INJURY FREE OKLAHOMA

Strategic Plan for Violence and Injury Prevention 2016-2020

Oklahoma State Department of Health

INJURY PREVENTION SERVICE • OKLAHOMA STATE DEPARTMENT OF HEALTH

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Creating a state of health

Mission

*To protect and promote health, to prevent disease and **injury**, and to cultivate conditions by which Oklahomans can be healthy.*

– Oklahoma State Department of Health

Mission

To work in collaboration with communities and stakeholders to identify injury problems, and develop, implement, and evaluate environmental modifications, policy, and educational interventions.

– Injury Prevention Service

Vision

Promoting an injury-free Oklahoma

Mission

To work collaboratively to identify injury problems and to develop, implement, and evaluate policy and program interventions to reduce the burden of injuries in Oklahoma.

– Oklahoma Injury Prevention Advisory Committee

Background

Injuries are a major public health problem in the United States and Oklahoma. Unintentional injuries and injuries resulting from violence, combined, are the third leading cause of death in Oklahoma, behind heart disease and cancer. In 2014, more than 3,500 Oklahomans lost their lives to injury, including over 2,400 unintentional injury deaths, 731 suicides, and 247 homicides. The leading causes of injury death have changed over time. Since 2009, unintentional poisonings have surpassed motor vehicle traffic crashes as the leading cause of injury death in Oklahoma. Motor vehicle traffic crashes are the second leading cause of death followed by suicides, falls, and homicides.

Among people 1-44 years of age, unintentional injuries continue to be the leading cause of death overall, accounting for 791 deaths in 2014 among this age group. Among adolescents and young adults 10-34 years of age, suicide was the second and homicide the third leading cause of death overall in 2014. In addition, injuries accounted for more than 22,000 hospitalizations in 2014 and 8% of hospital inpatient charges.

Injury is the single leading killer of Americans and Oklahomans between the ages of 1 and 44 years. Every year, nonfatal injuries cause one in three of us to seek medical attention and render us unable to perform normal activities.

Because injuries affect so many young people, they account for more premature deaths before age 65 than cancer, heart disease, stroke, and diabetes combined. Injury deaths in Oklahoma during 2014 alone resulted in nearly 64,000 years of potential life lost. Many injury survivors, particularly those with traumatic brain and spinal cord injuries, sustain functional limitations that may cause significant physical, emotional, and financial challenges for the rest of their lives.

While injuries are commonly thought of as "accidents" that happen randomly, most can be explained by predictable patterns, and thus are preventable. The Injury Prevention Service (IPS) has sought to educate stakeholders and the public on this crucial point and to apply the public health approach to the problem of injuries. The public health approach, a systematic process used to solve public health problems, involves collecting data to define and monitor the problem; identifying risk and protective factors; developing, testing, and implementing interventions; and widely disseminating interventions that work. To be most effective, multifaceted strategies are needed to impact all four spheres of the social ecological model, which include individuals, relationships, communities, and society as a whole. Effective strategies are designed to target multiple layers of the Spectrum of Prevention, including educating individuals, providers, and communities; building coalitions and networks; changing organizational practices; and promoting policies and legislation to reduce injuries.

Data collected on key injury and violence indicators show that, over the past 10 years, reductions in motor vehicle-related injuries and deaths have been realized (see *Key Indicators*). These reductions can be attributed to wide-scale efforts of public health and safety agencies, trauma systems, advocacy groups, schools, and many other organizations that educate the public, strengthen and enforce traffic laws, and improve vehicle safety technology, road safety, and trauma and emergency response systems. While motor vehicle-related death and injury rates in Oklahoma have declined, these rates remain substantially higher than national rates. Reductions in traumatic brain injury rates have also been realized over the past 10 years; however, the rates of many types of injury and violence in the state have increased and persist at alarming rates.

In Oklahoma, injuries account for 57% of ALL deaths to children 1-14 years of age and 82% of ALL deaths among adolescents 15-19 years of age. After the first year of life, more children die from injuries than all other causes of death combined.

Injury and violence prevention is a priority for Oklahoma. During 2015, the Oklahoma Health Improvement Plan (*Healthy Oklahoma 2020*), Oklahoma State Department of Health (OSDH) Leadership Strategic Targeted Action Teams, and the Governor's *OKStateStat Healthy Citizens and Strong Families* strategic performance framework adopted goals to reduce childhood injury, prescription drug abuse/overdose, older adult falls, intentional and unintentional injury, and motor vehicle injuries. These actions are indicative of Oklahoma's recognition of injury as a serious public health problem and the need to provide infrastructure for these areas to promote the overall wellness of citizens.

Oklahoma's first strategic plan for injury prevention (*Injury Free Oklahoma, 2004-2010*) was created in 2004. The plan was revised in 2009 and became *Injury Free Oklahoma, 2010-2015*. Now, *Injury Free Oklahoma, 2016-2020* is a snapshot of the areas of injury and violence prevention currently being addressed by the IPS directly or in partnership with other agencies and organizations. Each focus area section includes a summary of prevalence, current strategies being implemented, and goals that the program aims to achieve by 2020.

Health care is vital to all of us some of the time, but public health is vital to all of us all of the time.

– C. Everett Koop, M.D., former U.S. Surgeon General

National Violent Death Reporting System

Oklahoma is one of 42 states participating in the National Violent Death Reporting System (NVDRS). The NVDRS is a state-based surveillance system that links data from death certificates, medical examiner reports, and law enforcement reports into one data system. Violent deaths include homicide, suicide, legal intervention, unintentional firearm injury deaths, and undetermined manner (intent) deaths that may have been caused by violence. Oklahoma began collecting NVDRS data in 2004.

Prevalence

A total of 9,927 violent deaths occurred among Oklahoma residents from 2005 to 2014 (26.6 per 100,000 population). More than half (61%) of these deaths were suicides, 23% were homicides, 13% were undetermined manner deaths, 1% were legal intervention deaths, and 1% were unintentional firearm deaths. There were no terrorism-related deaths in Oklahoma during this period.

Seventy-five percent of the victims were male. The majority of the injuries (76%) occurred at a residence. Two percent of violent deaths occurred while the person was in law enforcement custody or in the process of being arrested. More than 100 victims were homeless. Sixteen percent of decedents had served in the U.S. Armed Forces. Metropolitan areas accounted for a slightly higher than expected proportion of violent deaths; 41% of all violent deaths in Oklahoma were among Oklahoma and Tulsa County residents, compared to 35% of the population.

Suicide was the most prevalent type of violent death in Oklahoma from 2005 to 2014. Suicide accounted for 6,098 deaths of Oklahoma residents 10 years of age and older (610 deaths per year). The annual suicide rate increased 27% from 2005 to 2014 (from 14.9 to 18.9 per 100,000 population, respectively).

Current Status

The Oklahoma Violent Death Reporting System (OKVDRS) collects and analyzes data received from death certificates, medical examiner reports, police reports, and Supplementary Homicide Reports. The OKVDRS is a collaborative effort between the Oklahoma State Department of Health, the Office of the Chief Medical Examiner, and the Oklahoma State Bureau of Investigation. Data collected are used to produce manuscripts, reports, and special data requests throughout

the year to show the distribution of violence and inform prevention efforts.

The Injury Prevention Service (IPS) has developed a close relationship with the Suicide Prevention Program of the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) and regularly provides data to inform their programs. The ODMHSAS often refers various partners in suicide prevention to the OKVDRS for suicide data.

A health educator in the IPS currently serves as the Commissioner of Health's designee to the Oklahoma Suicide Prevention Council (OSPC). The health educator, certified in the Question, Persuade, Refer (QPR) suicide prevention strategy, assists the OSPC with reviewing, assessing, and implementing goals for systemic prevention of suicide across the state. The OSPC members assist with the annual state suicide prevention conference, where OKVDRS data are presented.

Five-Year Plan

The IPS will maintain and continuously improve the OKVDRS to collect timely, high-quality, comprehensive violent death data and provide data to partners. Through 2020, the IPS will continue to collect and enter data efficiently for all violent deaths in Oklahoma; maintain strong working relationships with data contributors; improve data quality by evaluating and monitoring the OKVDRS; and provide violent death data to partners working in injury prevention and the public through reports, peer-reviewed publications, presentations, and special data requests.

The health educator will continue representing the OSDH on the OSPC and conducting QPR trainings when requested. The health educator will assist the OSPC with membership growth, capacity building with underrepresented groups, and a wider spectrum of community activities.

2020 Goals

- Expand dissemination efforts and provide data to inform local prevention programs through 2020.
- Meet and exceed Centers for Disease Control and Prevention performance standards for initiating cases in the OKVDRS and completing data entry of medical examiner and death certificate data for 100% of cases within 14 months of the death by 2020.
- Complete law enforcement data collection for 97% of cases within 14 months of the death by 2020.
- Assist the ODMHSAS in sustaining and strengthening collaborations across state agencies to advance suicide prevention through 2020.

Intimate Partner Violence Prevention

Prevalence

According to the 2010 National Intimate Partner and Sexual Violence Survey, approximately 697,000 Oklahoma women (49%) and 550,000 men (41%) had experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime. The Oklahoma State Bureau of Investigation reported that domestic abuse offenses reported by law enforcement in 2014 included 47 homicides, 795 sex crimes, 2,749 domestic assaults, and 20,635 domestic assault and battery crimes. These numbers represent a total increase of 6% from 22,801 in 2013 to 24,226 in 2014. Further, the Oklahoma Domestic Violence Fatality Review Board (DVFRB) reported 39 (43%) of the 93 domestic violence homicides in 2014 were categorized as intimate partner homicides. According to the Oklahoma Violent Death Reporting System (OKVDRS), intimate partner violence was listed as a circumstance in 19% of homicides from 2004 to 2014. While not as specific as intimate partner violence, intimate partner problems (which could include intimate partner violence) were listed as a circumstance in 34% of suicide deaths.

Current Status

The Injury Prevention Service (IPS) is a member of the DVFRB and staff attend monthly review meetings. Staff from the IPS also coordinate data comparisons between the OKVDRS and the DVFRB to ensure all cases of domestic violence and intimate partner homicide are accurately reflected in the data. For several years, the IPS has partnered on a National Institute of Justice study

to evaluate the Lethality Assessment Protocol (LAP), a brief lethality assessment administered by law enforcement at the scene of a domestic violence incident that includes immediate referral to domestic violence services. The IPS continues to participate in training law enforcement and domestic violence service providers on the LAP.

Five-Year Plan

Data regarding domestic violence homicide will continue to be collected through the OKVDRS program. Staff will maintain their participation with the DVFRB, as well as a working relationship with the Oklahoma Coalition Against Domestic Violence and Sexual Assault and other entities involved with the prevention and intervention of domestic violence. The IPS will support, as resources allow, the goal of increasing implementation of an awareness and response protocol regarding domestic violence within the Oklahoma State Department of Health system.

2020 Goals

Implement a system-wide domestic violence identification and response protocol with the Oklahoma State Department of Health and associated organizations by 2020.

Maintain IPS representation on the DVFRB and participate in developing recommendations for systems improvements and intimate partner violence prevention through 2020.

Continue to collect data on intimate partner problems and violence and monitor the incidence and characteristics of intimate partner homicide using OKVDRS through 2020.

Sexual Violence Prevention

Prevalence

According to the 2010 National Intimate Partner and Sexual Violence Survey, approximately 697,000 Oklahoma women (49%) and 368,000 men (27%) had experienced sexual violence and 353,000 Oklahoma women (25%) had experienced rape in their lifetime. According to the 2013 Oklahoma Youth Risk Behavior Survey, 6% of high school boys and 10% of girls had been forced to do sexual things in the past year and 6% of girls had experienced rape with physical force.

Sexual violence prevention efforts focus on populations at increased risk including youth aged 10 to 24 years, men and boys, and their influencers. School and college staff, parents, and staff at youth-serving organizations are included in prevention efforts to reinforce messages of healthy relationships and social norms change.

Current Status

The Oklahoma Rape Prevention and Education (RPE) program of the Injury Prevention Service (IPS) focuses on prevention of first-time perpetration of sexual violence using a public health approach. In partnership with other state- and community-level organizations, the RPE program provides evidence-based sexual violence prevention education and community-level activities to change social norms, reduce risk factors for perpetration, and increase protective factors against perpetration and victimization. Community-based programs are tailored to community readiness, norms, and strengths through training and technical assistance. Additionally, RPE staff work with universities and

military partners to plan, implement, and evaluate sexual violence prevention programming.

Five-Year Plan

To reduce the rate of sexual violence in Oklahoma, the IPS will continue to maintain state-level partnerships and community-based programming to reduce first-time perpetration of sexual violence. The IPS will continue to facilitate the implementation of sexual violence prevention strategies in Oklahoma communities using the public health approach. The IPS has a long history of providing training and technical assistance related to sexual violence prevention. Through 2020, the IPS will continue to provide timely and responsive training and technical assistance to sexual violence prevention professionals and stakeholders to increase use of the public health approach and principles of effective prevention. The IPS will increase the reach of the Oklahoma RPE program by collaborating with multi-sector stakeholders to implement and strengthen sexual violence prevention programming and policies and build and maintain sexual violence prevention program evaluation capacity.

2020 Goals

Maintain at least five community-based sexual violence prevention programs to implement sexual violence prevention strategies using the public health approach and principles of effective prevention through 2020.

Increase the number of state- and community-level youth-serving organizations implementing effective sexual violence prevention programming through 2020.

Develop and implement effective evaluation protocols for community-level sexual violence prevention programming by 2020.

Child Abuse and Neglect Prevention

Prevalence

In 2014, the Oklahoma Department of Human Services (DHS) received nearly 75,000 referrals of possible child abuse and/or neglect. For the Injury Prevention Service (IPS), abusive head trauma is the current main focus of prevention efforts related to child abuse and neglect. Abusive head trauma is a form of physical abuse of children, including shaken baby syndrome, which is most often caused by shaking or blunt impact. This trauma results in bruising, fractures, brain bleeds, and retinal hemorrhages. Infants under one year of age (especially aged 2 to 4 months) are at highest risk of abusive head trauma due to natural episodes of inconsolable and unpredictable crying. These episodes are normal for infants, but may be frustrating to caregivers.

The majority of perpetrators are parents or their partners, especially fathers, stepfathers, and mothers' boyfriends. According to the Centers for Disease Control and Prevention, most cases of abusive head trauma have some evidence of previous abuse.

According to previous studies, abusive head trauma diagnoses are associated with longer hospital stays, increased use of the medical system, and higher costs for treatment, both immediately following an injury and for years to come. Many victims of abusive head trauma have severe, lifelong disabilities resulting in billions of dollars in health care costs. More than one in five children who suffer abusive head trauma die.

From 2010 to 2013, 182 children aged 0 to 5 years were hospitalized for a traumatic brain injury (TBI) related to abusive head trauma in Oklahoma. Compared to other hospitalizations for TBI in the same age group, victims of abusive head trauma were more likely to be male (68% versus 58%), die in the hospital (12% versus 1%), and be discharged to DHS custody (61% versus 1%). Abusive head trauma patients were more likely to have a stay paid for by Medicaid and had a longer average length of stay than other TBI patients (8.1 versus 3.9 days).

Current Status

Staff in the IPS currently participate on the Injury Prevention Workgroup of the Preparing for a Lifetime, It's Everyone's Responsibility initiative in Oklahoma. The Preparing for a Lifetime initiative was created by the Oklahoma State Department of Health (OSDH) to reduce infant mortality in Oklahoma. One of the primary activities of the Preparing for a Lifetime Injury Prevention Workgroup is implementing the

Period of PURPLE® Crying (*PPC*) program, an evidence-based program to prevent shaken baby syndrome, throughout the state. In collaboration with workgroup partners, the IPS developed methodology and conducted an evaluation of *PPC* programs implemented in Oklahoma birthing hospitals. The IPS administered semi-structured face-to-face interviews with *PPC* program coordinators and nursing staff providers to learn how hospitals had implemented and were maintaining the program. The data gathered were used and will continue to be used to inform *PPC* program implementation and improvements in program fidelity.

Five-Year Plan

Although 41 infants and young children in Oklahoma sustained a TBI due to abusive head trauma requiring hospitalization in 2013, many more likely visited an emergency department for treatment and/or management of symptoms. In order to understand the magnitude of abusive head trauma-related TBIs in Oklahoma, it is important to gather data from emergency department visits on the severity of injuries, perpetrators, and reports of previous injury. The IPS will continue to advocate for statewide, centralized electronic emergency department discharge data.

The IPS will continue to work to expand the *PPC* program to additional Oklahoma hospitals. The IPS will assist with developing, including providing relevant data and information, for a webinar by the Preparing for a Lifetime Injury Prevention Workgroup to increase *PPC* program fidelity among participating hospitals. The IPS will also continue to attend meetings of the Injury Prevention Workgroup and participate in the Preparing for a Lifetime initiative.

The IPS will continue to collaborate with Oklahoma's home visiting programs to reduce the incidence of child maltreatment, empower home visitors with injury prevention information and resources, and conduct data linkages to examine injury rates among program participants for evaluation and quality improvement purposes.

The IPS will develop an early childhood injury fatality surveillance system (children aged 0 to 5 years) to inform statewide promotion of safe sleep procedures and early childhood injury prevention and to evaluate changes in child abuse and neglect over time. The IPS will create reports/fact sheets on child injury fatalities and distribute to relevant stakeholders, including the Maternal and Child Health Service and home visiting programs.

2020 Goals

- Implement a statewide, centralized electronic emergency department discharge data system by 2020.
- Develop, implement, and maintain an early childhood injury fatality surveillance system through 2020.
- Assist stakeholders by providing childhood injury-related data and resources on to inform program planning and evaluation through 2020.

Unintentional Poisoning/Prescription Drug Overdose Prevention

Prevalence

Unintentional poisoning (UP) is the leading cause of injury death, surpassing motor vehicle crashes in Oklahoma. Of the more than 5,300 UP deaths in Oklahoma from 2007 to 2014, 77% involved at least one prescription drug. Prescription painkillers (opioids) were the most common class of drugs involved in overdose deaths (86% of prescription drug-related deaths, with 427 opioid-involved deaths in 2014). More UP deaths involved hydrocodone or oxycodone than methamphetamine, cocaine, and heroin combined. The most common medications involved in UP deaths were oxycodone, hydrocodone, alprazolam, methadone, and morphine. Adults aged 35 to 54 years had the highest death rate of any age group for both prescription and non-prescription-related overdoses. However, adults aged 55 years and older had the largest increase in unintentional prescription drug overdose (PDO) death from 2007 to 2014. Although males had higher rates of UP death overall, females aged 45 years and older had higher unintentional PDO-related mortality rates than males in this age group. In general, counties with the highest death rates were located in more rural areas of the state.

Current Status

Program efforts conducted by the Injury Prevention Service (IPS) to reduce UP/PDO deaths include collecting and disseminating data; providing education, training, and technical assistance; developing and managing a naloxone (an opioid antagonist used to reverse an overdose) program for first responders; facilitating

collaborations and partnerships for special projects such as developing opioid prescribing guidelines, maintaining a PDO state strategic plan, and promoting provider education; and creating and distributing educational material and resources.

The IPS established and continues to maintain a UP fatality surveillance system. Based on medical examiner reports and supplemental data from death certificates and the Prescription Monitoring Program (PMP), the IPS conducts detailed analyses to enhance knowledge about the substances involved in overdose deaths and circumstances of events. The IPS is also actively working to develop the PMP as a public health surveillance tool and is conducting data linkages with health outcomes data sets.

Results of these data analyses are used to identify areas of the state with a high burden of PDO and are regularly used to select target populations for additional programmatic and policy efforts. The IPS provides community education, resources to raise awareness, and technical assistance to community coalitions and county health departments. Target areas are being identified for

the implementation of practice facilitation and academic detailing for physicians treating pain in high-burden areas.

Finally, the IPS works closely with partners on a naloxone training and distribution program to instruct first responders, including basic- and intermediate-level emergency medical service personnel, on the use of intranasal naloxone.

Five-Year Plan

Program efforts will continue to include working with medical licensing boards, county health departments, emergency medical personnel, and local coalitions to distribute information on the burden of UP/PDO in Oklahoma. The IPS will expand its partnership with the Oklahoma Bureau of Narcotics and Dangerous Drugs Control to identify outlier providers and patients at high risk of a prescription drug-related overdose in addition to supporting PMP software upgrades. The IPS will continue collaborations with the Oklahoma State Department of Health Emergency Systems Division and the Oklahoma Department of Mental Health and Substance Abuse Services on the statewide naloxone program for first responders.

Additionally, the IPS will continue to collect medical examiner reports on UP; provide educational material and community outreach, including technical assistance and comprehensive PDO training; and assist with the expansion of naloxone availability across the state, including providing replacement kits and continued training for emergency medical service agencies. New strategies will be identified to expand surveillance efforts to include emergency medical services and emergency department discharge data to capture nonfatal poisonings; improve insurance mechanisms through PMP and Medicaid data linkage; educate on policy providing immunity from prosecution for drug possession (Good Samaritan) to reduce potential barriers to calling 911 during an overdose; implement and expand a practice facilitation/academic detailing model to promote best practice for providers treating pain; and update and expand adoption of the opioid prescribing guidelines through the creation of model policy for hospitals.

2020 Goals

Reduce the rate of UP deaths from 18.8 per 100,000 population in 2014 to 16.0 per 100,000 by 2020.
Reduce the rate of inpatient hospitalization discharges for acute drug poisoning from 121.1 per 100,000 population to 102.9 per 100,000 by 2020.
Increase naloxone accessibility to 100% coverage for basic- and intermediate-level emergency medical services and volunteer fire departments by 2020.
Implement a statewide, centralized electronic emergency department discharge data system by 2020 to more fully assess the burden of nonfatal poisonings.

Occupant Protection

Prevalence

In 2014, there were more than 150,000 persons involved in motor vehicle crashes (MVCs) in Oklahoma, resulting in 669 fatalities and 33,405 injuries. Over half of the MVC fatalities were to unrestrained occupants; the majority of these decedents were male. Data from the 2015 Oklahoma Seat Belt Observation study showed that Oklahoma had a seat belt use rate of 84% (county-specific use ranged from 73% to 95%). These statistics suggest that males and rural residents may be more likely to not wear a seat belt and be injured in a MVC.

Children and teens are also at increased risk for injury or death in crashes, especially when they are not properly restrained. According to the 2015 Oklahoma Youth Risk Behavior Survey, 6% of teens reported that they rarely or never used a seat belt. Similarly, not all children are restrained while traveling; in 2015, 88% of infants and 90% of children aged 1 to 8 years were restrained. Proper vehicle restraint use greatly reduces the risk of serious injury or death for all vehicle occupants. Seat belt use increases the chance of surviving a crash by 45% to 65%. Car seat use increases an infant's chance of surviving a crash by 71%, and booster seat use reduces a child's risk of serious injury or death by 45%.

Current Status

Through the Injury Prevention Service (IPS) child safety seat program, nearly 60,000 car seats and booster seats have been distributed to Oklahoma families over the last 23 years. The

IPS has two certified child passenger safety technicians on staff to conduct car seat checks and installations. The IPS also collaborates with partners to offer child passenger safety certification classes as well as basic child passenger safety classes for providers such as social workers and child care workers. The IPS offers community education presentations, technical assistance, and educational material on child passenger safety and occupant protection.

In order to build capacity for child passenger safety in Oklahoma County, the IPS has partnered with the Oklahoma City-County Health Department to establish a child safety seat program by providing funding for an Injury Prevention Specialist. Additionally, the IPS, in collaboration with Safe Kids Oklahoma and OU Medical Center, created a brochure and poster for parents, caregivers, and providers on the 2015 changes to Oklahoma's child passenger safety law and best practices in child passenger safety.

Five-Year Plan

In addition to maintaining the child safety seat program, the IPS will continue to build statewide capacity for child passenger safety and general occupant protection by leveraging resources, expanding and strengthening partnerships, promoting best practices, increasing awareness and education, and engaging communities to support efforts at the local level. In order to improve occupant restraint use and prevent MVC-related injuries and deaths, the IPS will identify opportunities to educate decision makers on best practices and effective occupant protection policies. The IPS will provide technical assistance and car/booster seats to county health departments and will work to increase the number of technicians and installation check sites around the state. The IPS will provide education to businesses, organizations, and the general public and will develop educational material that include the latest data and best practice prevention strategies.

2020 Goals

- Increase the observed Oklahoma seat belt use from 84% in 2015 to 87% by 2020.
- Decrease the percentage of teens that rarely or never use seat belt from 6% in 2015 to 4% by 2020.
- Increase the observed combined child restraint use rate from 90% in 2015 to 92% by 2020.
- Increase the number of county health departments with at least one certified child passenger safety technician on staff from 50 in 2016 to 60 by 2020.

Distracted and Impaired Driving Prevention

Prevalence

In the United States, nearly half (46%) of all motor vehicle crashes can be attributed to distracted or impaired drivers. In 2014, there were 7,340 distracted driver crashes, 3,558 alcohol-related crashes, and 1,036 drug-related crashes in Oklahoma. Of the fatal crashes that occurred in Oklahoma, 26% were alcohol related. Most of the fatal, alcohol-related crashes in Oklahoma occurred on rural roadways and highways; almost half of the alcohol-related, nonfatal injury crashes occurred on urban roadways. When compared to females, nearly three times as many males involved in crashes had an alcohol-related driver condition in 2014. Drivers with an alcohol condition in crashes tended to be younger; drivers aged 21 to 25 years accounted for 20% of drivers with an alcohol-related condition, followed by drivers aged 26 to 30 years (16%). Similarly, young drivers tended to comprise a larger proportion of distracted drivers in crashes; 37% of distracted drivers were aged 16 to 24 years.

Oklahoma has strong laws against impaired driving, and as of November 1, 2015, also has a law prohibiting the use of electronic devices to compose, read, or send messages while driving.

Current Status

In January 2015, after one state trooper was killed and another severely injured by a distracted driver who was updating social media on his cell phone, Oklahoma legislators passed the Trooper Nicholas Dees and Trooper Keith Burch Act of 2015, which bans texting while driving in Oklahoma (effective November 1, 2015). The Injury Prevention Service (IPS) served on a committee assembled by Representative Terry O'Donnell, the author of the texting while driving law, to plan a media awareness campaign for the texting law before it went into effect. The IPS offers education and technical assistance to schools, businesses, organizations, and community groups on prevention strategies to reduce distracted and impaired driving. The IPS also collaborates with transportation safety partners and participates on the Governor's Impaired Driving Prevention Advisory Council, a statewide taskforce created by the Governor and charged with reviewing all aspects of the impaired driving problem in Oklahoma and making recommendations to the Governor.

Five-Year Plan

To reduce the number of crashes in Oklahoma, the IPS will continue to promote effective strategies to reduce distracted and impaired driving. The IPS will provide educational resources and will target high-risk populations based on data analyses. In order to reduce the prevalence of underage drinking, impaired

driving, and distracted driving in Oklahoma, the IPS will support educational resources targeted to middle school, high school, and college aged students and will utilize the Centers for Disease Control and Prevention's *Parents are the Key* campaign and other materials to develop presentations and programs for students and parents. To evaluate progress and inform policy-related and educational interventions, the IPS will use Oklahoma Youth Risk Behavior Survey data to track trends in the number of teens who drive while distracted and ride with a driver who has been drinking. The IPS will continue to provide technical support to businesses and organizations and educate decision makers on best practices to reduce distracted and impaired driving.

2020 Goals

Decrease the rate of drivers in crashes in Oklahoma with alcohol- or drug-related driver condition from 12.0 per 10,000 population in 2014 to 10.8 per 10,000 by 2020.

Decrease the rate of distracted drivers in crashes in Oklahoma from 19.3 per 10,000 population in 2014 to 17.4 per 10,000 by 2020.

Decrease the rate of distracted drivers aged 16 to 24 years in crashes in Oklahoma from 55.2 per 10,000 population in 2014 to 49.7 per 10,000 by 2020.

Teen Driver Protection

Prevalence

Motor vehicle crashes are the leading cause of death for teens both nationally and in Oklahoma. In 2014, 12,611 teen drivers (ages 16 to 19) were involved in crashes in Oklahoma. From 2010 to 2014, the number of teen drivers involved in crashes in Oklahoma decreased 17%. Even though teen driver crashes have steadily declined in Oklahoma, teen drivers are still more likely to be involved in a crash than any other age group, especially when driving distracted. From 2010 to 2014, 42% of distracted drivers involved in crashes in Oklahoma were teens and young adults (ages 16 to 24), but accounted for only 13% of the state population. Male teen drivers were 9% more likely to be involved in a crash compared to female drivers; male teen drivers were more than three times as likely to be involved in a fatal crash.

Oklahoma has a strong Graduated Driver Licensing (GDL) program that, along with a Zero Tolerance policy, has proven to be effective. In order to continue reducing teen driver-related crashes in Oklahoma, the Injury Prevention Service (IPS) will support educational interventions that target teens close to driving age and encourage parental involvement.

Current Status

The IPS has produced and distributed a brochure that explains the GDL program; this brochure has been distributed to parents, driver's education schools, and other organizations. Educational presentations are offered to teens and parents regarding teen driver safety and distracted driving. The IPS also utilizes news releases to draw

attention to high-risk times of the year, such as prom and graduation season, the time when most alcohol-related teen driver crashes occur. The IPS also provided technical assistance to Oklahoma Family, Career, and Community Leaders of America (FCCLA) in their Oklahoma Challenge project, a statewide campaign against distracted driving.

Five-Year Plan

The IPS will continue to distribute GDL brochures and publish news releases regarding teen driver safety. Educational resources and technical assistance will be provided to groups working to reduce teen driver crashes in Oklahoma. In order to continue to reduce the rate of teen driver deaths in Oklahoma, the IPS will utilize the Centers for Disease Control and Prevention's *Parents are the Key* campaign and other resources to teach parents how to be actively involved in their teen driver's learning process. The IPS will encourage high schools to ensure that their student driver policies are in accordance with the Oklahoma GDL program. To evaluate safe driving practices and inform intervention planning and implementation,

the IPS will track Oklahoma teen seat belt use and distracted driving through data collected by the Oklahoma Highway Safety Office and the Oklahoma Youth Risk Behavior Survey.

2020 Goals

Decrease the rate of teen drivers (ages 16 to 19) involved in crashes in Oklahoma from 614.3 per 10,000 population in 2014 to 552.9 per 10,000 by 2020.

Decrease the percentage of Oklahoma teens who report rarely or never using a seat belt from 6% in 2015 to 4% by 2020.

Decrease the rate of distracted drivers aged 16 to 24 years in crashes in Oklahoma from 55.2 per 10,000 population in 2014 to 49.7 per 10,000 by 2020.

Pedestrian and Bicyclist Protection

Prevalence

In 2014, there were 359 bicyclists involved in motor vehicle-related crashes in Oklahoma resulting in four fatalities. That same year, 628 pedestrians were involved in crashes resulting in 52 fatalities. In 2014, Oklahomans aged 15 to 20 and 31 to 35 years were at highest risk of being involved in a crash as a pedestrian. Children and young adults aged 15 to 30 years, as well as adults aged 46 to 50, were most likely to be involved in a crash as a cyclist.

Personal vehicles are the primary source of transportation in Oklahoma, and most communities, towns, and cities are designed for the convenience of drivers, not bicyclists or pedestrians. Until Oklahoma communities and cities transform to be more conducive to bicycle and pedestrian travelers, it is imperative that drivers, pedestrians, and bicyclists learn how to properly share the road. Targeting young, school-aged children and college-aged adults with consistent, age-appropriate pedestrian and bicycle safety education could reduce the incidence of crashes involving pedestrians and cyclists in Oklahoma as communities collaborate to make the roads safer for everyone.

Current Status

The Injury Prevention Service (IPS) is a member organization of the statewide Bicycle and Pedestrian Advisory Committee (BPAC) lead by the Oklahoma Department of Transportation. The BPAC is in the process of creating a map of the state of Oklahoma that categorizes roadways by their level of safety for cyclists. The BPAC also promotes the implementation of bicycle lanes, the improvement of existing sidewalks, and the addition of sidewalks in areas of high-volume pedestrian traffic. The IPS provides pedestrian and bicycle safety for children in school-based educational presentations and for parents and general audiences.

Five-Year Plan

The IPS will continue to participate on the BPAC and promote bicycle and pedestrian safety through educational presentations to children, teens, young adults, and parents. The IPS will also continue to distribute data and reports to be used by communities to improve safety for pedestrians and bicyclists. The IPS will encourage

educators and school administrators to incorporate pedestrian and bicycle safety into school policies to make schools and campuses in Oklahoma safer.

2020 Goals

- Decrease the number of pedestrians 25 years of age or younger involved injured in motor vehicle crashes in Oklahoma from 231 in 2014 to 200 by 2020.
- Decrease the number of bicyclists involved in motor vehicle crashes from 359 in 2014 to 320 by 2020.
- Decrease the number of bicyclists 25 years of age or younger involved in motor vehicle crashes from 160 in 2014 to 145 by 2020.
- Decrease the number of pedestrians involved in motor vehicle crashes from 628 in 2014 to 575 by 2020.

Other Motorized Vehicle Injury Prevention

Prevalence

Each year in the United States, the Consumer Product Safety Commission estimates there are more than 650 deaths and 100,000 injuries treated in emergency departments attributed to all-terrain vehicle (ATV) use. Twenty ATV-related crash fatalities occur in Oklahoma each year, on average.

Children, especially those under the age of 16 years, are at increased risk of injury or death in ATV-related crashes involving an adult-sized ATV. By state law, children under age 18 are prohibited from driving or riding on an ATV without a helmet on public land, and passengers may only ride on ATVs specifically designed for more than one person. Even with these laws in place, the rate of injury for young ATV riders in Oklahoma is high because the ATV law only applies to use on public land; most ATV injuries in Oklahoma take place on private land. One method of combating the high rate of ATV-related injury is targeted safety education to produce behavioral changes.

Current Status

The Injury Prevention Service (IPS) has partnered with Ride Safe Oklahoma to provide ATV safety and injury prevention education through the ATV Safety Institute (ASI). The program provides education to children and adults throughout the state of Oklahoma. From 2013 to 2015, at least one ATV Safety program was conducted in 64 of the 77 counties in Oklahoma, reaching over 470,000 youth and adults. Programming included online classes, classroom-based training, hands-on rider courses, educator training, and instructor licensing courses. The IPS has an ASI instructor on staff who represents the IPS on the Ride Safe Oklahoma committee.

Five-Year Plan

The IPS will continue to maintain its partnership with Ride Safe Oklahoma. The IPS instructor, in conjunction with Ride Safe Oklahoma, will continue to train educators in ATV safety curriculum and provide classroom-based ATV safety education. The IPS will also provide relevant data and reports to stakeholders. In order to expand knowledge and capacity throughout the state, the IPS will provide safety information at county, regional, and statewide ATV events and fairs.

2020 Goals

Increase the number of counties with at least one ATV Safety program from 64 in 2015 to 77 by 2020.

Decrease the number of ATV-related fatalities per year from 24 in 2014 to 18 by 2020.

Older Adult Falls Prevention

Prevalence

According to Oklahoma Vital Statistics death data and the Oklahoma Hospital Inpatient Discharge Database, falls result in the death of more than 350 older adults (65 years and older) and the hospitalization of approximately 7,000 older adults each year in the state. Acute care hospital charges alone total more than $250 million annually. Older adults account for nearly three-fourths of all fall-related hospitalizations. Fall-related hospitalization rates increase with age, with adults aged 85 years and older having hospitalization rates nearly three times higher than adults aged 75 to 84 (3,651.5 and 1,433.8 hospitalizations per 100,000 population, respectively, in 2013). Hospitalization rates are higher for females, while males have higher mortality rates.

As the older adult population doubles in size over the next decade, so will the burden of fall-related injuries (e.g., hip fractures and traumatic brain injuries). These injuries take a toll on not only the health and independence of Oklahoma's older adults, but also on the healthcare system and state resources/services.

Current Status

The Injury Prevention Service (IPS) collects and disseminates data from the Oklahoma Hospital Inpatient Discharge Database and Oklahoma Vital Statistics death data to assess trends in fall-related hospitalizations and deaths among persons 65 years and older in Oklahoma. Additionally, the IPS provides fall-related educational and programmatic information to Oklahomans 65 years of age and older and other stakeholders, in

addition to championing the *Tai Chi: Moving for Better Balance* (TCMBB) program. The TCMBB program is an evidence-based community fall prevention program designed to promote balance, strength, mobility, and confidence in older adults. Program participants can reduce fall risk by up to 55%, and the program can be modified and tailored to meet the individual participant's needs. The IPS conducts instructor trainings across the state, with particular focus on communities with few or no instructors/classes. Technical assistance is provided to trained instructors on community implementation.

Five-Year Plan

To reduce the number of falls leading to injury death, the IPS will continue outreach efforts to provide fall-related educational and programmatic information to Oklahoma's older adults and champion the TCMBB program. The IPS will continue to collect and disseminate data to identify trends on fall-related hospitalizations and deaths among persons 65 years and older in Oklahoma. Collaborative partners addressing older adult falls prevention include county health departments, Turning Point partners, physicians, OU Medical Center, Area Agencies on Aging, Oklahoma Healthy Aging Initiative, home health agencies, rehabilitation providers, YMCAs, and other community organizations that work closely with persons 65 years and older. The IPS will maintain the Older Adult Falls Prevention Coalition, a subcommittee of the Oklahoma Injury Prevention Advisory Committee. In order to evaluate and expand the TCMBB program, the IPS will conduct at least three TCMBB instructor trainings per year and continue to provide technical assistance to TCMBB master trainers and teachers. The IPS will also continue to engage and mobilize community partnerships, participate in community activities around falls prevention, and promote evidence-based falls prevention programs.

2020 Goals

Stabilize the rate of unintentional fall-related injury deaths among persons 65 years of age and older at 86.4 per 100,000 population (2014 rate) by 2020.
Stabilize the rate of unintentional fall-related hospitalizations among persons 65 years of age and older at 1,289.7 per 100,000 population by 2020.
Expand TCMBB class coverage across the state by increasing the number of TCMBB trained instructors from 326 in 2015 to 626 by 2020.

Sports Concussion Prevention

Prevalence

According to the Centers for Disease Control and Prevention (CDC), between 2001 and 2012, there were approximately 3.42 million emergency department (ED) visits for a sports and recreation-related traumatic brain injury (TBI) or concussion. The rate of injury increased significantly during this time frame and mainly affected persons aged 0 to 19 years, who comprised 70% of all reported cases.

From 2010 to 2013, 662 children and young adults aged 0 to 24 years were hospitalized for a TBI related to sports and recreation in Oklahoma. The majority (73%) of these patients were male. Most injuries occurred during unorganized sports or recreation activities as opposed to organized games or practices. The most common sports and recreation-related activities resulting in an inpatient stay for a TBI were all-terrain vehicles (30%), cycling (17%), horseback riding (9%), football (7%), and skateboarding/riding on a scooter (7%). Of patients participating in an activity with recommended safety equipment, nearly half (49%) were not using any personal protective equipment (PPE); PPE use was unknown for more than one third (36%) of patients; and slightly more than 15% of patients were noted to use some form of PPE in the medical record.

A concussion is a type of TBI. It is a serious injury that can be caused by a bump or blow to the head. It can also be caused by a blow to the body that causes the head to move back and forth rapidly. Loss of consciousness may or may not occur; feeling dazed, seeing stars, getting your bell rung,

or getting lit up may be indicative of a concussion or head injury.

Children and youth participating in athletic sports are at risk for concussions and head injury. It is important to protect children from even minor concussions. Repeated or later concussions can result in damage to the brain affecting the child for a lifetime. Long-term cognitive or behavioral outcomes may result. Other serious consequences including brain swelling and even death can occur. Sports and recreation TBI can be minimized by using protective equipment, coaching safe sports-skills, adhering to the rules of play, and good officiating. Secondary injury can be minimized by recognizing the signs and symptoms of TBI and

taking the appropriate actions when TBI is suspected.

Current Status

The Oklahoma State Department of Health is currently working with partners to provide information on state legislation that requires all school districts and youth sports organizations/associations to develop policies and procedures to inform and educate coaches, game officials, team officials, athletes, and parents/guardians of the nature and risk of concussion and head injury. In addition, the legislation requires players suspected of sustaining a concussion to be removed from play and not returned until evaluated and cleared by a licensed health care professional (not the same day). Coaches, officials, and referees must undergo organized concussion training and school boards must implement a return to learn protocol. Additional stress to the brain from learning activities can cause a delay or set back in healing the brain. School policies on returning to learn are needed to support the conditions for optimal recovery from a head injury.

An IPS health educator currently conducts formal and informal trainings on concussion/head injury, including myths and facts surrounding head injuries, how to identify a concussion, and information on return to play after a suspected head injury. In the past year, 60 trainings have been conducted reaching nearly 900 Oklahomans. The health educator has utilized the Metropolitan Library System to offer trainings and also partners with schools, parent and community groups, and youth-serving organizations.

Five-Year Plan

The IPS will continue to advocate for statewide, centralized electronic ED discharge data. Although 145 children and young adults sustained sports or recreation-related TBI requiring hospitalization in 2013, many more likely visited an ED for treatment and/or management of concussion symptoms. In order to understand the magnitude of concussion/head injuries in Oklahoma, it is important to gather data from ED visits on the types of activities, severity of injuries, return to play procedures, and PPE used.

The IPS will create and regularly update concussion and head injury educational material for coaches, athletes, and parents/guardians on the signs and symptoms of concussion/head injury and the risk of continuing to practice or compete after sustaining a concussion/head injury. The CDC is currently producing provider guidelines for pediatric mild TBI. Once available, the IPS will promote the guidelines to Oklahoma health care providers and health systems. These educational efforts will improve awareness and understanding of concussion/head injury as a public health problem. These efforts will also encourage safe play and proper equipment use to reduce the burden of sports and recreation-related concussion/head injury and change social and cultural norms around sports and the seriousness of head injuries.

2020 Goals

Implement a statewide, centralized electronic emergency department discharge data system by 2020.

Expand IPS educational efforts on concussion prevention and management to include the majority of Oklahoma hospitals and health systems by 2020.

Injury Prevention Capacity and Response

Background

Given the substantial burden injuries and violence place on the health and well-being of Oklahomans of all ages, maintaining a comprehensive injury prevention program and qualified workforce is critical to appropriately recognizing and responding to emerging issues and disasters as they occur. Injury and violence prevention is most effective with a variety of integrated strategies based on multi-sector collaborations. Fragmented, isolated prevention strategies lack the network of partnerships and the broad promotion necessary for impact and sustainability. With a solid infrastructure in place and maintained over time, an injury prevention program is adaptable to changing situations, new threats, and emerging public health concerns. With appropriate training, public health professionals can become well-versed in the field of injury prevention and can apply key concepts and models from the world of disease prevention to injury-related issues. Among the areas that contribute to a strong statewide injury prevention program are:

- Well-developed skills in a dedicated injury prevention workforce
- Close coordination amongst a variety of partners to align efforts and strategies
- Integration of support for injury and violence prevention into larger systems (e.g., public health, health, urban planning, emergency response, research)
- Improved use of existing data and the design of systems to collect injury surveillance data

- Statutory authority for injury prevention
- Ability to make ongoing assessments and evaluations that lead to improvements and modifications
- Empowering communities to improve local capacity and implement injury prevention efforts
- Application of the science of injury prevention and public health to create real-world interventions to promote safety and health.

A state injury prevention program with a solid infrastructure and core funding provides focus and direction. Additionally, injury prevention is a diverse, multidisciplinary field, affecting all walks of life, many different professions, and almost any setting in which people live, work, or play. Coordinating these disparate agendas and finding common ground among different individuals and organizations are tasks best accomplished by a strong, stable, and comprehensive program. A solid infrastructure benefits the state by helping to reduce the burden of injury and violence.

Current Status

Since its inception in 1987, the Injury Prevention Service (IPS) has established a comprehensive injury prevention program that encompasses the core components of a state injury program, including collecting and analyzing injury and violence data; designing, implementing, and evaluating interventions; providing technical support and training; and affecting policy. The IPS utilizes the public health approach, a systematic framework for understanding and solving public health problems that progressively moves from defining/monitoring a problem to responding with effective interventions and evaluation. The IPS currently maintains a strong capacity for monitoring injury trends and conducting interventions and has a well-rounded staff of injury prevention professionals with expertise in surveillance; program planning, implementing, and evaluation; capacity building; and policy development. The current workforce annually engages in training opportunities to enhance personal development in the core competencies for injury and violence prevention and to develop subject matter expertise.

The IPS remains committed to data-driven program planning and to monitoring the burden of injuries and violence through ongoing data collection and analysis. The IPS currently collects detailed statewide morbidity and/or mortality surveillance data on unintentional poisonings, TBIs, violent deaths, burns/smoke inhalation, submersions, and disaster injuries. Injury indicator data are collected for 22 fatal and hospitalized injuries and shared with the CDC, among others, for the State Injury Indicator Reports. Special emphasis reports are produced on infant and early childhood injury, TBI, older adult falls, and drug overdoses. Data are disseminated in other reports and publications as well and used to inform program and policy planning, identify unique and emerging problems, and evaluate programs. The IPS has access to a variety of data sets, including Vital Statistics death data, hospital inpatient discharge data, and medical examiner data. The IPS is also a strong proponent for the development of a statewide, centralized emergency department discharge data system.

The IPS has significant experience conducting injury investigations after natural and man-made disasters. During its history as a program area, the IPS has conducted multiple studies related to the 1995 Oklahoma City bombing, including an acute injury investigation immediately after the event and multiple long-term follow-up studies in the subsequent years. Using that experience, the IPS assisted with the 1996 terrorist bombing of the Khobar Towers (Saudi Arabia). Beyond terrorism, the IPS has responded to natural disasters in the state (e.g., tornadoes, winter/ice storms, floods), characterizing the injuries

sustained and identifying ways to prevent them from occurring in future events.

Five-Year Plan

The IPS will maintain its capacity to identify and address injury and violence in the state with a competent workforce that engages in ongoing training and development opportunities. The IPS will continue to monitor the status of various injury- and violence-related topic areas through the calculation of injury indicators and specialized analyses using IPS surveillance data and secondary data sources. The IPS will develop an early childhood injury fatality surveillance system to better track and understand the circumstances surrounding deaths among children aged 0 through 5 years, including sleep-related deaths, and will continue to advocate for statewide, centralized emergency department discharge data. The IPS will design additional surveillance systems and conduct special studies as resources and needs warrant, or as disasters occur.

The IPS will focus on engaging and coordinating internal and external partners to continually strengthen and build a broad base of support for injury and violence prevention. The IPS will educate leaders, decision makers, communities, and the public about public health approaches to injury and violence prevention and will leverage resources to increase impact and sustainability of efforts. Finally, the IPS will work to implement this state strategic plan, *Injury Free Oklahoma, 2016-2020*, and use it as a guide to increase statewide capacity and response for injury and violence prevention.

2020 Goals

Maintain the capacity of the IPS to identify and respond to emerging injury issues through data collection/analysis and implementation of prevention strategies through 2020.
Maintain a qualified workforce of injury and violence prevention professionals by promoting and participating in training and development opportunities to enhance core competencies and subject matter knowledge base through 2020.
Develop and implement a statewide, centralized electronic emergency department discharge data system by 2020.

Key Indicators for Oklahoma Injury and Violence Prevention Program Planning

Overall

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking (2013)	Oklahoma Percent Change 2004-2013
Injury death (all ages)[1]	*Rate per 100,000 (age-adjusted)*	89.2	58.5	3	15%
Unintentional injury death (all ages)[1,] OKStateStat	*Rate per 100,000 (age-adjusted)*	62.5	39.2	2	14%
Intentional injury death (all ages)[1,] OKStateStat	*Rate per 100,000 (age-adjusted)*	24.2	17.9	7	16%

Violence

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking (2013)	Oklahoma Percent Change 2004-2013
Suicide[1]	*Rate per 100,000 (age-adjusted)*	17.3	12.6	12	20%
Homicide[1]	*Rate per 100,000 (age-adjusted)*	7.0	5.2	9	10%
Firearm injury deaths[1]	*Rate per 100,000 (age-adjusted)*	16.5	10.4	8	28%
Legal intervention[2]	*Rate per 100,000*	0.5	NA	NA	-3%
Undetermined intent[1]	*Rate per 100,000 (age-adjusted)*	2.4	1.4	10	62%
Lifetime prevalence of any intimate partner violence among women[3] *(2010)*	*Weighted percent*	49.1	35.6	NA	NA
Intimate partner homicide[2, 4]	*Weighted percent*	1.1	0.4	NA	-26%
Lifetime prevalence of rape of women[3] *(2010)*	*Weighted percent*	24.9	18.3	NA	NA
High school students physically assaulted by a dating partner[5]					
Males	*Weighted percent*	5.7	7.4	NA	NA
Females	*Weighted percent*	11.3	13	NA	NA
High school students physically forced to have sex[5]					
Males	*Weighted percent (percent change 2003-2013)*	2.9	4.2	NA	-36%
Females	*Weighted percent (percent change 2003-2013)*	9.5	10.5	NA	-21%

Prescription Drug Overdose/Poisoning

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking (2013)	Oklahoma Percent Change 2004-2013
Fatal unintentional poisonings[1]	*Rate per 100,000 (age-adjusted)*	19.1	12.2	5	53%
Fatal unintentional drug poisonings[1]	*Rate per 100,000 (age-adjusted)*	17.4	11.2	5	54%
Fatal drug overdoses (all intents)[1]	*Rate per 100,000 (age-adjusted)*	20.5	13.7	8	48%
Fatal unintentional poisoning due to prescription drugs [6, OKStateStat]	*Rate per 100,000 (age-adjusted)*	13.5	5.3	1	48%
Acute drug poisoning hospitalizations[7, OKStateStat]	*Rate per 100,000*	105.9	NA	NA	18%
Percent of adults who have taken prescription drugs without a doctor's prescription in the past 30 days.[8, OKStateStat]	*Percent*	1.8%	NA	NA	NA

Motor Vehicle Crash (MVC) Injury

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking (2013)	Oklahoma Percent Change 2004-2013
MVC fatalities (all ages)[9,10]	*Rate per 100,000*	17.6	10.3	6	-20%
MVC injuries (all ages)[9,10]	*Rate per 100,000*	875.7	731.7	NA	-27%
MVC fatalities children <8[9,10,11]	*Rate per 100,000*	4.0	1.3	6	-43%
MVC injuries children <8[9,10,11]	*Rate per 100,000*	307.1	NA	NA	-19%
MVC fatalities children <15[9,10,11, OHIP Child]	*Rate per 100,000*	4.1	1.4	3	-36%
MVC injuries children <15[9,10,11]	*Rate per 100,000*	335.9	300.9	NA	-29%
MVC fatalities 15-19[9,10, LSTAT]	*Rate per 100,000*	19.9	10.9	6	-54%
MVC injuries 15-19[9, LSTAT]	*Rate per 100,000*	1519.9	NA	NA	-44%
MVC fatalities 20+[9,10, LSTAT]	*Rate per 100,000*	21.2	12.5	4	-12%
MVC injuries 20+[9, LSTAT]	*Rate per 100,000*	964.3	NA	NA	-22%
Pedestrian fatalities[1]	*Rate per 100,000*	1.8	1.5	14	15%
Seat belt use[12]	*Percent*	84%	87%	NA	5%
Car/booster seat use 0-8[13,14, LSTAT]	*Percent*	87.8%	89% *(0-7)*	NA	NA

Falls

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking (2013)	Oklahoma Percent Change 2004-2013
Unintentional older adult fall deaths (65+)[1, LSTAT]	*Rate per 100,000*	81.6	56.9	10	141%
Older adult fall hospitalizations (65+)[15, LSTAT]	*Rate per 100,000 (2012 data)*	1290.0	NA	NA	8%

Traumatic Brain Injury

Indicator		Oklahoma (2013)	U.S. (2013)	Oklahoma's National Ranking* (2013)	Oklahoma Percent Change 2004-2013
TBI deaths[16]	*Rate per 100,000 (age-adjusted)*	23.8	16.3	8	-2%
TBI hospital discharges[17]	*Rate per 100,000 (age-adjusted)*	81.2	NA	NA	-13%
Infant (<1) hospital discharges from abusive head trauma[18]	*Rate per 100,000*	53.7	NA	NA	4%

NA = National data/ranking is not available.

Data sources referenced by number.

Shaded cells are performance measures for OKStateStat, Leadership Strategic Targeted Action Teams (LSTAT), or Oklahoma Child Health Improvement Plan (OHIP Child).

Key Indicator Data Sources

1. Centers for Disease Control and Prevention WISQARS (Web-based Injury Statistics Query and Reporting System) Fatal Injury Reports 1999-2013 (http://www.cdc.gov/injury/wisqars/).
2. Oklahoma State Department of Health, Injury Prevention Service, Oklahoma Violent Death Reporting System.
3. National Intimate Partner and Sexual Violence Survey: 2010 Summary Report, National Center for Injury Prevention and Control of the Centers for Disease Control and Prevention (http://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf).
4. Federal Bureau of Investigation, Uniform Crime Reports, Expanded Homicide Data Table 10, Murder Circumstances by Relationship, 2013. https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/.
5. Youth Risk Behavior Survey (YRBS), Youth Online: High School YRBS (https://nccd.cdc.gov/youthonline/App/Default.aspx).
6. CDC WONDER, Oklahoma and U.S. rates of unintentional poisonings due to prescription drugs, definition from *CDC. Vital signs: Overdose of prescription opioid pain relievers – United States, 1999-2008, MMWR 2011;60:1487-1492.*
7. Oklahoma Hospital Discharge Database, definition from *Safe States Consensus Recommendations for National and State Poisoning Surveillance.*
8. Oklahoma Behavioral Risk Factor Surveillance System, 2013.
9. Oklahoma Crash Facts, Oklahoma Highway Safety Office, Fatality and Injury Rates for 2004 and 2013. http://ok.gov/ohso/documents/2013FB_Fatality%26InjuryRates.pdf.
10. National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2013, was used to calculate U.S. rates. http://www-fars.nhtsa.dot.gov/Main/index.aspx.
11. National Highway Traffic Safety Administration, Fatality Analysis Reporting System, Traffic Safety Facts, publication DOT HS 812 154, June 2015.
12. National Highway Traffic Safety Administration, Traffic Safety Facts, publication DOT HS 812 030, May 2014. National and Oklahoma seat belt rates for 2013.
13. University of Central Oklahoma, Oklahoma Statewide Child Restraint Survey, September 2015. Report accessible from Oklahoma Highway Safety Office, http://ok.gov/ohso/Grants_and_Program_Areas/Program_Areas/Child_Passenger_Safety/.
14. National Highway Traffic Safety Administration, Occupant Restraint Use in 2013: Results from the National Occupant Protection Use Survey Controlled Intersection Study, publication DOT HS 812 080, January 2015.
15. Oklahoma Hospital Discharge Database. Used CDC Core VIPP State Injury Indicator Instructions for unintentional fall-related hospitalizations (E880–E886, E888).
16. CDC WONDER, definition from *State Injury Indicators Report, Instructions for Preparing 2013 Data.*
17. Oklahoma Hospital Discharge Database, definition from *State Injury Indicators Report, Instructions for Preparing 2013 Data.*
18. Oklahoma Hospital Discharge Database, definition from *Pediatric Abusive Head Trauma: Recommended Definitions for Public Health Surveillance and Research (broad definition).*