A shot rings out.
A young man is hit.

He is rushed to the hospital, where doctors save his life. Eventually, the gunshot wound heals. But he doesn’t.

He is scared, anxious and angry. He’s just a teenager, but now he carries a gun of his own. He can no longer concentrate in school, so he drops out.

Life Outside of Violence
The shooting affects others, too. The boy’s family feels responsible. Too often, they are away from home, working to make ends meet. Friends and neighbors who witnessed the shooting fear for their own lives and their children’s.

And this child’s experience is just one of many. Stories like his play out over and over in communities across the country. The residents in those communities live with — and sometimes die because of — high rates of gun violence. It’s a cycle that is fueled by poverty and that disproportionately affects African Americans.

This is especially true in Missouri, which has the highest black homicide victimization rate in the nation. According to a report by the Violence Policy Center, in 2015 the U.S. black homicide victimization rate was 18.68 per 100,000 people. At 46.24 per 100,000, Missouri’s rate was more than double that.

Many of those deaths occurred in St. Louis. According to a report from the U.S. Department of Justice, 188 people in the city of St. Louis died by homicide in 2015. Almost all of those deaths involved guns, and more than three-fourths of the gun violence victims in St. Louis were black. The report also noted that the St. Louis homicide rate was far higher than the national rate and that the percentage of homicides committed with guns in St. Louis was substantially higher than the percentage nationwide: 86 versus 69 percent.

The evidence of this kind of violence often appears in hospital emergency rooms across the U.S. In 2002, Barnes-Jewish Hospital had 1,250 trauma admissions; in 2017, there were more than 4,000. Victims of violence consistently make up 20 percent of these admissions.

Nationwide, the trauma surgeons who treat gunshot victims have an intimate view of the horrors of gun violence. It’s why they spoke out forcefully and in large numbers when the National Rifle Association told doctors to ‘stay in your lane’ after the American College of Physicians (ACP) published guidelines for reducing deaths and injuries from firearms.

Along with the ACP, other physician groups, public health organizations and hospitals are among those taking action to prevent gun violence. The efforts vary, but they have one thing in common: They treat gun violence as an epidemic. As an editorial published in the December 2017 issue of JAMA Pediatrics puts it: “The key to reducing firearm deaths in the United States is to understand and reduce exposure to the cause, just like in any epidemic, and in this case that is guns.”

Addressing the epidemic

Through a program launched in 2018, the Institute for Public Health at Washington University is tackling the gun violence epidemic with a specific focus: to work with the victims of that violence. Through its Life Outside of Violence (LOV) program, the institute is aiming to interrupt the cycle of violence and provide those already harmed with the treatment and support they need.

LOV is a citywide effort, and it is the first violence-prevention program in the nation to incorporate three research universities — Washington University in St. Louis, Saint Louis University and the University of Missouri-St. Louis — and four hospitals — Barnes-Jewish Hospital, SSM Saint Louis University Hospital, St. Louis Children’s Hospital and SSM Cardinal Glennon Children’s Hospital.

“Violence in St. Louis is pervasive,” says Kateri Chapman-Kramer, MSW, LCSW, a social worker and project coordinator for LOV. “In some communities, people use violence for survival. And they often expect to die a violent death and not live past a young age. It truly is a public health issue.”

According to the Institute for Disease Control and Prevention, homicides, many by guns, are the third-leading cause of death among 15- to 34-year-olds in the United States, topped only by unintentional injury (such as car wrecks) and suicide. And the Giffords Law Center reports that for African Americans aged 1 to 44, firearm homicide is the leading cause of death.

For these young victims of violence, the psychological effects may be much worse than the physical ones. The teenage boy who felt scared and anxious after surviving a shooting was likely suffering from post-traumatic stress disorder, or PTSD.

In research published in the Journal of Trauma Nursing in 2018, victims of gunshot violence reported experiencing behavior changes that fall along “a continuum of fearfulness.” Some are reluctant to even go outside. This fear, then, can lead to a lack of physical activity, which is tied to a host of chronic diseases that often go untreated.

Other victims, though — or their friends and relatives — may seek retaliation. Stopping the cycle means, in part, helping victims avoid engaging in violence in the future. According to the American Psychological Association, “The most consistent and powerful predictor of future violence is a history of violent behavior.”

With this in mind, LOV’s goals are to decrease incidences of retaliation, criminal involvement, reprisal and death.
WE NEED TO ADDRESS THE ROOT CAUSE OF GUN VIOLENCE, NOT JUST PUT PATCHES ON BULLET HOLES. A TRIP TO THE E.R. FOR A GUNSHOT WOUND IS A TEACHABLE MOMENT.

— KRISTEN MUELLER, MD

Funded by a three-year, $1.6 million grant from the Missouri Foundation for Health, the free program is designed to reach and treat St. Louis City and County residents aged 8 to 24 who are injured by gunshot, stabbing or assault.

When a victim in the targeted age range is admitted to a local trauma center, an LOV case manager meets with him or her within 24 hours of admission — in part to begin to understand the circumstances that culminated in the violent act.

Kristen Mueller, MD, a Washington University emergency medicine specialist at Barnes-Jewish Hospital, notes that the young people LOV reaches are often in dire situations, caught in the cycle of violence that moves from victimhood to criminal conduct to retaliation and back again. Many have undiagnosed PTSD from previous violence. And they may be dealing with trauma, unemployment, poverty and the resulting unmet basic needs, such as stable housing and affordable transportation.

“We need to address the root cause of gun violence, not just put patches on bullet holes,” Mueller says. “A trip to the ER for a gunshot wound is a teachable moment.”

Help the victim, help the community

In places where gun violence is prevalent, entire communities suffer. Children exposed to violence in their community, for example, are at increased risk for eventually being involved in gun violence themselves.

And according to a series of research publications released by the Urban Institute in 2017, gun violence has a substantial impact on community-level economic health. Sudden increases in gun violence, for example, are associated with significant reductions in the growth of new retail and service businesses, and a slowing in home value appreciation.

Increased rates of gun violence can also be associated with lower credit scores and homeownership rates.

It seems to go both ways: Gun violence can harm local economies, and poor socioeconomic conditions can lead to violence. The teenage boy who was shot and now suffers psychologically probably lives in a neighborhood where economic and educational opportunities are few and the incarceration rate is high. His family might not earn enough to pay the bills, and he may not always have enough food when he’s hungry or medicine when he’s sick.

Addressing the systemic issues that lead to poverty and socioeconomic inequalities is key to ending the gun violence epidemic. But so is reaching victims on an individual level.

“Trauma affects people physically, emotionally, financially,” says LOV case manager Abigail Batha, MSW, LMSW. “My goal is to figure out what each person needs and then connect them to the proper resources.”

Batha works to eliminate some of the struggles that may put a person in the path of violence. That might mean making a connection with a community mental health agency that could provide a long-term case worker and psychiatrist. It might mean helping the program participant secure Social Security and Medicaid services. Or it could simply entail providing cab fare to get to and from LOV appointments.

But, Batha says, perhaps the most important thing she does is listen, offering support and encouragement while forging a relationship that is built on trust. When someone agrees to participate in the LOV program, Batha creates a comprehensive treatment plan, identifying the services and resources that will be most helpful. She will meet regularly with the participant for six months to a year, all the while solidifying a plan to stay safe and reconnect with the community in a positive way.

Although each LOV case worker is assigned to a specific hospital, they do not operate in a vacuum. They meet regularly with one another and as a group with Chapman-Kramer, and they work with physicians and other medical professionals at their assigned medical centers.

Barry Hong, PhD, a Washington University clinical psychologist at Barnes-Jewish Hospital, helped build the LOV program and now supports case managers in group meetings or one-on-one conversations. In collaboration, Hong and the case workers identify the effects of each participant’s trauma, teasing out what problems are related to the violent incident, what issues predate that act and what might be related to pre-existing medical problems.

The care team can then determine the most appropriate resources for each participant.

Their efforts, he says, will begin to break the cycle of violence, one person at a time.

Looking ahead

Figuring out the best ways to prevent gun violence is neither straightforward nor easy. But across the nation, researchers are trying, initiating studies on both the causes and effects of various types of gun violence.

Complicating these efforts, though, is the fact that an amendment passed by Congress in 1996 to prohibit federal funds from being used “to advocate or promote gun control” had a chilling effect on gun-violence research.

A compromise reached in 2018, though, clarifies that the amendment does not prohibit federal funding for studies on the causes of gun violence, rather, it only restricts researchers from promoting gun control. But figuring out where that distinction lies can be tricky.

In addition, although researchers are using other funding sources to study gun violence, whether more federal funding will be devoted to the issue remains to be seen.

A report released by the RAND Corporation last year after a two-year study of gun policy in the U.S. stressed the need for more research: “America spends more research money studying hernias and peptic ulcers than it does studying gun violence. As a result, we don’t know whether assault–weapon bans reduce homicides, or whether better background checks might prevent accidental shootings. We don’t even know how many guns are circulating in the United States right now.”

In the meantime, more than 38,000 people are killed by guns in the U.S. every year.

In St. Louis, the LOV program is working to make a dent. To date, LOV has reached more than 270 prospective participants; more than 50 have enrolled.

And it is tracking outcomes to learn what works and what doesn’t, and making changes as needed. When a participant has been in the LOV program for a year, the care team will measure success by looking for changes in areas known as protective factors: aspects of life that can act as buffers against a return to violent activity. For example, if a participant has worked to develop a strong social network and has returned to or found a job, he or she is more likely to break the cycle of violence and avoid new trauma.

LOV’s goal is for no more than 10 percent of its participants to return to a trauma center for treatment of a violence-caused injury within one year of the original trauma.

“Participants are seeing successes,” including securing employment and starting counseling, says Chapman-Kramer. “Many of them have gained an awareness of what led to their injuries and the psychological impact that has had on them, and some are beginning to shift the direction of their lives.”

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To learn more about Life Outside of Violence:
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