senator, safety training as being similarly low-hanging fruit that garners broad support?

Senator William Frist 22:05

It's a different issue. I think the issues do need to be kept separate. But yes, as a gun owner and a hunter here in Tennessee, and having grown up around firearms, to get a Tennessee hunting license, I had to take a course on gun safety. And for my pistol, I had a separate gun safety course than for my shotgun, and so forth. Yet today, there are no required gun safety courses around the country. Now, I'm not sure how that actually polls, but it does make sense. And as you know, from motor vehicles and everything else in life that we have as utility aspects of our life, safety rises to the top. And therefore knowing what is right and wrong in gun safety make sense as well.

Heather Howard 22:57

Dr. Sathya, you have an initiative to introduce conversations about firearm safety into conversations with families. Can you talk about how that dovetails with the approaches Senator Frist is talking about?

Dr. Chethan Sathya 23:11

Yeah, it's exactly related. This is part of the screening effort, but it is really with the intention to promote firearm safety, or having weapons stored safely, which means locked, unloaded and separate from ammunition. As mentioned, there is evidence demonstrating that when you offer that counseling and that education paired up with a safety device, potentially a gun lock or community resource around how to learn about firearm safety, that you can reduce the risk of suicide/homicide in the household. Millions of Americans right now, particularly peri-pandemic, are first-time gun owners. And they have typically now bought weapons for self-defense, right? So a lot of them are not learned gun owners. They're very appreciative of this information, and frankly, pretty surprised at the risks that unsecured firearms can pose to their children and potentially elderly and other loved ones in the household. So that is very much an integral part of what we do. We have a big public awareness campaign around this and also about parent-to-parent asking about the safe storage of firearms when sending kids over to someone else's house. Parents already ask about child safety gates and drowning avoidance. We don't really view this as any different.

Senator William Frist 24:25

I meant to imply earlier that today's a different day. It used to be that people owned guns because they were hunters or sportsmen. I grew up with almost a cultural sense of hunting as a part of growing up. Today, the reason that people own guns is fear for their own safety. If you ask people why they have guns today, 65% will say it is primarily to protect myself, in my community. There are extreme people who think there's going to be civil war and that sort of thing, but your typical gun owners today own guns to protect themselves.

Heather Howard 25:11

And Dr. Sathya, these are not abstract ideas. It sounds like at Northwell Health, you're giving out these locks. And just in the last year, Michigan has enacted some gun safety storage requirements. So this is happening both at the health system level and in public policy, right?

Dr. Chethan Sathya 25:31

Yep. Absolutely. And, as was already mentioned, there's a lot of evidence to back up many of these policies. I think there's a common misconception as well, that policy is political. But really, policy is just part of public health. We don't view seatbelts as political right now, right? We don't view age limits for smoking as political. They were once viewed as political. It was good data, and a public health approach, that changed that narrative. And that's what we're looking to do when it comes to firearm injury.

Heather Howard 26:00

I'm glad you raised the issue of seatbelts. Because I think a couple of years ago, those of us in public health noted that the lines had crossed, that there were more deaths related to firearms than motor vehicles. And that was because there was an increase in gun violence, but also because public health had done a really good job of designing interventions to reduce motor vehicle-related deaths. That meant, for example, making cars safer, making drivers safer, and making roads safer. So how do epidemiologists think about those lessons? How do we apply them?

Heather Howard 26:42

Senator Frist, you've written about ways to make firearms themselves safer, just like we've done with cars, with seat belts, and airbags. You've written about things like making triggers heavier, so that maybe there are fewer accidents by kids. Can you discuss some of those smaller level interventions that can have an impact and that have analogies in other injury prevention areas?

Senator William Frist 27:08

I think your analogy to motor vehicles and motor vehicle safety, where we've seen this dramatic cultural change over a 25 or 30 year period, is one that we need to study further. People who question the public health approach need to look at that and start with that. I think you've introduced it well. When I was growing up, we didn't have seatbelts. They stuck them in cars, but we just didn't use seat belts. Airbags are another great example. We never had airbags; the whole idea of a blimp blowing up in front of you while you're driving a car was unacceptable. So was the notion that big government would come in and tell me how to drive a car. Speed limits were much higher. But it took a lot of science, it took a lot of data, it took a lot of research, it took advocacy, it took alignment of incentives, and then everything began to fall into place. It became more about population health than an individual's right to drive a car -- however you wanted to drive it, no matter what it is.

Senator William Frist 28:13

Our Constitution includes the right to bear arms, to be able to own a gun. And indeed, people are doing just that. But with those rights come responsibilities. And those responsibilities are why we as a society must come around the table together and have podcasts like this. We need to sit around the dinner table and have civil discussions. In legislatures, we need to be able to talk about these issues with

current data. Indeed technology, which is what you'd asked about, is one way to tackle this issue, but there's no point solution to this. Survey after survey, people will tell you that the reason they own guns is to protect themselves in this increasingly violent world that is politically charged, that is hyped up in many ways by social media. But there are also biometrics today. With one fingerprint and one touch, you can have access to that weapon. And that's just one of many sorts of technologies that are out there today, that can be applied. And then you have to ask, "Well, if that's the case, and you have the technology, why don't we apply them?" And that's where some policies may have to come in. There may have to be some regulation with that. And there may have to be some incentive or financial incentive to do that. It may well be that gun manufacturers should not have a privileged liability case for them versus other industries, and that they do need to take some sort of liability, financial responsibility. Again, no single solution, but all of these need to be discussed in a civil way, whether you're a Democrat or Republican, a conservative or liberal, because, I agree, it is not a political issue.

Dr. Chethan Sathya 30:05

Yeah, I have a question for Senator Frist. That last point is very pointed. And I know you mentioned this in your Forbes article. Can you tell us a little bit about why we can't repeal PLCAA [Protection of Lawful Commerce in Arms Act]? And why the gun industry continues to have this protected?

Senator William Frist 30:20

Yes. And, basically, the real question is why? Why does the industry itself have a privileged position in liability? That is a product of lobbying. The lobbying has been affected by certain entities out there, mainly from the industry, and certain associations that are out there. And the lobby has been very well-funded over the years. The disadvantage for the fire injury protection community is the lack of good data. And so then people say, "What are you talking about? The evidence is out there." Well, it's out there, but it's really only very recent data. And that is because of another policy from about 20 years ago, that was political, that was put out by these advocacy groups that had a vested interest, that basically said that they were going to prevent federal dollars from being used to support firearm injury or gun safety. Federal dollars cannot be used for those purposes. And as we all know, our National Institutes of Health, our CDC, our science foundations, all federally funded, are where much of that information can be gathered most efficiently and effectively. Now, that policy luckily was reversed two years ago, but for about 18 years, there was essentially no federally funded firearm injury protection research going on. Now that door is opening up. And one of the things that we can all do as citizens today is to encourage further funding, further investment in this type of research. And I'm not talking about \$25 million, or \$30 million, which may have been in total what was spent last year, but I'm talking about hundreds of millions of dollars in order to catch up to address this number one public health issue affecting our kids and people 19 and under today.

Heather Howard 32:25

That's right. I mean, think about how much research went into those interventions that have reduced the number of deaths on highways. Hundreds of millions of dollars have gone into research. And we know that researchers follow the money. If there's not money there, it's hard. So for our listeners, Senator Frist is mentioning what was called the Dickey Amendment, which said federal funding couldn't go to research [on firearm injury or gun safety]. I met you, Dr. Sathya, because some of the states in the Northeast got together in the absence of federal funding and created a regional Gun Violence

Research Consortium. You're involved from New York, and I'm involved from New Jersey. It's great that federal funding has started to flow, but it's not nearly what it should be. Can you speak to the paucity of research, Dr. Sathya, now that federal funding is ramping up? Are you seeing a change in what's happening in terms of other researchers out there and support for your efforts?

Dr. Chethan Sathya 33:23

Oh, yeah, it's been huge. I mean, I wouldn't probably be here if it wasn't for that NIH funding. We were fortunate to be one of the first eight centers in that first round of 2020 funding to get an NIH grant specifically for firearm injury. And that really skyrocketed, I think, a lot of what our health system wants to do. One thing I don't mention is that our health system is very focused on getting other hospitals like Vanderbilt and so on to the table, because we find that health care leadership actually is quite silent on this from a corporate standpoint, and that they can do much more. And none of that would have started without this further legitimization of the academic world through this funding. So it's really translated into a lot. The entire screening protocol that I'm talking about is NIH funded as part of our implementation science study to understand how we can normalize this conversation in health care settings, and whether or not it leads to better outcomes. So it's made a huge difference.

Dr. Chethan Sathya 34:17

Gun violence has received less than 1% of the funding that any other leading cause of death with similar mortality has ever received. And as a result has something like 2 to 3% of the number of publications that it should have for the burden of disease that it has. That has ramped up exponentially in the last 3 to 4 years as a result of this funding. Twenty-five million is a drop in the bucket, as I already mentioned. There's a lot more to do. But we are also seeing philanthropic sources step up now, and I think there's definitely momentum. I'm seeing a ton of new researchers come into this space. I will point out that people often ask about the biggest areas of research need. When it comes to gun violence, it's akin to a new disease. We have such little data that we are starting from the basics in many of these areas. But there are three big spots that really need our focus. The first is data infrastructure. As I mentioned, "Public Health 101," we can't even surveil non-fatal firearm injuries in this country very well. We have totally siloed data between health care, community, and law enforcement; none of them speak together when it comes to illegal guns, so we can't even, as researchers, understand illegal gun trafficking. There are so many disconnects that we only get snapshots, and none of them are comprehensive or timely. Number two is community research. We don't have a good sense of how to work with community and how to research in partnership with community organizations. And number three is policy. There has been a reluctance among academics to engage in policy research. That needs to change. Again, policy is part of public health.

Heather Howard 35:47

This has been so fascinating. But before we wrap, we talked about the importance of data and research informing policy, and we talked about policy interventions for safe storage, for safety training, for product safety. The one dimension that we haven't talked about yet is our policies about who can access firearms. And there are a couple of areas there. Maybe you can each pick one of these to talk about. There are background checks on who can purchase firearms, there are extreme protection orders (which are what are often called "red flag" laws), and there's now a growing movement to raise the age of sale for the purchase of firearms. About a third of states now set the age for the purchase of

guns at 21. Maybe you can each take one of those and talk about what you've seen in the research, and what you find is a promising policy intervention. Senator, do you want to go first?

Senator William Frist 36:38

I'll jump in on background checks. I'll just give a high level approach to that. Research tells us about the effectiveness of background checks. It tells us that, yes, they work. In states without universal background checks, the research indicates that those legally prohibited from purchasing weapons go around the system and get the firearms through private sales. If I had to just take a guess, and don't hold me to it, but just to help our listeners, probably 1 out of 2 guns out there today did not go through a background check. If there are 350 million guns out there, half of them probably did not have a background check. There all sorts of reasons. Background checks do not happen through the private sales that you see when you're out driving along the highway. If you go to a retail store, yes, there's a background check. Those background checks need to be strengthened. The data that they draw upon in a lot of states is not good data, so we need to look at that. But when we say closing the loophole in background checks, it means predominantly those 50% of sales that go through the private sector. Universal background checks are really quick today; nine out of 10 background checks are completed within a matter of minutes. If you had to go through a private sale, typically you would do it. If you had required background checks, you'd have to go to a federally licensed firearm dealer. And there's a dealer within 10 miles of everybody in the United States today. So it is a so-called loophole. But we can fix the background checks that are out there today. But that's a good example of one that I believe, again, we're going to have to move towards because there are clearly people today, and not just those with mental illness, but people who are buying a firearm for the wrong reason and have something in their record (from a prior assault or some sort of breaking of the law) that should prevent them from purchasing a firearm within minutes.

Heather Howard 38:48

And Dr. Sathya, in the category of regulating who's able to purchase a firearm, where would you look for policy options?

Dr. Chethan Sathya 38:57

Yeah, I think as mentioned, extreme risk protection orders are definitely high yield and require more implementation with careful evaluation. And I know there's a little bit of a slippery slope there. But the studies for "red flag" laws, such as the study that everyone quotes from Connecticut, show that if you implement 10 to 11 of these "red flag" law -- which allow family members or law enforcement or, in some cases, other petitioners, to temporarily restrict weapons from a loved one or family member who might be at risk of harm to self or others -- you can save one life. If you think about the tests that we do in medicine, colonoscopies and so on, then you know that the number needed to save a life there is in the hundreds. And so this is a potentially very powerful tool. You're seeing a lot of it in the media, as mentioned. And the bipartisan Safer Communities Act provided tremendous funding for this as well. So I think we're all on the lookout to evaluate how these laws are implemented. That's another struggle in itself. I know here in New York, we've seen thousands of these laws being implemented for the first time. I do think there's evidence to back them up. But we need to implement them now.

Heather Howard 40:07

And then evaluate them so we can learn from them, right? You mentioned Connecticut was in the forefront with some of these. But as we learn from them, maybe we can refine them?

Senator William Frist 40:17

We're getting ready to address them here in Tennessee. And, again, for perspective, 21 states today have enacted some sort of "red flag" law or extreme risk protection order to keep guns out of the hands of individuals who have a threat to themselves or others. And the data that we have is that they do reduce suicide deaths, clearly. Let me just add to that the Vanderbilt study, which was a great study statewide here from just a couple of months ago. Basically it said that 75% of all registered voters in Tennessee strongly support or support these "red flag" laws. So it's an issue that is broadly supported, keeping guns away from people who might hurt themselves. But it can get politicized early on. It's a slippery slope. Do you want big government coming in and taking away your guns? When it's framed that way, it gets reverted. But these big issues that get 75% or 80% support, like the safe storage laws, are the policy issues which are important. Policy is one of the three areas that Dr. Sathya mentioned that we can and should be taking action on. And it'll begin with a great conversation around the dinner table among parties that may not agree when they came in the room, but would agree if we approach it and talk about it in the right way.

Heather Howard 41:42

Well, even in the face of the horrible statistics, I think this conversation gives me some hope. And I want to end on a note of hope with your reframing of this issue to focus on injury prevention, and in identifying policy interventions that are rooted in the data. Both are very promising. I'll give you each a chance, maybe Dr. Sathya and then Senator Frist, to provide a final comment on what gives you hope even in the face of the worsening statistics.

Dr. Chethan Sathya 42:16

What gives me hope is conversations like this... hearing from amazing leaders like Senator Frist, and just honestly talking to survivors, and Americans. One of the biggest things that I think we've seen come out of the screening questions that we have is that we meet people from all spectrums of the political aisle -- right, left, middle. And at the end of the day, they all want to make our communities better. The majority of them want to do the right thing. And I think when you have those conversations, that's what inspires me. If those conversations were just always going to be black and white, I would not be inspired. So I would say that's what really gives me hope for the future. I think we can make a change. It's just going to take time.

Senator William Frist 42:58

I think there's sort of three things. I think that we've got starting points for civil, informed conversations, at a time when people will gather around the headlines, which reflect the reality today that guns are the number one cause of death for people 19 and younger. I've seen people come to the table. The fact that my op-ed went viral around a country that is heavily divided on the issue at the door gives me hope. Number two is the recent funding, as Dr. Sathya said, and to have centers like his on the forefront. Every health system, every doctor, every hospital that's listening to this should go back tomorrow and ask what they we doing in their facilities. Because right now 90% of hospitals are not doing anything and not investing in these common sense things that Dr. Sathya is really leading the

country on. This improved data gives me hope. For the public health model to work, for the four principles to work, we can define the problem as number one. But the next three principles depend on good data, collection of data on what does work and what does not work. And it has to be backed up by science and scientifically controlled studies over time. They [these studies] were not funded for 20 years. They are being funded now, for the first time. Third, I think that there is this willingness to put things aside. Today we're politically more divided than I've seen in my 30 or 40 years in Washington D.C. But now we are beginning to understand that it is not just an individual issue, but a community issue. Dr. Sathya, we didn't talk a lot about it, but addressing community violence is a prominent portion of what needs to be done, what can be done. And that's where the growth in these statistics has been. That whole door was just not realized five years ago, but it is being realized today. There's an increasing realization that everybody belongs to a community. And that violence is increasingly affecting communities, broadly. This is one thing that we know that we can address and can actually change the course of history if we do so.

Heather Howard 45:19

Well, that is a great note on which to end, and I really do hope this will spark further conversations and continued discussion. So thank you both.

Heather Howard 45:26

Thank you for listening to the Princeton Pulse Podcast, a production of Princeton University's Center for Health and Wellbeing. The show was hosted by me, Professor Heather Howard, produced by Aimee Bronfeld. and edited by Alex Brownstein, with additional support for Madison Linton, Dan Quiyu, and Kasey West. We invite you to subscribe to the Princeton Pulse Podcast on Apple Podcasts, Spotify, or wherever you enjoy your podcasts.