



Strategies For Building Safe Communities

Table of Contents

| | |
|---|-----|
| Acknowledgements | v |
| Dedication | vii |
| Foreword | ix |
| What You Should Know..... | 1 |
| Building Community Programs | 7 |
| Where You Can Go | 11 |
| What You Should Know About... | |
| Motor Vehicle Injury | 15 |
| Impaired Driving..... | 27 |
| Pedestrian Injury..... | 34 |
| Bicycle Injury..... | 39 |
| Unintentional Poisoning Injury | 46 |
| Fire and Burn Injury | 56 |
| Agriculture Injury | 65 |
| Unintentional Fall Injury | 76 |
| Suicide | 84 |
| Appendix A: State Profile..... | 94 |
| Appendix B: The Intervention Decision Matrix..... | 96 |
| Appendix C: Grant Writing 101 | 97 |

Acknowledgements

No project can be completed without the assistance and support of a significant number of people. Special credit must be given to Ronda James for research and the graphic design and layout of the document. Her hard work and tenacity is greatly appreciated. Special recognition must also be given to Nancy Green, Pam Archer and Tanika Davis for their contributions.

We would also like to thank the Commissioner of Health, James M. Crutcher, M.D., M.P.H., and the State Board of Health for mandating injuries as reportable conditions so that the data can be studied and the true impact of the injury problem can be determined.

We would also like to acknowledge the Centers for Disease Control and Prevention for funding injury prevention initiatives in Oklahoma.

Shelli Stephens-Stidham
Injury Prevention Service

Dedication

In February 2004, Sue Mallonee, R.N., M.P.H., was named Director of Scientific Affairs at the Oklahoma State Department of Health following 16 ½ years with the Injury Prevention Service. The Injury Prevention Service was created in 1987, and Sue was selected to lead the program.

Under her leadership, the Injury Prevention Service developed into a comprehensive injury prevention program and emerged as a leader in the field, gaining national and international recognition across the country.

It has been our privilege to stand shoulder-to-shoulder with her and share her vision. It is with pleasure that we dedicate this publication to Sue as an opportunity to acknowledge her contributions to injury prevention.

Shelli Stephens-Stidham

Pam Archer



*“What pleasure — to march in a parade which
shall always be remembered as you.”*

Reprinted from A Parade Named Leadership by Mary Anne Macy Bryce Lewis Radmacher 1999

Foreword


The faces of public health have been changing dramatically in the past 100 years. At the beginning of the 20th Century, the life expectancy for the average person was 46 years; today life expectancy has increased to 78 years. Improvements in sanitation, development of antibiotics and immunizations, and other public health measures made it possible to drastically reduce deaths and disability due to infectious disease. Unfortunately, not all children and young adults can be expected to live well into their 70s. These people will die from an injury.

Injury is the single leading killer and disabler 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.

"Accidents" are no longer a part of our terminology, because we know injuries are not random, uncontrollable acts of fate. Instead, they are understandable, predictable, and preventable. Oklahoma has established itself as a leader in the country in implementing and testing specific, community-based injury prevention measures. It is truly a promising and exciting challenge for all of us in public health as we strive to make an impact in reducing the burden of the injury problem.

Many local organizations and individuals can play a role in community-based injury prevention programs. *Injury Prevention Works: Strategies For Building Safe Communities* was developed to assist communities and local health practitioners in meeting the challenge of the injury problem in Oklahoma. It is our hope that it will be a useful tool, and that every community will join us in responding to the need to reduce this problem.

Shelli Stephens-Stidham
Injury Prevention Service



Safety and security don't just happen; they are
the result of collective consensus and public investment.

Nelson Mandela



Give the responsibility for prevention to the community and audience.

Injuries are not accidents; most can be predicted and therefore prevented. The individuals and the community own the conditions that lead to the injury problem. Therefore, the individuals and community have the responsibility for prevention. Respect the audience and plan projects that transfer responsibility for prevention to them. Provide the community and individuals with the awareness of the injury problem and information on how to prevent injuries. For example, the project personnel can install a smoke alarm in a home, but the occupant has to take the responsibility of keeping the alarm installed and functioning (i.e., leaving the battery in and changing the battery when needed) and practicing safety behaviors. Prevention is everybody's business.

References

1. Centers for Disease Control and Prevention. Surveillance for Fatal and Nonfatal Injuries, United States, 2001. *MMWR*. 2004;53 (SS-7):1-58.
2. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. *Web-based Injury Statistics Query and Reporting System (WISQARS)*. August 2004. Available from: <http://www.cdc.gov/ncipc/wisqars>. Accessed October 16, 2002.
3. Centers for Disease Control and Prevention. Medical Expenditures Attributable to Injuries, United States, 2000. *MMWR*. 2004;53(1):1-4.

- age groups affected
- race or ethnicity affected
- community geography and environment
- high risk occupations (i.e., farming)
- circumstances of the injuries
- effectiveness of injury prevention measures
- resources available for implementing prevention measures.

Step Four: Select the Population at Risk

Demographic information (see [Appendix A](#)) is useful for getting a clearer picture of the make-up of your community. Age, race, sex and other socioeconomic factors should be considered, as well as the ability to reach those most at risk. For maximum effect, focus your efforts on a specific sub-population, such as Native American children less than 5 years of age in a given city or county, or persons 65 years and older receiving county health department services.



Step Five: Select the Intervention

The surest route to success is by being realistic about your goals and subsequent selection of the most appropriate injury prevention projects and activities. Also consider what resources, including time, people, and money, are available. The best interventions have maximum impact on the intended population in a shorter amount of time and with the most effective use of your resources.

Interventions can be one of three types: education, legislation (enforcement), or technology/devices (engineering). The ideal program would contain aspects of all three, however, an injury intervention may target just one type. The *Intervention Decision Matrix* is a simple tool designed to identify intervention options and choose between them (see [Appendix B](#)). It can also identify long-term goals and intervention options that support each other. The seven elements of the Intervention Decision Matrix can be used as decision criteria when selecting an intervention: 1) effectiveness; 2) feasibility; 3) cost feasibility; 4) sustainability; 5) ethical acceptability; 6) political will; 7) social will; 7) potential for unintended benefits and potential for unintended risks.¹

Step Six: Determine Project Goals & Objectives

The importance of establishing goals and objectives cannot be overstated. Project goals and objectives will be used to guide and evaluate your

efforts. Goals should be clearly stated in measurable terms. Objectives tell you how to accomplish your goals. Goals and objectives should focus on preventing the injury from occurring and/or changing knowledge, attitudes and behaviors related to the injury. For example:

Project Goal: Increase the use of bicycle helmets by 25% among children 5-12 years of age in the intended population.

Project Objective 1: Ensure the availability of low-cost helmets.

Project Objective 2: Educate parents about the extent of bicycle-related head injuries.

Project Objective 3: Implement an elementary school policy requiring helmet use when riding bicycles to school.

Step Seven: Determine Project Strategies

The strategies you select for your injury prevention project will help you to accomplish your goals and objectives. Your strategies should be realistic and easily implemented within your community. This is a good place to utilize new and existing programs and coalitions to develop activities and ideas. For example:

Strategy 1: Distribute free or low-cost bicycle helmets at local events.

Strategy 2: Work with law enforcement and school officials to ensure compliance of a helmet policy.

Step Eight: Develop and Organize

Clearly identifying who will do what and when from the beginning will help the project run smoothly. Establish project goals and objectives, as well as a timeline for each aspect of the course of the project. Proper training and orientation of those involved will also make sure the project is administered consistently and runs smoothly.

Step Nine: Implement the Project

This is where the real fun begins. Once your project has been outlined and participants trained, you are ready to implement the project. Be sure to stick to your timeline and strategies, although these are not set in stone. If you should encounter a problem, then plans can be adjusted even as the project is being implemented. However, keep in mind your goals, objectives, and evaluation methods before making major adjustments.

National Data

WISQARS

WISQARS™ (pronounced "whiskers") is a powerful, interactive database that allows easy access to injury mortality data that can be used for research and policy decisions. Since its debut, WISQARS™—which stands for Web-based Injury Statistics Query and Reporting System—has provided researchers, policy makers, reporters and the public with customized reports about both unintentional and violent injuries. In October 2001, CDC expanded WISQARS™ to include national estimates of nonfatal injuries treated in hospital emergency departments. To access WISQARS, go to <http://www.cdc.gov/ncipc/wisqars/>

Fatality Analysis Reporting System

The Fatality Analysis Reporting System (FARS), managed by the National Highway Traffic Safety Administration (NHTSA), contains data about all fatal traffic crashes on public roadways within the 50 states, the District of Columbia, and Puerto Rico. FARS provides descriptions of each fatal crash reported, with more than 100 coded data elements that characterize the crash, the vehicles, and the people involved. For more information, go to <http://www-fars.nhtsa.dot.gov>.

National Electronic Injury Surveillance System

The National Electronic Injury Surveillance System (NEISS), operated by the U.S. Consumer Product Safety Commission (CPSC), provides injury data from inner city, urban, suburban, rural and children's hospitals. Originally, NEISS collected data only about nonfatal injuries related to consumer products and recreational activities. In July 2000, through a cooperative effort between CPSC and CDC, NEISS began collecting data about all nonfatal injuries treated in hospital emergency departments. For more information, go to <http://www.cpsc.gov/library/library.html>.

National Hospital Discharge Survey

The National Hospital Discharge Survey, administered by CDC's National Center for Health Statistics (NCHS), provides annual information about persons who are discharged from inpatient hospital care. NCHS gathers data annually from approximately 270,000 inpatient records acquired from a national sample of about 500 hospitals. Data include patient's age, sex, race, ethnicity, marital status and expected sources of payment; diagnosis; length of hospital stay; procedures performed; and condition at the time of discharge. For more information, go to <http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm>.

National Crime Victimization Survey

Run by the Bureau of Justice Statistics at the Department of Justice, the National Crime Victimization Survey provides nationally representative data about the frequency, characteristics, and consequences of crime in the U.S., including violent crimes such as rape, physical and sexual assault, and homicide. Survey data include type of crime, time and location of the crime, relationship between victim and offender, characteristics of the offender, consequences of the victimization, whether the crime was reported to the police and reasons for reporting or not reporting, and offender use of weapons, drugs, or alcohol. Basic demographic information is also included. For more information, go to <http://www.icpsr.umich.edu/NACJD/NCVS>.

National Uniform Crime Reports

More than 17,000 city, county, and state law enforcement agencies voluntarily participate in the nationwide Uniform Crime Reports system, managed by the Federal Bureau of Investigation. Data can be broken down by geographic areas, municipalities of varying population sizes and specific cities. For more information, go to <http://www.fbi.gov/ucr/ucr.htm>.

National Vital Statistics System

Each state must send information about deaths that occur within its borders to CDC's National Center for Health Statistics, which manages the National Vital Statistics System. For each death—including those caused by injuries and violence—the system contains information about the decedent's age, sex, race, ethnicity and education level, as well as information about the causes of death. For more information, go to <http://www.cdc.gov/nchs/nvss.htm>.

Physician Evaluation of Senior Drivers

Medical conditions and poor vision are commonly cited as reasons for seniors to stop driving. Physicians are respected members of a community and often considered a trusted, extended member of the family. To assist doctors in evaluation, the American Medical Association (AMA) has a guide available with a checklist for doctors to test patients' vision and motor skills. The guide also offers strategies for best persuading impaired older drivers to retire from the road. Alternatives for senior drivers, such as larger mirrors, hand gears and a steering wheel knob for arthritic patients, are also given. For more information on the Physician's Guide to Assessing and Counseling Older Drivers go to <http://www.ama-assn.org/ama/pub/category/10791.html>.

Graduated Driver Licensing

Graduated driver licensing (GDL) systems are designed to phase in beginning drivers to full driving privileges through a three-stage process as they mature and develop their driving skills, instead of the traditional approach in which a young driver gets unrestricted driving privileges after passing a test.²⁴⁻²⁶ Evaluations of these systems have demonstrated crash reduction impacts of up to 16% among Oregon males,²⁷ 5-9% in Maryland and California,²⁵ 9% in Canada,²⁷ and 8% in New Zealand.²⁸ In North Carolina, the number of fatal crashes among 16 year-old drivers dropped by 57% from 1996 - 1999, and the number of nonfatal injury crashes dropped by 27%.²⁹ In Michigan, overall crash risk for 16 year-olds was reduced by 25%.³⁰ Model GDL systems have a minimum age of entry (usually 15 1/2) and require one to two full years to complete a 3-tiered licensing program: learning stage, intermediate stage, and full licensure. Graduated licensing ensures that the initial driving experience is accumulated under lower-risk conditions, usually imposing a nighttime driving restriction and passenger limits for young novice drivers. In a 1994 report to Congress, NHTSA showed that driver's education alone did not significantly reduce crashes among teenagers.³¹

Limiting Cellular Phone Use While Driving

Based on a broad range of estimates for cell phone-related crashes, further scientific study is needed to determine the actual extent of such injuries. Limiting cell phone use to hands-free devices may not be enough. Current data suggests that legislative initiatives restricting handheld devices but permitting hands-free devices are not likely to reduce interference from the cognitive processes involved with maintaining a cell phone conversation.

State

- Oklahoma Highway Safety Office
405/523-1570
www.dps.state.ok.us/ohso
- Injury Prevention Service
Oklahoma State Department of Health
405/271-3430
www.health.state.ok.us/PROGRAMS/injury
- Oklahoma SAFE KIDS Coalition
405/271-5695
www.oksafekids.org

National

- National Highway Traffic Safety Administration
www.nhtsa.dot.gov
- National Center for Injury Prevention and Control
www.cdc.gov/injury
- National SAFE KIDS Campaign
www.safekids.org
- Safe Ride News
www.saferidenews.com
- Safe USA
www.safeusa.org
- Safety Belt Safe USA
www.carseat.org
- Boost America
www.boostamerica.org
- Children's Safety Network
www.childrenssafetynetwork.org
- Insurance Institute for Highway Safety
www.iihs.org
- Indian Health Service
www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm

