

# Injury Assessment for Travis County

*Prepared by: Doug Ballew, Austin/Travis County HHSD Injury Prevention Program*

**The Austin/Travis County Health & Human Services Department's Injury Prevention Program** is dedicated to improving community health and well-being by building momentum for effective injury prevention. Injury prevention means taking action to prevent injuries before they occur. The Program's work is characterized by a strong commitment to community participation and promotion of equitable health outcomes among all social and economic groups. Our mission is to reduce the frequency and severity of injuries by adopting evidence-based programs and by assisting community partners with incorporating injury prevention strategies into their regular on-going efforts.

The first step toward building a stronger injury prevention program in Travis County is to assess the injury problem locally. This assessment will first look at injuries nationwide, then statewide, and finally data pertinent to Travis County. Both intentional and unintentional injuries will be analyzed. Ethnicity, age, and sex are important variables which are necessary to better understand who, how, and why people are injured. Severity of injury will also be addressed. For every fatality due to an injury, there are many more whose injuries have a wide range of severity. Additionally, injuries that result in morbidity have a wide range of impacts on the individual, families, the health care system, etc.

## **Injuries in the U.S.**

Injuries have a substantial impact on the lives of individuals, their families and communities, and society. During 2011, in the U.S., a total of 187,464 injury-related deaths occurred, and during 2012, an estimated 31,743,028 persons with nonfatal injuries were treated in U S hospital emergency departments. Injuries, including unintentional injuries, homicide, and suicide, are the leading cause of death for persons aged 1–44 years.

One of the most relevant means of assessing injury data is through Years of Potential Life Lost (YPPL), which takes into account the age of victims as well as the cause of death. YPPL is an estimate of the average years a person would have lived if he or she had not died prematurely. Injury is the leading cause of years of potential life lost before age 65. <sup>1</sup>

## **Injuries Among Young People**

Unintentional injuries and violence are the leading cause of death, hospitalization, and disability for children ages 1-18. In 2006, the number of injury deaths for children ages 1-18 was 12,538, and the number of nonfatal injury admissions to emergency departments and hospitals was 8.8 million. <sup>2</sup>

Among persons aged 1–34 years, unintentional injuries alone claim more lives than any other cause. In 2005, motor vehicle traffic fatalities accounted for 37.1% of unintentional fatal injuries, representing 43,667 deaths. Poisoning, suffocation,

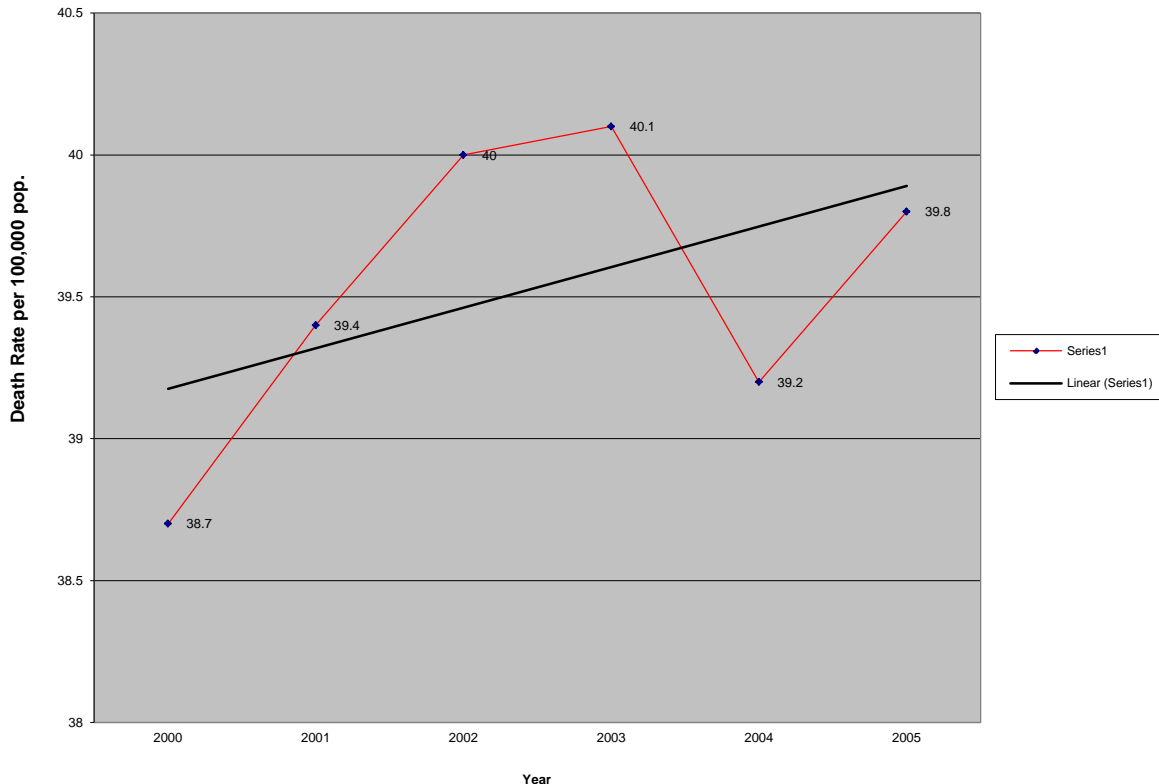
drowning, falls, and fire each accounted for a substantial proportion of unintentional injury deaths.<sup>3</sup>

The impact of injuries resulting from violence is also substantial. Homicide is the second leading cause of death for persons aged 15–24 years and the third and fourth leading cause for every other group aged 1–34 years. Suicide is not only the 11th leading cause of death across all ages, but it ranks second for persons aged 25–34 years and third for those aged 15–24.

## Injuries in Texas

The following graph shows that the rate of unintentional injuries in Texas increased from 38.7 deaths per 100,000 population to 39.8 deaths per 100,000 population between 2000 – 2005.

Death Rate per 100,000 Population Due to Unintentional Injuries in Texas



Source: Texas DSHS

One of the most relevant means of assessing injury data is through Years of Potential Life Lost (YPLL), which takes into account the age of victims as well as the cause of death. YPLL is an estimate of the average years a person would have lived if he or she had not died prematurely. In YPLL in Texas, injuries account for 30.7% or 288,112 YPLL among Texans who die as a result of injuries. Injuries are the leading category in YPLL.

# Years of Potential Life Lost Before Age 65 (YPLL) Texas, 2011

## Leading Causes of Premature Death

Total Population								
Cause	Total		White**		Black		Hispanic	
	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*
<b>Total</b>	<b>886,387</b>	<b>38.63</b>	<b>437,919</b>	<b>40.00</b>	<b>162,778</b>	<b>57.65</b>	<b>285,690</b>	<b>31.16</b>
Accidents [Injuries]	177,299	7.73	94,581	8.64	20,451	7.24	62,268	6.79
Malignant Neoplasms [Cancer]	134,603	5.87	75,641	6.91	21,889	7.75	37,073	4.04
Diseases of the Heart	104,323	4.55	56,605	5.17	24,058	8.52	23,660	2.58
Conditions Arising in Perinatal Period	67,076	2.92	20,584	1.88	16,125	5.71	30,367	3.31
Intentional Self-Harm [Suicide]	58,326	2.54	40,527	3.70	4,207	1.49	13,593	1.48
Congenital Malformations	40,064	1.75	14,231	1.30	5,768	2.04	20,066	2.19
Assault [Homicide]	38,956	1.70	10,636	0.97	13,810	4.89	14,510	1.58
Chronic Liver Disease and Cirrhosis	24,843	1.08	13,019	1.19	1,901	0.67	9,924	1.08
Cerebrovascular Disease [Stroke]	19,643	0.86	8,349	0.76	4,672	1.65	6,622	0.72
Diabetes Mellitus	18,067	0.79	8,296	0.76	3,857	1.37	5,914	0.65
All Other	203,189	8.86	95,452	8.72	46,042	16.31	61,695	6.73
Males								
Cause	Total		White**		Black		Hispanic	
	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*
<b>Total</b>	<b>558,719</b>	<b>48.42</b>	<b>276,953</b>	<b>50.38</b>	<b>95,809</b>	<b>69.30</b>	<b>185,958</b>	<b>39.92</b>
Accidents [Injuries]	127,317	11.03	66,547	12.11	13,542	9.80	47,228	10.14
Diseases of the Heart	70,513	6.11	39,380	7.16	14,407	10.42	16,726	3.59
Malignant Neoplasms [Cancer]	69,354	6.01	39,414	7.17	10,157	7.35	19,783	4.25
Intentional Self-Harm [Suicide]	46,632	4.04	31,920	5.81	3,507	2.54	11,206	2.41
Conditions Arising in Perinatal Period	36,985	3.21	11,512	2.09	9,095	6.58	16,379	3.52
Assault [Homicide]	30,938	2.68	7,922	1.44	11,288	8.16	11,728	2.52
Congenital Malformations	21,541	1.87	7,324	1.33	3,542	2.56	10,676	2.29
Chronic Liver Disease and Cirrhosis	17,042	1.48	8,192	1.49	1,193	0.86	7,657	1.64
Cerebrovascular Disease [Stroke]	10,860	0.94	4,401	0.80	2,415	1.75	4,045	0.87
Diabetes Mellitus	10,285	0.89	4,855	0.88	1,998	1.45	3,432	0.74
All Other	117,254	10.16	55,489	10.09	24,667	17.84	37,099	7.96

# Years of Potential Life Lost Before Age 65 (YPLL) Texas, 2011

## Leading Causes of Premature Death

Total Population								
Females								
Cause	Total		White**		Black		Hispanic	
	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*	YPLL	Rate*
<b>Total</b>	<b>327,668</b>	<b>28.73</b>	<b>160,967</b>	<b>29.53</b>	<b>66,969</b>	<b>46.48</b>	<b>99,733</b>	<b>22.11</b>
Malignant Neoplasms [Cancer]	65,249	5.72	36,227	6.65	11,733	8.14	17,290	3.83
Accidents [Injuries]	49,983	4.38	28,034	5.14	6,909	4.79	15,040	3.33
Diseases of the Heart	33,810	2.97	17,226	3.16	9,651	6.70	6,934	1.54
Conditions Arising in Perinatal Period	30,091	2.64	9,073	1.66	7,031	4.88	13,988	3.10
Congenital Malformations	18,523	1.62	6,907	1.27	2,226	1.55	9,390	2.08
Intentional Self-Harm [Suicide]	11,695	1.03	8,607	1.58	701	0.49	2,387	0.53
Cerebrovascular Disease [Stroke]	8,783	0.77	3,949	0.72	2,257	1.57	2,578	0.57
Assault [Homicide]	8,018	0.70	2,714	0.50	2,522	1.75	2,782	0.62
Chronic Liver Disease and Cirrhosis	7,801	0.68	4,827	0.89	708	0.49	2,267	0.50
Diabetes Mellitus	7,783	0.68	3,442	0.63	1,859	1.29	2,482	0.55
All Other	85,935	7.54	39,963	7.33	21,376	14.83	24,596	5.45

\*Rate for Years of Potential Life Lost Before Age 65 per 1,000 persons ages 0 - 64.

\*\*Includes Other and Unknown race/ethnicity. *Source: Texas DSHS*

**Leading Causes of Death by  
Race/Ethnicity  
Texas, 2011  
(Rates Per 100,000 Estimated  
Population)**

**LEADING CAUSES OF DEATH IN TEXAS - 2011 -- TOTAL**

<b>RANK</b>	<b>CAUSE</b>	<b>NUMBER</b>	<b>RATE</b>	<b>PERCENT</b>
	<b>All Causes</b>	167,997	654.3	100.0
1	Diseases of the Heart	37,955	147.8	22.6
2	Malignant Neoplasms	37,121	144.6	22.1
3	Accidents	9,301	36.2	5.5
4	Chronic Lower Respiratory Diseases	9,115	35.5	5.4
5	Cerebrovascular Diseases	9,058	35.3	5.4
6	Alzheimer's Disease	5,394	21.0	3.2
7	Diabetes Mellitus	5,060	19.7	3.0
8	Septicemia	3,420	13.3	2.0
9	Nephritis, Nephrotic Syndrome and Nephrosis	3,405	13.3	2.0
10	Chronic Liver Disease and Cirrhosis	3,093	12.0	1.8
	All Other Causes	45,075	175.6	26.8

Source: Texas DSHS

**FIVE LEADING CAUSES OF DEATH BY SEX AND AGE  
TEXAS RESIDENTS, 2011  
(Rates per 100,000 Population)**

MALE				FEMALE			
Cause	Deaths	Rate	Percent	Cause	Deaths	Rate	Percent
<b>AGES 1-14</b>							
ALL CAUSES	571	20.6	100.0	ALL CAUSES	389	14.7	100.0
1. Accidents [Injuries]	182	6.6	31.9	1. Accidents [Injuries]	125	4.7	32.1
2. Malignant Neoplasms [Cancer]	72	2.6	12.6	2. Malignant Neoplasms [Cancer]	53	2.0	13.6
3. Assault [Homicide]	55	2.0	9.6	3. Congenital Malformations	34	1.3	8.7
4. Congenital Malformations	44	1.6	7.7	4. Assault [Homicide]	22	0.8	5.7
5. Diseases of the Heart	23	0.8	4.0	5. Diseases of the Heart	20	0.8	5.1
All Other Causes	195	7.0	34.2	All Other Causes	135	5.1	34.7
<b>AGES 15-24</b>							
ALL CAUSES	1,892	97.3	100.0	ALL CAUSES	672	36.7	100.0
1. Accidents [Injuries]	896	46.1	47.4	1. Accidents [Injuries]	282	15.4	42.0
2. Intentional Self-Harm [Suicide]	322	16.6	17.0	2. Malignant Neoplasms [Cancer]	65	3.5	9.7
3. Assault [Homicide]	248	12.8	13.1	3. Intentional Self-Harm [Suicide]	59	3.2	8.8
4. Malignant Neoplasms [Cancer]	97	5.0	5.1	4. Assault [Homicide]	47	2.6	7.0
5. Diseases of the Heart	65	3.3	3.4	5. Diseases of the Heart	33	1.8	4.9
All Other Causes	264	13.6	14.0	All Other Causes	186	10.1	27.7

<b>AGES 25-34</b>							
ALL CAUSES	2,491	135.5	100.0	ALL CAUSES	1,146	63.5	100.0
1. Accidents [Injuries]	1,013	55.1	40.7	1. Accidents [Injuries]	288	16.0	25.1
2. Intentional Self-Harm [Suicide]	373	20.3	15.0	2. Malignant Neoplasms [Cancer]	156	8.6	13.6
3. Assault [Homicide]	276	15.0	11.1	3. Intentional Self-Harm [Suicide]	97	5.4	8.5
4. Diseases of the Heart	183	10.0	7.3	4. Diseases of the Heart	96	5.3	8.4
5. Malignant Neoplasms [Cancer]	124	6.7	5.0	5. Assault [Homicide]	58	3.2	5.1
All Other Causes	522	28.4	21.0	All Other Causes	451	25.0	39.4
<b>AGES 35-44</b>							
ALL CAUSES	3,445	197.7	100.0	ALL CAUSES	2,232	126.9	100.0
1. Accidents [Injuries]	790	45.3	22.9	1. Malignant Neoplasms [Cancer]	562	32.0	25.2
2. Diseases of the Heart	569	32.6	16.5	2. Accidents [Injuries]	350	19.9	15.7
3. Malignant Neoplasms [Cancer]	420	24.1	12.2	3. Diseases of the Heart	316	18.0	14.2
4. Intentional Self-Harm [Suicide]	393	22.5	11.4	4. Intentional Self-Harm [Suicide]	113	6.4	5.1
5. Chronic Liver Disease and Cirrhosis	151	8.7	4.4	5. Cerebrovascular Disease [Stroke]	87	4.9	3.9
All Other Causes	1,122	64.4	32.6	All Other Causes	804	45.7	36.0

Source Texas DSHS

## Injuries in Travis County

Travis County has a population of nearly 1 million people, of which 26% is under the age of 19. Residents of Travis County have an average life expectancy of 78.2 years compared to the median for all U.S counties of 76.5.

As in the U.S., injury is the leading cause of death among Travis County residents ages 1 – 44.

<b>Cause of Death</b>	<b>Travis County Rate</b>	<b>Peer County Range</b>	<b>U.S. Rate 2007</b> (age adjusted to the year 2000 standard population)	<b>Healthy People 2020 Target</b>
Unintentional Injury	23.5	14.3 - 33.0	40	36
Unintentional Suffocation Deaths Among Infants 0 to 12 mos.	N/A	N/A	22.5	20.3
Poisoning	N/A	N/A	13.1	13.1
Motor Vehicle crash	15	7.7 - 18.3	13.8	12.4
Suicide	12.9	5.7 - 15.8	11.3	10.2
Firearm-related	N/A	N/A	10.2	9.2

*Source: Austin/Travis County HHSD, HP2020. Rates are per 100,000 population.*

The following chart showing the leading causes of death in Travis County by ethnicity.



## Leading Causes of Death in Travis County

	White	Black	Other	Hispanic
<b>Under Age 1</b>				
Complications of Pregnancy/Birth	49%	42%	nrf	51%
Birth Defects	28%	30%	nrf	27%
<b>Ages 1-14</b>				
<b>Injuries</b>	<b>38%</b>	<b>30%</b>	<b>nrf</b>	<b>37%</b>
Cancer	17%	nrf	nrf	17%
<b>Homicide</b>	<b>nrf</b>	<b>10%</b>	<b>nrf</b>	<b>nrf</b>
<b>Ages 15-24</b>				
<b>Injuries</b>	<b>55%</b>	<b>30%</b>	<b>nrf</b>	<b>58%</b>
<b>Homicide</b>	<b>nrf</b>	<b>22%</b>	<b>nrf</b>	<b>11%</b>
<b>Suicide</b>	<b>17%</b>	<b>nrf</b>	<b>nrf</b>	<b>nrf</b>
Cancer	nrf	nrf	nrf	nrf
<b>Ages 25-44</b>				
<b>Injuries</b>	<b>31%</b>	<b>18%</b>	<b>39%</b>	<b>34%</b>
Cancer	14%	13%	26%	11%
Heart Disease	nrf	17%	13%	nrf
<b>Suicide</b>	<b>13%</b>	<b>nrf</b>	<b>13%</b>	<b>nrf</b>
HIV/AIDS	nrf	19%	nrf	nrf
<b>Homicide</b>	<b>nrf</b>	<b>nrf</b>	<b>nrf</b>	<b>nrf</b>
<b>Ages 45-64</b>				
Cancer	34%	30%	41%	24%
Heart Disease	18%	23%	15%	14%
<b>Ages 65+</b>				
Heart Disease	28%	29%	20%	27%
Cancer	21%	22%	33%	24%

nrf No report, fewer than 20 deaths in race/ethnicity and age group or less than 10% of the deaths.

nda No data available.

Local data are presented for the Nation's top leading causes of death in each age group. Percentages shown represent the deaths as a percentage of all deaths for each group. Columns, within age categories, do not total 100% because all causes of death are not listed.

The most complete ethnicity data available are reported.

Source: Austin/Travis County HHSD

<b>CAUSE OF DEATH 2011</b>	<b>T R A V E L I S</b>
All causes	4,615
Motor vehicle accidents	91
All other and unspecified accidents and adverse effects	339
Intentional self-harm (suicide)	105
Assault (homicide)	31
All other external causes	10

---

<sup>1</sup> National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at: <http://www.cdc.gov/ncipc/wisqars/>. Accessed July 30, 2008.

<sup>2</sup> Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC.

<sup>3</sup> CDC Injury Research Agenda 2009-2018

U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Center for Injury Prevention and Control Atlanta, Georgia, January 2009