

"We Can Make Ownership Safer" – A Conversation with ECU Trauma Surgeon Eric Toshlog About Preventing Firearm Injury and Death

Interview conducted by Stephen W. Marshall

ECU trauma surgeon Dr. Eric A. Toshlog speaks with injury prevention epidemiologist Stephen W. Marshall about the role of clinicians and policymakers in deterring firearm injury and death in North Carolina and nationwide.

Introduction



Eric A. Toshlog, MD, professor and chief of trauma and acute care surgery at ECU, knew from a very young age that he wanted to be a physician. He identified surgery as an avenue through which he could directly improve the health of members of his community.

"Trauma surgery is a sub-discipline where we are in a high-stress, high-acuity environment with tremendous impact on patient well-being and outcomes," Toshlog told the *North Carolina Medical Journal*. "I thrive in that environment, and I have a real sense of commitment to the citizens of Eastern North Carolina."

In his work as a trauma surgeon, Toshlog treats a lot of gunshot wounds. From January to September 2022, there were 2590 firearm-related emergency department (ED) visits in North Carolina [1], with the northeastern part of the state experiencing the highest firearm-related ED visits over the previous 12 months [2]. Seeing what a firearm can do to the body has made Toshlog an advocate for consensus-driven, evidence-based policy to prevent firearm injuries and deaths in North Carolina and beyond.

"I'm a supporter of the Second Amendment, and I'm a gun owner, and I could not be more frustrated with the state of legislation and gun safety in this country," he said.

In an interview with co-guest editor Stephen W. Marshall, director of UNC's Injury Prevention Research Center, Toshlog argues for a shift in perspective among clinicians, policymakers, and firearm owners to view the gun injury and death crisis in a similar way to the opioid crisis.

"In 2016, when we started seeing in excess of 50,000 opioid overdoses in the United States, the speed and bipartisan nature of the response was impressive," Toshlog said. "When we see 48,000 people shot to death in the United States [3], we need to do something immediately."

Stephen W. Marshall: Some don't expect a clinician to speak about firearm policy, but you have not shied away from doing that publicly. Why?

Eric A. Toshlog: A few years ago on Twitter, the NRA told physicians to stay in their lane, and I tweeted a response that said, "I'm a trauma surgeon and a gun owner, and I own this lane." It was amazing how many responses I received immediately after the tweet. It struck a nerve. We trauma surgeons are exactly the people to be engaging in discussions of gun safety, gun ownership, responsibility, and the risks and benefits of owning a gun with our patients.

I want every gun owner to know that I respect their freedom; we share 90% of our perspectives on guns and gun ownership, so let's agree that we can make ownership safer. We also need to retain the right of physicians to talk to their patients about this issue if they so choose. One of the most distressing of all of the concerning legislation that has emerged in the last decade or two in the United States was a House bill in Florida that would have penalized pediatricians for even inquiring of their patients and their families about gun ownership or gun storage. That's a First Amendment infringement, which is ironic to me. It's also asking us to neglect our Hippocratic oath to act to the benefit of our patients and their families.

I served on the American College of Surgeons Committee on Trauma, in addition to our state Committee on Trauma and its gun safety subcommittee. We developed a gun safety toolkit that can be printed and given out during hospitalization. What I don't understand is some of the political pushback that we received about doing something as simple as that. I have no designs on your gun in your home. Please own your gun, but I'm going to give you some information that may save one of your family members' lives. Is there a better person to hear that from than your trauma surgeon? And is there a better forum than in an acute hospitalization, particularly for a gunshot?

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Marshall: Can you talk about your personal approach to firearm ownership and gun safety?

Toschlog: I live on a farm, and the first gun I purchased was a Remington 20-gauge shotgun. The reason I purchased that shotgun was because we lose our ducks and chickens frequently to possums, and we rely on those animals to sell their eggs. There's also a personal protection element, living remotely where I do. So, it was a risk-benefit assessment: is it worth it to bring a very dangerous instrument into my home? This decision is predicated on the knowledge I have and what I have seen with my own eyes—the impact a gun can have on human tissue. Once my wife and I decided that the answer was “yes,” I had to know every detail about cleaning, storage, loading, discharging, and how to operate this weapon. The next thing was: how do we make 100% certain that our children don't get hurt with this gun? I decided a trigger lock was a very safe option, and I store the guns well out of the children's reach—they don't even know where the guns are, or where the keys are to the gun locks. It is remarkable how many households that have both a gun and a child have the gun in a condition that we consider the worst storage condition: loaded and unlocked. There's a very significant percentage of children who live in a household like that [4].

Marshall: From your perspective as a surgeon, what do you see as the necessary policy steps for ensuring people don't end up on your table with gunshot wounds?

Toschlog: If I could legislate a couple of things immediately, the first one would be states and the federal government working with private entities to dedicate as much money as possible to research. What we've always asked as the Committee on Trauma within the American College of Surgeons is for funding proportional to the disease burden. I would love to see some significant portion of my tax dollars going toward a multifaceted approach to researching gun safety, violence and injury prevention strategies, and suicide prevention strategies. As we start to develop safeguard strategies, it's imperative that we have a significant increase in funding and dedication to research. As a nation, we don't have enough research on gun safety. Dr. Arthur Kellerman's ground-breaking studies on gun ownership and homicide risk didn't result in legislation requiring education of gun owners about injury risk; rather they prompted the Dickey Amendment [a 1996 appropriations amendment that effectively zeroed federal funding for gun violence research for over two decades; former Rep. Jay Dickey (R-AK) subsequently expressed deep regret concerning the effect of his amendment] [5, 6].

Second, and I think this is low-hanging fruit, we should work toward a robust federal data repository or platform through which existing state databases can communicate and collaborate on any research that has any relationship to the Second Amendment.

Those two are very straightforward proposals, but my third one is where it gets tricky: I think we're doing a very poor job of background checks. I don't think they are universally applied, and I don't think we are necessarily asking the right questions. If you've never committed a felony, that doesn't make you worthy

of purchasing a weapon. I would favor a comprehensive bipartisan approach to doing a much better job of screening when someone purchases a weapon, regarding red flags like intimate partner violence and mental health. And I think that aligns with the American College of Surgeons perspective as well.

Fourth, I would also like to make sure that we go on a multiple-pronged campaign to educate gun owners about how to safely store their weapons.

Marshall: What are some examples of progress in this area, particularly in North Carolina?

Toschlog: This is why I'm so excited about my relationship with Scott [Proescholdbell, state injury epidemiologist], because I think we are going to do some great work to build a gun research platform in our state. One of the things we have discussed is potentially getting a legislative consensus effort someday, but at first we are keeping our focus on safety education.

We just started the second county-based gun safety coalition in the state here in Pitt County. More than half of the gun deaths among US adults are suicides using a gun owned by the deceased [7, 8]: in Bertie County, we are collaborating with the sheriff's office and have purchased a number of gun locks that will be distributed for free to gun owners at strategic times, such as times of relationship stress or financial duress [9]. We are also going to start distributing them here at the hospital.

Let's make it educationally easy for a gun owner to know how to safely store their weapon, as well as the risks and implications of unsafe gun storage. We, as physicians and trauma surgeons, need to be the tip of the spear in these efforts, particularly because a gunshot hospitalization is an excellent platform to discuss gun safety. NCMJ

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