

Preventing harm from injuries, violence a public health priority

Nationwide movement for safety needed

States see many successes in reducing motor vehicle deaths

IT IS A TALE AS OLD AS CARS THEMSELVES: For as long as people have been driving, there have been motor vehicle injuries.

“The things that have killed us for decades are still: alcohol, speed, distractions and seat belts — or lack thereof,” said Deborah Hersman, MS, president and CEO of the National Safety Council. “Motor vehicle crashes in the U.S. are accepted as the cost of mobility by society, but the cultural Novocain must wear off, because more than 100 people each day are dying in crashes we know how to prevent.”

The Centers for Disease Control and Prevention has prioritized traffic safety for drivers, passengers and pedestrians, and offers data and tools, including seven Vital Signs reports on the topic since 2011, on its motor vehicle safety webpage. There, the latest statistics, as well as case studies from different states and communities, are available for public health leaders to use and apply to their own communities.

Motor vehicle safety is more important than ever before, as traffic deaths are ticking up: Hersman said

the National Safety Council estimates that up to 40,000 people died in car crashes last year — a 6 percent jump from 2015 and a 14 percent increase since 2014, the steepest two-year climb in more than 50 years.

U.S. traffic fatality statistics were already high before the recent increase: A 2016

CDC Vital Signs report noted that in 2013, the American crash death rate was more than twice the average of other high-income countries, and front-seat seat belt use was lower than in other comparison countries. A third of U.S. crashes involved drunken driving, and nearly that many involved speeding, according to the report. That translates to \$44 billion in medical

“The things that have been killing us for decades are still: alcohol, speed, distractions and seat belts — or a lack thereof.”

— Deborah Hersman

expenses and work loss costs each year.

But there is some cause for hope. Winnable Battles, released March 30 by CDC, outlines trends and progress made on several key public health fronts, including motor vehicle injuries. The report notes that even with the recent increases, motor vehicle deaths in the U.S. have decreased by 15 percent since the mid 2000s. The U.S. is getting closer to CDC targets as well, with 2015 showing a fatality rate of 11 per 100,000, just a little higher than the CDC's goal of 9.5 per 100,000.

The report notes that a few key strategies can have major effects on improving safety on the road. It referenced multiple CDC reports, including the “State-Specific Fact Sheets on

Cost of Motor Vehicle Crash Deaths, Restraint Use and Drunk Driving;” Prevention Status Reports, which highlight policies and practices touching on public health issues, including motor vehicle safety; and Parents are the Key, a campaign that offers parents, pediatricians and communities information and tools to promote safe teen driving.

Utilizing the tools available from CDC can help communities enact small policy shifts with big impacts. For example, Hersman highlighted the Mark Wandall Traffic Safety Program Act, a 2010 Florida law authorizing red light cameras. Once the law was passed and cameras were installed, she said, red light-running fatalities in the state decreased by 24 percent between 2011 and 2015.

High-visibility campaigns also make a lasting impact: Hersman noted that the

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Photo by Diego_cervo, courtesy iStockphoto

After using data from the National Violent Death Reporting System, communities in Oregon and Virginia created targeted suicide prevention programs for seniors.

Data help communities build programs CDC reporting system helps prevent violent deaths

HUMANS CANNOT AVOID DEATH altogether, but data experts at the Centers for Disease Control and Prevention and across the country are helping communities find ways to prevent some lives from ending too soon.

CDC's National Violent Death Reporting System is a surveillance tool that, since 2002, has compiled information on lives ended by violence across the U.S. It collects known data from 40 U.S. states, the District of Columbia and Puerto Rico on every homicide, suicide and death where a person was killed by law enforcement in the line of duty. The system also collects data on unintentional firearm injury deaths and deaths where the intent was unknown.

Data in the system come from death certificates, coroner or medical examiner reports, law enforcement reports and toxicology reports. From those sources, system users can find a host of information, including circumstances related to suicide, such as major

life events or stresses and depression; the relationship between a perpetrator and a victim; other crimes, such as robbery, committed along with homicide; and if deaths were part of multiple homicides, or homicide followed by suicide.

Such information on violent deaths may appear grim, but its collection is a cause for hope: It can help communities create and implement prevention programs

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Tools for preventing injury and violence

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Photo by Antonio_Diaz, courtesy iStockphoto

Protective child safety seats, and their proper use, can save lives in the event of a traffic crash. Communities and states are taking steps to improve traffic safety, but risks still remain.

Published by the



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Violence can leave lasting emotional scars. A series of technical packages from CDC can help prevent violence from occurring.

Technical packages from CDC share best practices for violence prevention

VIOLENCE has an effect on communities, reducing productivity, disrupting social services and even decreasing property values, according to the Centers for Disease Control and Prevention. But violence can also cause long-term suffering for its survivors, leaving both physical and emotional damage.

To help public health workers and communities create effective interventions, CDC has created five technical packages for violence prevention. Aimed at preventing child abuse, intimate partner violence, suicide, sexual violence and youth violence, the technical packages share proven strategies and approaches and the evidence on which they are based.

Released in 2016 and 2017, the technical packages were created by CDC scientists who reviewed the best available evidence and developed the recommendations. The packages can be used to prevent violence from occurring or to lessen harms and prevent future risk.

The five technical violence packages, which can be downloaded from CDC's website, are:

◆ "A Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors," which includes approaches for providing quality childhood education early in life, strengthening youth skills and promoting healthy family environments;

◆ "Preventing Child Abuse and Neglect: A Technical Package for Policy, Norm and Programmatic

Activities," which includes approaches for enhancing parenting skills, intervening to lessen harm and strengthening economic support for families;

◆ "Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies and Practices," which includes approaches for teaching healthy relationships, creating protective environments and engaging influential adults and peers;

◆ "Preventing Suicide: A Technical Package of Policy, Programs and Practices," which includes approaches for identifying people at risk, promoting connectedness and strengthening access to care; and

◆ "Stop SV: A Technical Package to Prevent Sexual Violence," which includes approaches for promoting protective social norms, providing opportunities for empowerment and supporting survivors.

While the packages are especially useful to public health workers — who often create and implement the programs, policies and practices that guide the health of communities — other community members can benefit from them as well. Educators, businesses, faith-based organizations and government agencies are among the recommended audiences.

"The hope is that multiple sectors will use these packages to take advantage of the best available evidence and join CDC in efforts to prevent violence," CDC said.

For more details, visit bit.ly/technicalpackages. ■

— Michele Late

Prevent Child Abuse & Neglect:

When we make relationships and environments safe, stable, and nurturing, we help all kids and families thrive.



There are four types of child abuse and neglect:

Physical Abuse

Sexual Abuse

Emotional Abuse

Neglect

About **1 in 7**



children experienced child abuse and neglect in the last year. That is millions of kids. (self-report data)

The **prevention** of child abuse and neglect is a CDC priority. **They're not inevitable.**



SAFE,



STABLE,



NURTURING

relationships and environments are essential to prevent child abuse and neglect and to assure all children reach their full potential.

CDC has developed a **technical package** to help states and communities use the best available evidence to prevent child abuse and neglect.

The technical package highlights:

5 strategies to prevent child abuse & neglect



Strengthen economic supports for families



Change social norms to support parents and positive parenting



Provide quality care and education early in life



Enhance parenting skills to promote healthy child development



Intervene to lessen harms and prevent future risk

It is important to **monitor and evaluate** your efforts while the field of violence prevention **continues to evolve.**



Be a part of the solution.

www.cdc.gov/violenceprevention

Your prevention efforts may involve **developing new partnerships** or **working across sectors**.



Including:

Education, Government, Health Care Services, Social Services, Public Health, Businesses, Justice, Housing, Non-Governmental Organizations, Foundations

ACT NOW!

Use CDC's technical package to begin or expand your prevention efforts.



A CDC infographic shares information on the agency's technical package on preventing child abuse and neglect.

Preventing traumatic brain injuries: Kids, seniors most at risk for harm

FOR MANY PEOPLE, a bump to the head may seem like a minor occurrence. But the fact is traumatic brain injuries caused by bumps, blows, jolts and other trauma to the head are a major cause of death and disability in the United States.

About 2.8 million emergency department visits, hospitalizations and deaths related to traumatic brain injuries occurred in the U.S. in 2013 alone, according to the Centers for Disease Control and Prevention. And such instances are on the increase, a March CDC study found.

“Traumatic brain injuries are a serious public health problem in the United States,” said CDC in a Brain Injury Awareness Month feature in March. “Those who survive a TBI can face effects lasting a few days to disabilities which may last the rest of their lives.”

Falls are the leading cause of traumatic brain injuries, accounting for almost half of all related emergency department visits, hospitalizations and deaths. Other common causes are being struck by or against an object, assaults and motor vehicle crashes. Seniors and young children are at highest risk for traumatic brain injuries.

Fortunately, many traumatic brain injuries can be prevented. To reduce the risk of traumatic brain injuries in children, CDC recommends installing protective guards on windows, placing safety gates near stairs and using shock-absorbing surfaces on playgrounds. Children should also use helmets while rid-

ing a bike or scooter, skating, skiing, playing contact sports and during other high-risk activities.

For seniors, steps to preventing traumatic brain injuries include maintaining a regular physical activity program, removing tripping hazards, using nonslip mats and grab bars in bathrooms, installing handrails on stairways and improving lighting.

Also recommended to reduce senior falls is CDC’s Stopping Elderly Accidents, Deaths and Injuries initiative. STEADI helps health workers screen seniors for fall risk and reduce their risk of falling. Clinicians are recommended to ask their senior patients if they have fallen in the past year, feel unsteady or worry about falling; review medicines that their senior patients are taking and stop, switch or reduce medicines that increase fall risk; and recommend daily vitamin D supplements with calcium. CDC’s website offers a STEADI toolkit for health workers.

Other resources for health care providers available from CDC for preventing traumatic brain injuries include updated guidelines for diagnosis, treatment and outcomes for people with mild traumatic brain injuries. The agency also offers forms for acute concussion evaluation in patients, an online concussion training course and fact sheets and other information to share with patients.

For more details, visit bit.ly/braininjuries. ■

— Michele Late



Photo by Dean Mitchell, courtesy iStockphoto

To help prevent traumatic brain injuries in children, CDC recommends that they wear helmets while bicycling.

CDC resources help health workers create programs that work Preventing senior falls requires community approach

IN 2014, about 27,000 older Americans died as the result of a fall. The number means falling — which makes up \$31 billion in U.S. medical costs every year — is the leading cause of fatal and nonfatal injuries among Americans 65 and older. And that number is expected to grow.

“Fall prevention is vitally important,” said Kathleen Cameron, MPH, senior director for the Center for Healthy Aging at the National Council on Aging. “We’re seeing increasing numbers of adults falling every year and that’s expected to continue due to the aging of the country. In fact, fall prevention should be an integral part of health care and social services for older adults.”

According to data published last year in the Centers for Disease Control and Prevention’s *Morbidity and Mortality Weekly Report*, 2.8 million older adults sought care in emergency rooms for fall-related injuries in 2014, with about 800,000 eventually hospitalized. Using data from the 2014 Behavioral Risk Factor Surveillance System, researchers estimated that nearly 29 percent of older adults reported falling, and about 29 million falls resulted in 7 million injuries. The risk of falling increased with age.

The good news, CDC reported, is that falls among older Americans are largely preventable. In fact, health care-based interventions — such as assessing patients for balance and better managing medication side effects that affect fall risk — could reduce falls by 24 percent.

Among the agency’s many fall prevention resources is the Stopping Elderly Accidents, Deaths and Injuries Initiative for Health Care Providers. The initiative includes the evidence-based STEADI Tool Kit, which includes basic information on falls, case studies, patient conversation starters, standardized gait and balance assessment materials and educational handouts.

A number of health settings have seen success with the STEADI model.



Photo by Oneinchpunch, courtesy iStockphoto

Falls are a serious health risk for seniors, but prevention programs can help them stay healthy and avoid injuries.

For example, CDC reported that Oregon Health and Science University successfully integrated the STEADI algorithm and workflow into its clinical screening approach, which means providers are automatically alerted when a patient would benefit from fall-related assessment. Building on Oregon’s success, a private company developed software that now makes it easier for any health system to incorporate the STEADI initiative.

Other fall-related resources at CDC include “Preventing Falls: A Guide To Implementing Effective Community-Based Fall Prevention Programs,” the second edition of which was released in 2015. The guide is designed to help community-based organizations choose and implement a fall prevention program that fits the needs of their constituents. Another resource is the “CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults,” which had its third edition published in 2015 and highlights evidence-based strategies shown to reduce falls.

Cameron, who also directs the National Council on Aging’s National Falls Prevention Resource Center, said preventing falls requires a multifactorial approach that goes beyond health care settings. For

example, while health providers can assess older patients for balance and gait, many older adults also benefit from an assessment of their homes, where modifications can help reduce tripping and falling hazards. Cameron noted that such modifications are often fairly basic, such as improving lighting or installing grab bars.

More than 40 states are also home to falls prevention coalitions, Cameron told *The Nation’s Health*, with many such coalitions headquartered in state health departments or in offices on aging. Each coalition, she said, is tailored to meet local needs and relies on partnerships to promote fall prevention.



Photo by VikramRaghuvanshi, courtesy iStockphoto

The risk of falling increases as seniors reach older ages.

Cameron said public health’s expertise in

steering diverse stakeholders toward a common goal may be its greatest asset in preventing falls. In addition, public health practitioners know how to analyze and use falls data to shape interventions.

“Public health knows how to bring people together,” she said. “Knowing how to mount a coordinated and collaborative effort is vitally important to success in prevention.”

For CDC data and reports, visit www.cdc.gov/homeandrecreational/safety/falls. ■

— Kim Krisberg

Infrastructure improvements, community involvement make roads safer

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community awareness surrounding the Phone in One Hand, Ticket in the Other campaigns in New York and Connecticut in 2010, which were partnerships with the National Highway Traffic Safety Administration, showed a significant drop in driver cellphone use, by as much as a 72 percent reduction in texting, and a 57 percent drop in handheld phone use in Hartford, Connecticut.

But risks remain, particularly for American Indian and Alaska Native communities. Motor vehicle crashes are the leading cause of unintentional injuries among this racial group for people ages 1 to 44, and American Indians and Alaska Natives are 1.5 times more likely to die in a crash than whites or blacks, according to CDC data.

Thus, CDC has issued its "Tribal Motor Vehicle Injury Prevention Best Practices Guide 2016." Highlighting

what works to prevent motor vehicle crash injury and death, as well as federal, tribal and state responses and components for effective prevention, the report includes success stories and tips for communities.

That is particularly important for communities with limited resources or data, said Adam Larsen, a safety engineer with the U.S. Department of Transportation's Tribal Transportation Program. The program offers structural and financial assistance directly to tribal communities working to improve motor vehicle safety locally.

Many tribal communities have lower rates of seat belt use than national averages, according to CDC data. While overall seat belt usage hovers around 90 percent, in 2016, among 17 surveyed reservation communities, some had rates as low as 49 percent, CDC reported.

Local communities partnering with CDC and Tribal Transportation Program are

leading the way to improve community safety. In one example, the Hopi Tribe in Arizona has used CDC funding to strengthen existing seat belt laws through collaboration with local law enforcement. CDC reported that an accompanying education campaign helped raise seat belt use from 39 percent to 53 percent, and increase child safety seat use from 22 percent to 29 percent.

Larsen noted that the Lummi Nation in Washington has done a particularly good job of using partnerships to build strategic plans, improve data capabilities and implement "some really good projects," including adding roundabouts on reservation roads and promoting pedestrian safety.

A 2016 Lummi Nation Road Safety Audit Report by Eastern Washington University touted the implementation of the Lummi Nation Haxton Way Pedestrian Path/Lighting Project. In March, solar lighting company Sol noted that

Haxton Way previously had the highest traffic fatality rate of any road on the reservation, as high speeds and a lack of pedestrian space converged there. The creation of a three-mile trail, with environmentally sustainable lighting, made the area both more accessible and safe to pedestrians.

Building partnerships is key, Larsen said, because tribal communities, particularly in rural areas, may lack the resources of other communities. In a National Congress of American Indians and Leadership Conference Education Fund policy brief, experts noted that reservation roads are still the most underdeveloped road network in the U.S. despite being the principal transportation system for all residents of and visitors to tribal communities. The brief also noted that American Indian people are twice as likely as all other ethnic groups in the United States to die as a result of motor vehicle crashes.

"You just don't have the same quality of infrastructure in tribal areas," Larsen told *The Nation's Health*. "There's a lot of data that goes unreported. Standing Rock (Sioux Tribe in North and South Dakota) has a good safety data improvement program going on. Their law enforcement uses narrative crash reports instead of putting crash data in a format they can use for safety planning, but they see the data as so important that they're... hand-coding it. It's not an ideal situation, but they're doing the best they can with what they have."

It is motivation such as at Standing Rock, valuing

traffic safety, that will make a difference in communities across the country, Hersman said. She said acknowledging motor vehicle deaths and injury as a public health crisis is the first step in addressing the issue.

"If a plane crashed every single day, killing 100 people, we would ground air traffic, hold congressional hearings and demand change," Hersman told *The Nation's Health*. "We need to be equally as outraged when it comes to motor vehicle crashes. One hundred lives a day is unacceptable."

With data and tools readily available from CDC, communities can dig into the information to find solutions that will work. Both CDC data and Hersman call for collaboration, such as Road to Zero Coalition, an initiative started in 2016 with the Department of Transportation that comprises more than 250 organizations and individuals committed to ending roadway deaths in the next 30 years.

"It may seem like an impossible goal, but we have seen the public health community accomplish seemingly impossible things, like eradicating certain diseases and changing attitudes about smoking," Hersman said. "Getting to zero deaths on our roadways will take all of us. It won't be easy, but it will have a tremendous impact on those injured on our roadways as well as the families of those killed."

To learn more, visit www.cdc.gov/motorvehiclesafety. ■

— Lindsey Wahowiak

PATHWAYS to SAFER OPIOID USE

This interactive training from the Office of Disease Prevention and Health Promotion at HHS allows users to assume the role of one of four key members of the health care team — a nurse/care coordinator, physician, pharmacist, and patient — and walk through scenarios for making decisions about opioid prescribing, monitoring, and use. The tool helps health care providers learn evidence-based health literacy principles and team-based care strategies that can improve outcomes for patients taking opioids.

APHA has designated this web-based educational activity for a maximum of 1.0 AMA PRA Category 1 Credit(s)[™].

Check it out here:
health.gov/hcq/training-pathways.asp



Photo by Minerva Studio, courtesy iStockphoto

Seat belt use hovers at about 90 percent nationally. Programs that are highly publicized can make a major difference.

Injury, violence linked to 27.6 million annual emergency room visits

Putting science into action to prevent injuries and violence: Q&A with CDC's Debra Houry

Injuries and violence are major public health issues in the United States, leading to 214,000 deaths annually. Millions of people are also injured each year and survive, sometimes with long-lasting effects. The Nation's Health spoke with Debra Houry, MD, MPH, director of CDC's National Center for Injury Prevention and Control, about the ways the center is working to protect Americans from injuries and violence and how health workers can play a role.

Tell us about the work of the center. What is your mission and main focus?

The mission of CDC's National Center for Injury Prevention and Control is to prevent violence and injuries through science and action.

For 25 years, CDC's Injury Center has helped protect Americans from injuries and violence. We are the nation's leading authority on injury and violence. We study violence and injuries and investigate the best ways to prevent them, applying science and creating real-world solutions to keep people safe, healthy and productive.

We are committed to saving lives, protecting people and lowering the

health and societal costs of violence and injuries. Our goal is to offer individuals, communities and states timely, accurate information and useful tools and resources to keep people safe where they live, work, play and learn.

Why do Americans need to be concerned about injury and violence prevention?

Injuries are a leading cause of death in this country. In the first half of life, more Americans die from injuries and violence — such as motor vehicle crashes, falls or homicides — than from any other cause, including HIV, cancer or the flu. Injuries and violence affect everyone, regardless of age, race or economic status. And, in America, deaths from suicide, opioid overdose and car crashes have been going up in recent years. In 2015 alone, injuries and violence led to 214,000 deaths, 2.8 million people

hospitalized and 27.6 million emergency room visits

The economic costs are also staggeringly high. The total lifetime medical and work loss costs of injuries and violence in the U.S. was \$671 billion in 2013.

What are the big issues right now in U.S. injury and violence prevention?

CDC focuses on key injury and violence issues that harm the most people in the U.S. — issues where we also have science

about what works to help protect Americans.

◆ **Opioid overdoses:** Opioids — including prescription opioids and heroin — killed more than 33,000 people in 2015, more than any year on

record. CDC works with states, communities and prescribers to prevent opioid misuse and overdose by tracking and monitoring the epidemic, helping states scale up effective programs and supplying health care providers with data, tools and guidance for evidence-based decisionmaking.

◆ **Suicide:** Each year there are more than 40,000 suicides in the U.S. — an average of about 117 every day. CDC works to prevent suicide by promoting programs and conducting science to reduce factors that increase risk and increasing factors that promote resilience or coping.

◆ **Motor vehicle injury:** More than 32,000 people are killed and 2 million are injured each year from motor vehicle crashes. CDC uses science to better understand this problem and develop programs that will change behavior to keep drivers, passengers, bicyclists and pedestrians safe on the road every day.

◆ **Traumatic brain injuries:**

Traumatic brain injury is a major cause of death and disability in the United States. Such injuries contribute to about 30 percent of all injury deaths.

CDC's research and programs work to prevent traumatic brain injuries and help people recognize, respond and recover if a traumatic brain injury occurs.

◆ **Violence against children:**

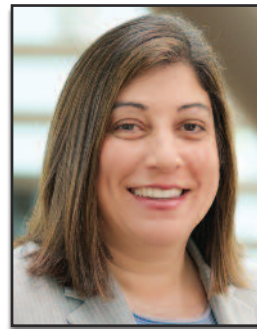
There were 683,000 victims of child abuse and neglect reported to child protective services in 2015. CDC works to ensure children and families have safe, stable nurturing relationships and environments.

What are some programs or strategies that have been working to prevent injuries and violence?

Injuries and violence are so common that we often accept them as just part of life. But they can be prevented and their consequences reduced. The Injury Center does this by putting science into action. For example:

◆ We invested more than \$50 million in 44 states and Washington, D.C., to support opioid overdose prevention. With that money, and involvement from our scientists, states have strengthened their Prescription Drug Monitoring Programs, improved their electronic health record systems, and shared overdose data with health care providers and law enforcement.

◆ Creating business improvement districts — public-private partnerships that invest resources into local services like street cleaning and public safety — in Los Angeles led to a 12 percent reduction in robberies and an 8 percent reduction in overall violent crime in BID neighborhoods.



Houry

◆ Our Heads Up initiative helps protect kids on and off the sports field by raising awareness of concussion and other serious brain injuries. After using one of the campaign's toolkits, 77 percent of youth sports coaches reported they could more easily identify athletes who may have a concussion, and 72 percent reported educating other coaches, parents, and athletes.

◆ Ignition interlocks can reduce DWI re-offense by 70 percent, but only 1 out of 5 of those arrested for DWI had interlocks installed. We partnered with the National Highway Traffic Safety Administration and the Governors Highway Safety Association to evaluate 28 states and determine eight key features

of successful interlock programs.

◆ We also support states in tackling other critical injury and violence problems, including providing funds and assistance to all 50 states to prevent sexual violence through our Rape Prevention and Education Program and to 23 states to address their most pressing issues through the Core State Violence and Injury Prevention Program.

What role can public health workers play in preventing injury and violence?

Despite progress in our field, injury and violence is still a leading cause of death in the United States. Rates of suicide are continuing to rise and we remain

in the midst of an opioid overdose epidemic that includes deaths from prescription opioids and heroin. We need to continue advancing public health solutions to these problems because we know they work.

Like diseases, injuries are preventable — they do not occur at random. CDC's Injury Center uses the same scientific methods to prevent injuries that have been used to prevent disease: carefully describing the problem through surveillance, studying factors that increase or decrease risk for injury, designing and evaluating intervention strategies that target these factors, and taking steps to ensure that proven strategies are implemented in communities nationwide.

The Injury Center has developed technical packages to help states and communities take advantage of these proven strategies to prevent violence.

What one thing would you tell Americans to help them prevent injuries?

Quoting Benjamin Franklin: "An ounce of prevention is worth a pound of cure." We know that most injury and violence is predictable and preventable. That should be empowering to people.

There's a lot we know about what works to prevent injuries and violence, and we learn more every day. We want to help keep Americans safe, healthy and productive — and there's a lot that individuals can do on their own, too. ■

— Interview conducted and edited by Michele Late

For more information on CDC's National Center for Injury Prevention and Control, visit www.cdc.gov/injury.



Photo by Amysuem, courtesy iStockphoto

CDC's Heads Up initiative helps protect kids by raising awareness of concussion and other serious brain injuries.

National Violent Death Reporting System data just first step in prevention

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to reduce risks. The need is great, as CDC reported that more than 42,000 people died by suicide in 2014 in the U.S., and another 16,000 people died by homicide.

Community investment is key for making the National Violent Death Reporting System work well, starting with data collection, said Leroy Frazier Jr., MSPH, CHES, CDC's Surveillance Branch deputy branch chief. But data alone will not lower the rates of violent deaths in participating states, he warned.

"A lot of people think that collection of the data is an automatic prevention program," Frazier told *The Nation's Health*. "We have to depend on getting that data out to (potential prevention partners). Hopefully, prevention specialists and others that have resources to implement programs will take

that data and use it."

Indeed, many communities already have. Janet Blair, PhD, MPH, CDC's Mortality Surveillance Team lead, pointed to the Oklahoma Violent Death Reporting System, one of the 40 states currently in the national system.

Public health advocates in the state evaluating their data saw that among state domestic violence homicides, in many instances, law enforcement had previously been called to the same location before victims were killed. The state secured funding from the National Institute of Justice to implement a lethality assessment prevention tool, in which law enforcement can connect survivors of intimate partner violence with a domestic violence advocate at the scene of an incident.

A 2014 report by the National Criminal Justice Reference Service said the system was shown to increase survivors' use of

formal and informal protective strategies and decrease the frequency and severity of physical violence. However, the assessment did not show a decrease in the presence of domestic violence in the state or among the couples who had received assessments.

Violence prevention is public health

Part of the issue could lie in perceptions. Paul Bonta, MA, associate executive director for policy, advocacy and external affairs at the American College of Preventive Medicine, said even among public health experts, prevention is often viewed in terms of vaccines or behaviors linked to chronic health conditions. But violence is a public health issue that touches all corners of a community, and needs to be viewed and treated as such, Bonta said. And that is where the National Violent Death Reporting System comes in.

"The NVDRS is a program that's really aimed at better understanding the circumstances that really lead to a death," Bonta told *The Nation's Health*. "There's a lot of prevention that takes place in the public health setting. Once you identify the risk factors, you can work to prevent the onset of those risk factors. The same thing happens in violence."

Of particular interest to public health advocates is suicide prevention. Using data from the National Violent Death Reporting System, public health advocates can determine which populations are at risk for suicide attempt. Such was the case in both Oregon and Virginia, where data showed the elderly were dying by suicide at a higher rate than other age groups.

Bonta said local and state public health departments created resources targeted toward seniors and made more resources available to them if they were contemplating suicide. They were also "far more proactive" in reach-



Photo by Asiseit, courtesy iStockphoto

Counseling can be part of violence prevention. Communities using National Violent Death Reporting System data have built outreach programs that offer both in-person and online help.

ing out to senior centers and other places within communities where seniors congregated to talk directly to them about suicide prevention.

"That's something that would have never happened if they had not instituted their violent death reporting systems programs," Bonta added.

In Colorado, too, the system helped identify another group at particular risk for suicide: first responders. In a December 2015 Health Watch report from the Colorado Department of Public Health and Environment, experts found that the state itself had the seventh-highest suicide rate in the nation. The report showed that first responders were both likely to encounter suicidal people in their day-to-day work and at higher risk to contemplate suicide themselves, with nearly 200 first responder suicide deaths reported from 2004 to 2014. They were also almost 50 percent more likely to die by suicide with a firearm than the general population, the report noted, and more than twice as likely to be veterans.

The vast majority of first responders are men, according to a U.S. Department of Labor report.

In response to this population's high risk, the department amended an existing program called Man Therapy to include information particularly for veterans and first responders. The program also included an online

component, as the data showed men were not likely to pursue talk therapy.

Partnerships such as those in Colorado, where public health, state government and industry leaders collaborated both in collecting data and implementing prevention programs, are key to the National Violent Death Reporting System's success, Frazier said.

"The system would not be successful if it wasn't for the partners, who are the major data providers," he said. "Without their interest, support and dedication to providing data, (NVDRS could not thrive)."

In the 15 years since the National Violent Death Reporting System was first launched, the system has grown from data in just a few states to covering nearly 80 percent of the U.S. But CDC experts hope to expand the system to cover all U.S. states and territories.

Public health workers, supporters and students can request data from participating states through CDC's National Violent Death Reporting System website, as some of the data is under restricted access. But anyone who is interested in the information can access violent death data through CDC's Web-based Injury Statistics Query and Reporting System.

Learn more about the National Violent Death Reporting System at www.cdc.gov/violenceprevention/nvdrs. ■

— Lindsey Wahowiak

A Public Health Approach to Bullying Prevention

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A Public Health Approach to Bullying Prevention will serve as a practical, sustainable, cost-efficient strategy to tackle bullying. More importantly, it may be the best approach to providing legitimate and sustainable hope to our children at a time when bullying is becoming increasingly more difficult to tackle.

This book presents a public health approach to bullying prevention in a comprehensive and deliberate manner. Formal public health strategies have been used to combat infectious disease epidemics, tobacco use, and motor vehicle injuries. When applied to bullying, public health strategies provide a scientific approach to community planning, the use of evidence-based programs, coalition development, and the ability to change the culture in a school and community to one that is positive and strong. This text will serve as invaluable resource to parents and professionals looking for advice on specific facets of school-based bullying.

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CDC tools aid planning, implementation

Prevention key for reducing sexual violence on campus



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Engaging students in planning and implementation of prevention strategies is key for addressing campus sexual violence.

IN THE U.S., about 19 percent of women have experienced rape in their lifetimes. Many of those incidents happened on college campuses, where 1 in 5 women say they have experienced either an attempt at sexual violence or an act of sexual assault.

Evidence is still emerging on the most effective ways to prevent sexual violence, but researchers have identified key components that offer a greater likelihood of successfully reducing and preventing sexual violence on college and university campuses.

In “Sexual Violence on Campus: Strategies for Prevention,” which the Centers for Disease Control and Prevention released last year, researchers reported that college women experience rape at disproportionate levels when compared their non-college peers.

Dawnovise Fowler, PhD, MSW, who helped develop the CDC strategies report and serves as lead behavioral scientist in the agency’s Division of Violence Prevention, said campus-based sexual violence is likely under-reported, as not all campus climates are conducive to reporting such crimes. And while stopping sexual violence before it happens is certainly a difficult endeavor, Fowler said it often begins with making prevention a priority.

“Institutionalized prevention ultimately means that there needs to be a shared language around prevention across the campus,” she told *The Nation’s*

Health. “Prevention principles should be seen and apparent across institutional policies and in order to accomplish that, everyone on campus must see prevention as a priority.”

According to the 2016 CDC report, a comprehensive campus approach to sexual violence should include both prevention and response. In other words, efforts to prevent sexual violence should complement response efforts focused on the immediate needs of sexual violence survivors.

A comprehensive college prevention strategy that targets each level may include bystander training for individuals, working with male athletes to promote healthy relationships and change norms that facilitate sexual violence, community-based social marketing campaigns and societal policies that reduce excessive alcohol use, a contributor to sexual violence risk.

As is the case in most prevention efforts, Fowler said engaging the target audience — in this case, students — in planning and implementing a prevention strategy is key.

“It’s the students who know how to craft the messages, what will be most relevant and digestible and how their peers will receive

the messaging,” she said. “To be frank, they understand how the nuances of risk factors and protective factors play out in certain college settings. So as much as administrators and staff are important, it’s the students who know how and when this is a risk.”

APHA member Gayle Payne, PhD, branch chief within the CDC Division of Violence Prevention, said the strategies report is intended as a “starting place” for sexual violence responders and their campus partners to begin planning and implementing prevention efforts. She said health practitioners can leverage their relationships with community stakeholders to help strengthen and coordinate sexual violence prevention efforts over the long term.

“In public health, we recognize that it takes multiple perspectives and areas of expertise to address a complicated health and safety issue like sexual violence,” Payne told *The Nation’s Health*.

In addition to its campus-based prevention report, which includes a number of on-the-ground examples, CDC also released “STOP SV: A Technical Package to Prevent



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Students can help craft sexual violence prevention messages that resonate with their peers.

Sexual Violence” in 2016. The technical package offers evidence-based strategies to help communities and states hone their prevention efforts and increase

the likelihood of reducing sexual violence and its outcomes.

Another major resource is PreventConnect, a national online resource dedicated to the prevention of sexual assault and domestic violence. Anyone can join PreventConnect, a project of the California Coalition Against Sexual Assault, to learn strategies and share best practices.

To download CDC resources, visit www.cdc.gov/violenceprevention/sexualviolence/index.html. To access PreventConnect, visit www.preventconnect.org. ■

— Kim Krisberg

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Higher injury rates, opportunities for prevention in rural communities

RURAL AMERICANS face a greater risk of losing their lives to the nation's top leading causes of death, including unintentional injury. In fact, research finds that unintentional injury fatalities are 50 percent higher in rural communities than in urban ones, due in part to greater risks of traffic crashes and opioid overdoses.

About 46 million Americans live in rural communities, which the Centers for Disease Control and Prevention reports are often home to economic and social factors that

exacerbate the risk of dying from an injury, such as less access to health care, more people without health insurance and greater rates of poverty. A study pub-



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Rural Americans face a greater risk of losing their lives to unintentional injuries.

lished in January in CDC's *Morbidity and Mortality Weekly Report* found that more than half — or about 12,100 — of unintentional injury deaths in rural communities were likely preventable, compared to about 39 percent of unintentional deaths in metropolitan areas.

Preventable injury deaths were higher in rural communities throughout most of the country, the study found. For instance, in rural areas of Arizona, California, Hawaii and Nevada, 65 percent of such deaths were potentially preventable, versus 29 percent in the states' more urban areas.

Addressing injuries is also among the top 20 priorities of Rural Healthy

People 2020, a document that sets health objectives for rural America.

In March, *MMWR* published more worrisome findings on injury in rural communities, reporting that the gap in suicide rates between rural and urban communities has gotten wider. Using data from the U.S. Census and National Vital Statistics System, researchers found that suicide rates increased overall between 1999 and 2015, accelerating significantly around the time of the Great Recession.

Suicide rates at the beginning of the study period were lowest in more urban counties and highest in less urban ones, with that gap growing bigger over time. Researchers said the higher rural rates could be associated with a range of suicide risk factors, such as less access to mental health services, shortages in behavioral health providers and greater social isolation.

Researchers noted that opioid addiction and overdose are likely worsening rural suicide rates. The opi-



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Rural areas are often home to factors that worsen the risk of dying from an injury, such as less access to health care.

oid epidemic has hit rural communities particularly hard and addressing the problem is made even more difficult by a lack of addiction treatment services in rural areas.

CDC recommends a number of low-cost interventions to help bring down injury deaths in rural communities. For instance, rural health care providers can educate patients about seat belt use, which is much lower in rural communities than in urban ones. Providers can re-

examine and potentially shift their opioid prescribing practices — CDC released its evidence-based guidelines on prescribing opioids for chronic pain last year. And strengthening programs and policies that draw mental health providers and services to rural communities could go far in reducing suicide rates.

For more resources on injury in rural communities, visit www.cdc.gov/ruralhealth. ■

— Kim Krisberg

Preventing child abuse through partnerships, programs, policies

IN 2015, about 683,000 U.S. children were victims of abuse or neglect, with nearly 1,700 children dying as a result. From a public health perspective, preventing such abuse not only protects children in the present, but puts them on a trajectory toward better health and well-being.

In the late 1990s, the Adverse Childhood Experiences Study, a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente and one of the largest investigations of its kind, found an association between abuse and adverse experiences in childhood and later health problems.

Study results, published in 1998 in the *American Journal of Preventive Medicine*, found that people who reported multiple adverse exposures during childhood — such as abuse, witnessing violence against a

parent or living with someone struggling with addiction — had a four- to 12-fold increase in the risk for alcoholism, drug abuse, depression and suicide attempt. To get at the root of such experiences and help prevent them from occurring in the first place, CDC takes a decidedly public health-based approach that targets the social conditions that exacerbate the risk of child maltreatment and engages multiple sectors across a community.

The agency's 2014 report on "Essentials for Childhood: Steps to Create Safe, Stable, Nurturing Relationships and Environments" focuses on raising community awareness and commitment and on using policies and programs to create environments in which children and parents can more easily thrive.

The report highlights a number of programs that help prevent child maltreatment, such as coaching programs that work directly

with child-parent pairs, nurse home-visiting programs that help first-time mothers, and hospital-based programs that educate new parents on how to safely handle and soothe a crying baby. Examples of supportive policies include safety net programs that help buffer families against the impacts of poverty and reduce parental stress, a known risk factor in child maltreatment.

Last year, CDC also released "Preventing Child Abuse and Neglect: A Technical Package for Policy, Norm and Programmatic Activities," which provides evidence-based strategies to help prevent child abuse and neglect.

"Imagine if we had this seamless, coordinated network of care, where individuals and families are nurtured from the beginning to end because they understand the full complement of services available to them," said Wendy Ellis, project director of the Building Community Resilience collaborative at the George Washington University Milken Institute

School of Public Health. "It's about working smarter together."

Ellis, an APHA member, describes the adverse childhood experience with the image of a tree: The branches represent the visible manifestations of social stresses — such as maternal depression, substance abuse, neglect and homelessness — that effect the risk of child maltreatment. The roots represent the social conditions that lead to those manifestations — such as poverty, discrimination, lack economic mobility and poor housing.

Ellis oversees the Building Community Resilience collaborative, an innovative project launched in 2016 to create integrated, coordinated and community-level networks that link up public and private systems with local, grassroots organizations. The overarching goal of the effort, which now has test sites in Ohio, Texas, Oregon, Delaware and Washington, D.C., is to address the root causes of childhood adversity. For example, the team in Portland, Oregon — a team that

includes a local university, an insurer, a behavioral health services provider and a public health nonprofit — is working with a school of kindergartners through eighth-graders where more than 90 percent of students receive free or reduced lunch and half of are homeless or have unstable housing.

The collaborative is also partnering with the National Association of County and City Health Officials to adapt NACCHO's Mobilizing for Action through Planning and Partnerships framework to address childhood adversity.

"It's not about asking what's wrong with you, but what's happening to you that really gets at the root of adversity," Ellis said. "For public health, this is right in our wheelhouse. We are the guardians of the community's health."

For resources on preventing child maltreatment, visit bit.ly/childabuseresources. ■

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