



National Injury and Violence Prevention Resource Center

Minnesota 2013 State Fact Sheet

Unintentional injuries and violence are the leading causes of death, hospitalization, and disability for children ages 1-18. This fact sheet provides a state snapshot of data on the injury-related Maternal and Child Health Block Grant National Performance Measures and Health Status Indicators, with a special focus on disparities based on race, gender, and rural/urban residence. The fact sheet is intended to be a helpful and easy-to-use tool for needs assessments, planning, program development, and presentations.

The Children's Safety Network (CSN) National Injury and Violence Prevention Resource Center, funded by the Maternal and Child Health (MCH) Bureau, works with states to utilize a science-based, public health approach for injury and violence prevention (IVP). CSN is available to provide information and technical assistance on injury surveillance and data; needs assessments; best practices; and the design, implementation, and evaluation of programs to prevent child and adolescent injuries.

Major Causes of Injury Death

Table 1: Leading Causes and Total 5-Year Incidence of Deaths by Age Group, Minnesota, 2006-2010

Rank	Age Groups					
	<1	1 - 4	5 - 9	10 - 14	15-19	20-24
1	Congenital Anomalies 473	Unintentional Injury 101	Unintentional Injury 64	Unintentional Injury 73	Unintentional Injury 366	Unintentional Injury 529
2	Short Gestation 257	Congenital Anomalies 48	Malignant Neoplasms 39	Malignant Neoplasms 35	Suicide 165	Suicide 258
3	SIDS 178	Malignant Neoplasms 32	Congenital Anomalies 15	Suicide 27	Homicide 75	Homicide 96
4	Maternal Pregnancy Comp. 112	Homicide 25	Heart Disease 10	Congenital Anomalies 14	Malignant Neoplasms 53	Malignant Neoplasms 83
5	Unintentional Injury 106	Heart Disease 18	Influenza & Pneumonia ****	Homicide 11	Heart Disease 22	Heart Disease 40

Note. **** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes.

Table 2. Leading Causes and Total 5-Year Incidence of Injury Deaths by Age Group, Minnesota, 2006-2010

Age Groups							
Rank	<1	1 - 4		5 - 9	10 - 14	15-19	20-24
1	Suffocation 86	Homicide 25		MV Traffic 27	MV Traffic 35	MV Traffic 244	MV Traffic 310
2	Homicide 18	MV Traffic 24	Suffocation 24	Drowning 13	Suicide 27	Suicide 165	Suicide 258
3	MV Traffic 11	Drowning 20		Homicide ****	Suffocation ****	Homicide 11	Homicide 75
4	Undetermined Suffocation ****	Fire/Burn ****		Fire/Burn ****	Other land transport ****	Poisoning 48	Homicide 96
5	Fall ****	Poisoning ****	Pedestrian, other ****	Other land transport ****	Drowning ****	Drowning 18	Drowning 24

Note. All mechanisms of suicide and homicide were combined according to intent. Each listed mechanism is unintentional except those otherwise noted. **** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes.

Major Causes of Hospital-Admitted Injuries

Table 3: Leading Causes and Annual Incidence of Hospital-Admitted Injuries by Age Group, Minnesota Residents, 2010

Age Groups						
Rank	<1	1 - 4	5 - 9	10 - 14	15-19	20-24
1	Other Specified, NEC 64	Fall 132	Fall 137	Self-Inflicted 159	Self-Inflicted 681	Self-Inflicted 499
2	Fall 37	Other Specified, NEC 51	Other Specified, NEC 38	Fall 133	MV Traffic 168	MV Traffic 218
3	Suffocation 26	Fire/Burn 47	Pedal Cyclist, Other 25	Struck By/ Against 67	Fall 164	Fall 206
4	Assault 23	Poisoning 45	MV Traffic 24	Other Specified, NEC 56	Assault 120	Assault 177
5	Unspecified 15	Struck By/ Against 31	Struck By/ Against 23	Pedal Cyclist, Other 36	Other Specified, NEC 100	Poisoning 116

Note: MV = Motor Vehicle. NEC = Not Elsewhere Classifiable. Source: Children's Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013. Incidence based on 2010 data from the state and obtained from the Minnesota State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ). These injuries exclude patients who were dead at the time of discharge, readmission cases, transfers (e.g., from another short or long-term care facility, different acute care hospital), medical misadventures, and/or who suffered non-acute injuries. All counts were based on the patients' state of residence.



Table 4: Leading Causes and Total Medical Cost in Thousands (\$1,000) for Hospital-Admitted Injuries by Age Group, Minnesota Residents, 2010

Rank	Age Groups					
	<1	1 - 4	5 - 9	10 - 14	15-19	20-24
1	Suffocation \$2,311	Fall \$1,999	Fall \$2,356	Fall \$3,461	MV Traffic \$5,888	MV Traffic \$6,868
2	Other Specified, NEC \$1,555	Other Specified, NEC \$1,238	Fire/ flame *	Struck By/ Against \$1,221	Fall \$4,211	Fall \$6,012
3	Assault *	Suffocation \$1,075	Suffocation *	Self-inflicted \$938	Self-inflicted \$5,799	Self-inflicted \$3,582
4	Fall \$664	Fire/ flame \$911	Unspecified \$428	Suffocation *	Transport, other \$2,491	Transport, other \$2,112
5	Unspecified *	Hot Object/ Substance \$497	Pedal cyclist, other \$402	Assault *	Struck By/ Against \$1,686	Motorcyclist \$1,930

Note: MV = Motor Vehicle. NEC = Not Elsewhere Classifiable. Source: Children's Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013. Incidence based on 2010 data from the state and obtained from the XYZ State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ). Costs presented are medical costs in thousands. These injuries exclude patients who were dead at the time of discharge, readmission cases, transfers (e.g., from another short or long-term care facility, different acute care hospital), medical misadventures, and/or who suffered non-acute injuries. All counts were based on the patients' state of residence.

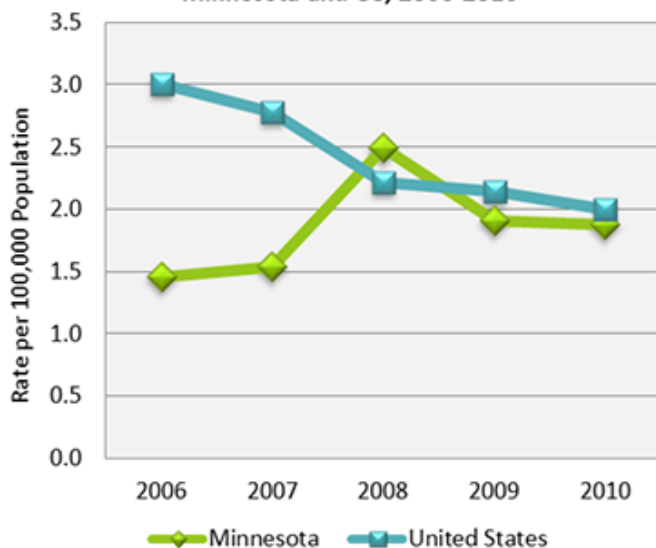
National Performance Measures

The Federal Maternal and Child Health Bureau Block Grant program requires State MCH programs to report on 18 National Performance Measures (NPM), two of which directly address injuries. NPM #10 addresses the rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children. NPM #16 addresses the rate (per 100,000) of suicide deaths among youths aged 15 through 19.

The following figures provide information related to NPMs #10 and #16.

NPM 10: Reducing Unintentional Motor Vehicle Deaths to Children Ages 0-14

Figure 1: Rate of Deaths Caused by Motor Vehicle Crashes, Children Aged 0 through 14, Minnesota and US, 2006-2010



Motor vehicle-related deaths remain a major cause of death for children 14 and under. Figure 1 shows the change in the rate of state motor vehicle-related deaths compared to the US rate from 2006-2010. Overall, the rate of death per 100,000 population declined steadily across the US during this period. Figure 2 provides a breakout of the fatalities by type distinguishing motor vehicle occupant deaths (of any vehicle type) from pedestrian and pedal cyclist fatalities. This information allows states to understand which types are responsible for most of the fatalities.

Figure 3 breaks out the fatalities by race and age group. There are considerable differences between races suggesting variations in social norms, safety practices, and the presence of risk factors, including child restraint system (CRS) or safety belt usage, alcohol involved crashes, and the use of helmets. Many factors may affect this variation. Figure 4 provides a breakdown of fatalities by gender and, although there is little variability between males and females for the 10-14 age group,

there is an increasing difference in the 15-24 age group. Figure 4 suggests that the female rate decreased for 20-24 year olds compared with the 15-19 year olds while male fatalities increased for 20-24 year olds.

Figure 2: Percentage Distribution of Motor Vehicle Traffic Fatalities by Type, Children Aged 0 through 14, Minnesota, 2006-2010

68% of children ages 0 through 14 involved in a motor vehicle fatality were occupants of the vehicle.

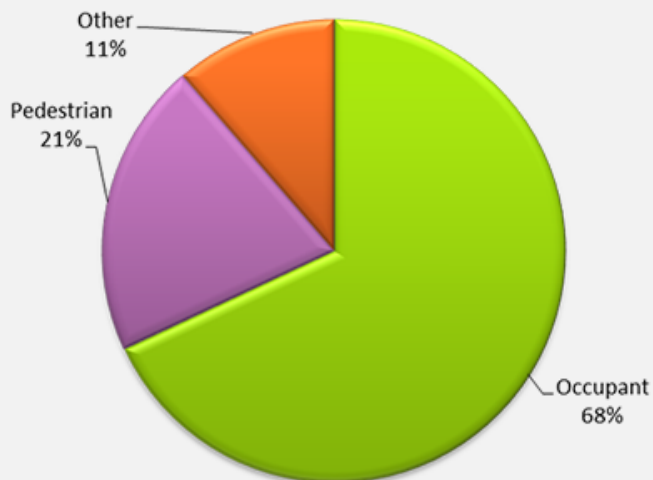


Figure 3: Motor Vehicle Traffic Fatality Rates by Race, Children and Youths Aged 0 through 24, Minnesota, 2006-2010

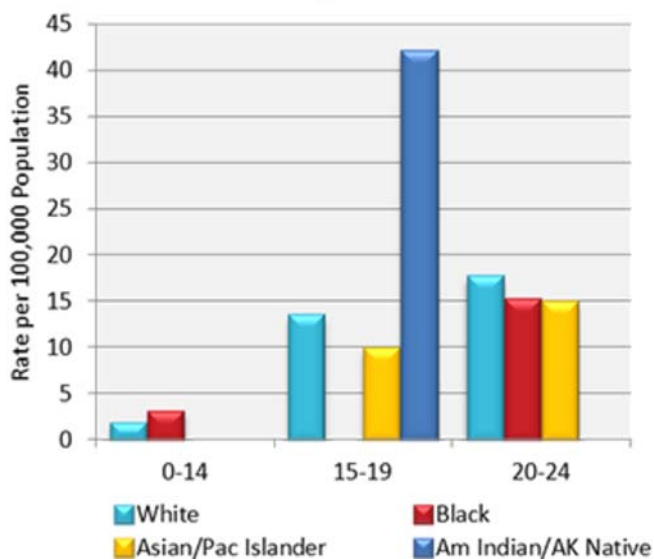
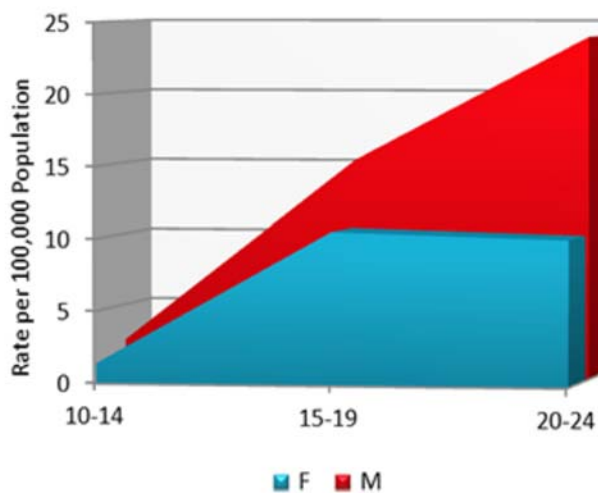


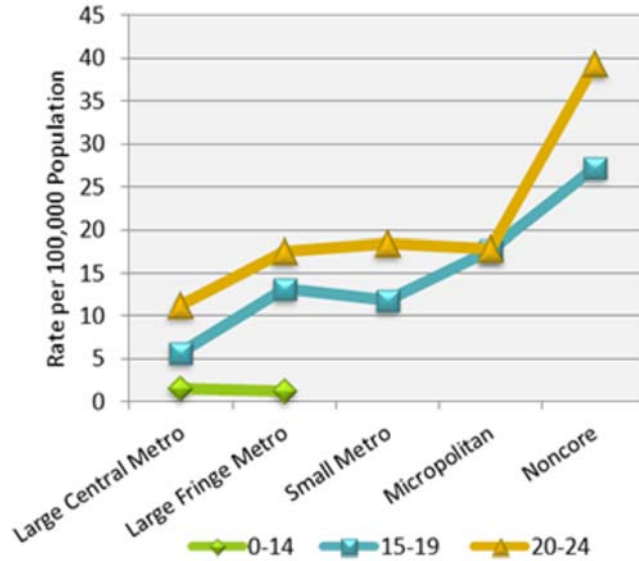
Figure 4: Motor Vehicle Traffic Fatality Rates by Gender, Children and Youths Aged 10 through 24, Minnesota, 2006-2010



One way of understanding disparities is to look at the rate of injuries by place of occurrence. To show this, CSN has provided the rates for the 0– 14, 15-19 and 20-24 age groups using the urban-rural classification system developed by the National Center for Health Statistics (NCHS). To show how injury rates vary by level of urbanization, a [table based on the classification system can be found here](#) and defines six levels of urbanization: large central metro, large fringe metro, medium metro, small metro, micropolitan, and noncore. Figure 5 shows how the rate varies by age group by place of occurrence/urban-rural setting. This information allows the state to better understand any disparity that may occur between the different settings. Data are provided only for those areas in which 20 or more deaths occurred.

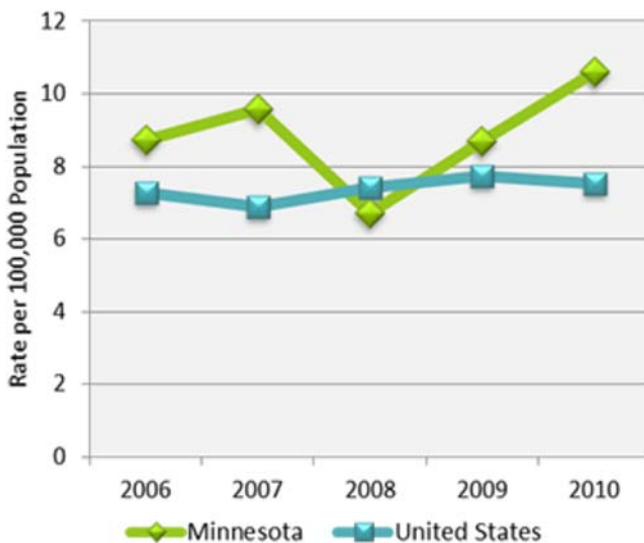
Many of these motor vehicle related deaths can be prevented through the implementation of a broad range of evidence-informed interventions and programs. These data are intended to provide a broad overview of the magnitude of the problem and to highlight possible disparities which may exist by race, gender, and urbanicity.

Figure 5: Motor Vehicle Traffic Fatality Rates by Urbanicity, Children and Youths Aged 0 through 24, Minnesota, 2006-2010



NPM 16: Reducing Suicide Deaths Among Teens Ages 15-19

Figure 6: Rate of Suicide Deaths, Youths Aged 15 through 19, Minnesota and US, 2006-2010

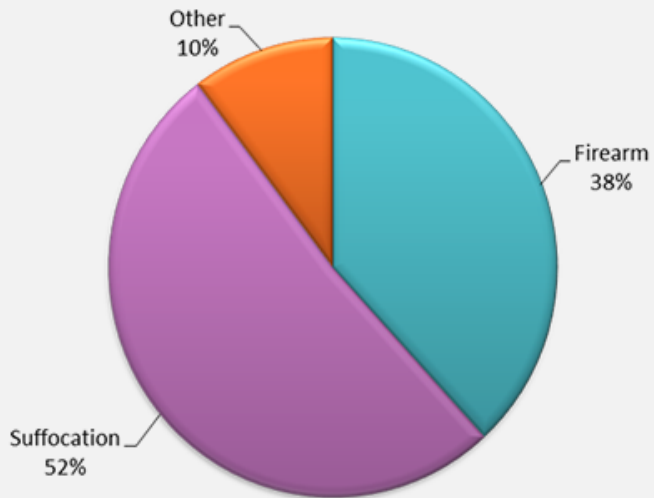


Suicide is the 4th leading cause of death and the 3rd leading cause of injury-related death among US youth 10-24 years of age. According to the 2011 Youth Risk Behavior Surveillance Survey (YRBSS), 15.8% of students seriously considered attempting suicide and 7.8% of students attempted suicide one or more times in the 12 months prior to the survey. Although progress has been made over the past decade in reducing the rate of completed suicides nationally, this reduction has leveled off in the last few years. The following figures provide state-specific data related to suicide. Figure 6 shows the state rate from 2006-2010 for 15-19 year olds in comparison to the US rate for the same age group and time period. Figure 7 provides information on the means used by the 15-19 year olds for completed suicides. It is important to note that the actual number of suicides is often quite small thus resulting in considerable variation when looking at year to year rates.



Figure 7: Percentage Distribution of Completed Suicides by Means, Youths Aged 15 through 19, Minnesota, 2006-2010

52% of youth ages 15 through 19 completed suicide by using suffocation.



Figures 8 & 9: Minnesota does not have YRBSS data.

Figure 10: Rate of Completed Suicides by Race, Youths Aged 15 through 24, Minnesota, 2006-2010

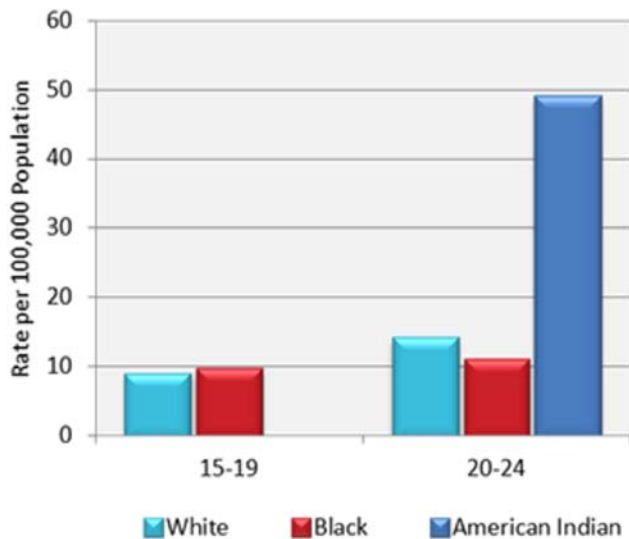
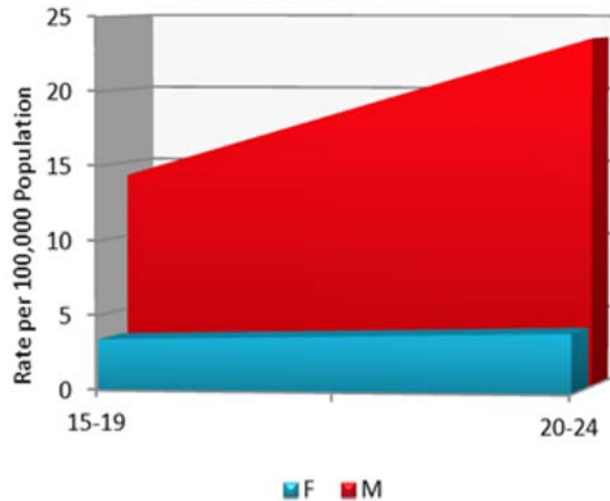


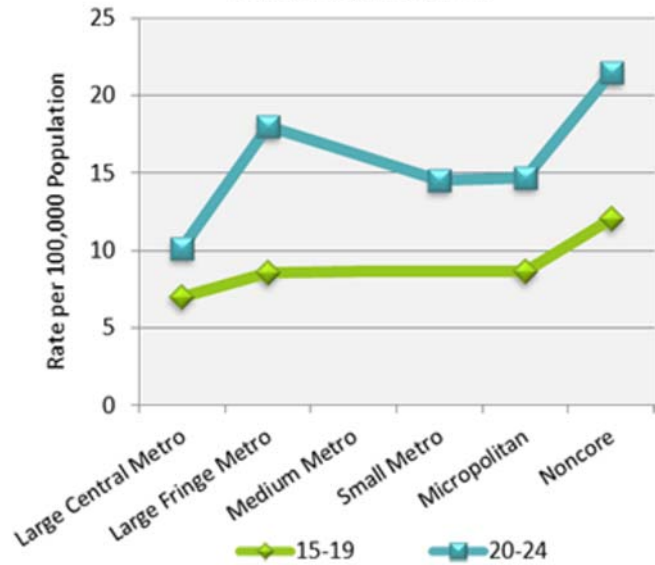
Figure 11: Rate of Completed Suicides by Gender among Youths Aged 15 through 24, Minnesota, 2006-2010



The YRBSS provides information about behaviors that contribute to unintentional and intentional violence among youth.

Figure 10 shows how the rate differs by race for 15-19 and 20-24 year olds from 2006-2010. Figure 11 shows the difference by gender for the same age group and time period with the male rate for both age groups exceeding the female rate. Figure 12 looks at the variation in rate by urbanicity for 15-24 year olds with the rate increasing as rurality increases (see definition of urbanicity in Motor Vehicle section). This information provides a better understanding of the magnitude of the problem in different parts of the state, helping the state to identify environmental risk factors and facilitate decision making on where to target its suicide prevention efforts.

Figure 12: Rate of Completed Suicides by Urbanicity, Youth Aged 15 through 24, Minnesota, 2006-2010



IVP Health Status Indicators

The Maternal and Child Health Bureau requires every state to report on 12 Health Status Indicators. Six of the indicators are related to IVP. The two figures below reflect the data reported for the IVP Health Status Indicators by the state in their Maternal and Child Health Block Grant Application Form 17, 2012.

Figure 13: Nonfatal Injury Health Status Indicators, Minnesota, 2007-2011

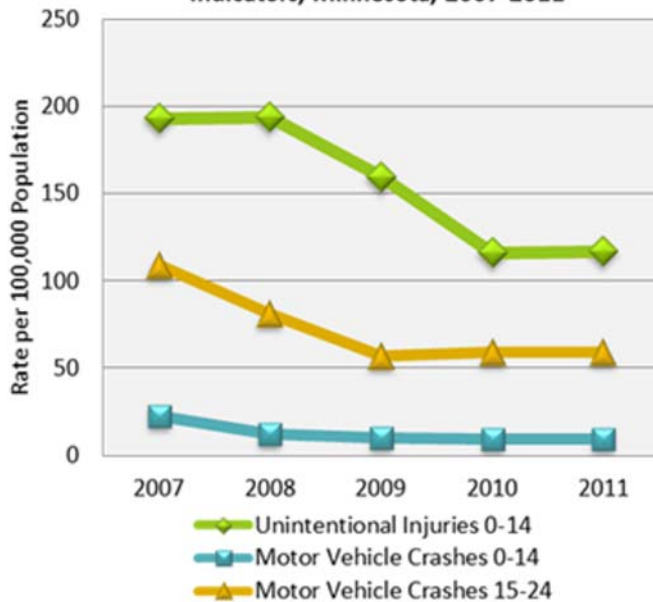
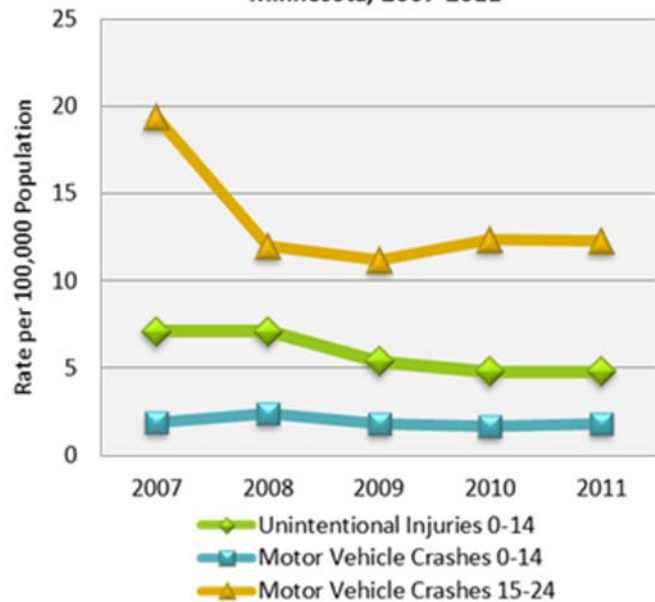


Figure 14: Fatal Injury Health Status Indicators, Minnesota, 2007-2011



State Specific Performance Measures and Priority Needs

Each state develops up to 7 – 10 State Performance Measures and priority needs. The following provides information about the states' selected 2013 injury-related performance measures and priority needs.

Minnesota has the following injury-related State Performance Measures:

- Reduce the incidence rate of child maltreatment reports per 1,000 children ages birth through 17 years.
- Increase the percentage of participants in Minnesota's family home visiting program referred to community resources that received a family home visitor follow-up on that referral.

Minnesota has the following injury-related Priority Need:

- Reduce child injury and death.

State Contact Information

MCH Director: Susan Castellano, susan.castellano@state.mn.us

IVP Director: Mark Kinde, mark.kinde@state.mn.us

PRAMS Coordinator: Cheryl Barber, cheryl.barber@state.mn.us

EMSC Contact: Kjelsey "Chelsea" Kluge, kjelsey.kluge@childrensmn.org and Kristi Moline, kristi.moline@childrensmn.org

CDR Coordinator: Ruth Clinard, ruth.a.clinard@state.mn.us

Adolescent Health Coordinator: Sara Hollie, sara.hollie@state.mn.us

State Fact Sheets Figure & Table Source Data

Table 1 Source: [WISQARS Leading Causes of Death Reports, 2006-2010](#)

Table 2 Source: National Center for Health Statistics, Multiple Cause of Death Data, 2006-2010

Table 3 Source: Children's Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013.

Table 4 Source: Children's Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013.

Figure 1 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 2 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 3 Source: [WISQARS Injury Mortality Reports, 2006-2010](#)

Figure 4 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 5 Source: [CDC WONDER Multiple Cause of Death data, 2006-2010 and Urban-Rural Definition Classification System](#)

The classification scheme can be found at: <http://wonder.cdc.gov/wonder/help/CMF/Urbanization-Methodology.html>. 2006 NCHS Urban-Rural Classification Scheme for Counties, by Deborah D. Ingram and Sheila Franco.

Figure 6 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 7 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figures 8 & 9 Source: [Youth Online: High School Youth Risk Behavior Survey \(YRBS\), 2003-2011](#)

Figure 10 Source: [WISQARS Injury Mortality Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 11 Source: [WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007](#)

Figure 12 Source: [CDC WONDER Multiple Cause of Death data, 2006-2010 and Urban-Rural Definition Classification System](#)

Figures 13 & 14 Source: [HRSA, Title V Information System Multi-Year Report](#). Some states may have changed their method of calculation.

About Children's Safety Network

The Children's Safety Network (CSN) National Injury and Violence Prevention Resource Center, funded by the Maternal and Child Health (MCH) Bureau, works with states to utilize a science-based, public health approach for injury and violence prevention (IVP). CSN is available to provide information and technical assistance on injury surveillance and data; needs assessments; best practices; and the design, implementation, and evaluation of programs to prevent child and adolescent injuries.

In this fact sheet CSN provides a cursory review of the injury morbidity and mortality data available for the state. The figures and tables in this fact sheet can help you understand the state's progress in addressing motor vehicle traffic injuries and suicide. To target and address these and other injury issues, it is critical to understand this data. CSN can assist you in conducting detailed data analyses, utilizing surveillance systems, and undertaking needs assessments. For assistance, contact the Children's Safety Network at csninfo@edc.org.

Connect with the Children's Safety Network

43 Foundry Avenue Waltham, MA 02453-8313

CSN's website: <http://www.ChildrensSafetyNetwork.org>

CSN on Facebook: <http://www.facebook.com/childrenssafetynetwork>

CSN on Twitter: <http://www.twitter.com/childrenssafety>

Register for the CSN newsletter: <http://go.edc.org/csn-newsletter>

Need TA? Have Questions? E-mail: csninfo@edc.org

CSN is funded by the Health Resources and Services Administration's Maternal and Child Health Bureau (U.S. Department of Health and Human Services). A project of the Education Development Center, Inc.

January 2013



Connect with The Children's Safety Network