

INJURY

Injuries are generally preventable causes of physical harm and include unintentional injuries or accidents as well as homicides, suicides, and other injuries such as complications in medical or surgical care. Most events that cause an injury are preventable.¹

HIP Year 2020 Health Objectives related to Injury:

Healthy Kids

- Reduce the substantiated child abuse rate for children under 18 years from 366 per 100,000 to 275 per 100,000.
- Reduce the sexual assault rate in females younger than 19 years of younger from 242 per 100,000 to 121 per 100,000.

Healthy Adults

- Decrease the annual domestic violence victim rate for adults from 611 per 100,000 to 427 per 100,000.
- Reduce the annual arrest rate for adults related to driving under the influence of drugs or alcohol from 362 per 100,000 to 272 per 100,000.
- Reduce the percent of self-reported drinking and driving among adults 18-34 years from 12% to 5%.

Healthy Older Adults

- Reduce the annual rate of hospitalizations due to falls for persons 65 years and older from 162 per 10,000 to 130 per 10,000.

Health Outcomes

All Injuries

Injury is the fifth leading cause of death in Washtenaw County for all ages. Injury is the leading cause of death for those 1 to 44 years. The average rate of deaths from injuries (2006-2010) in Washtenaw County is 24 per 100,000 residents. This is lower than the state (36 per 100,000) or the nation (39 per 100,000).²

In Washtenaw County, there was an increase in the number of fatal injuries from 2005 to 2010, as seen below. Traffic fatalities have decreased, but suicides have increased, and in particular, drug overdose fatalities now exceed motor vehicle deaths.³

Fatal Injuries, all causes

Fatal Injuries	2005	2006	2007	2008	2009	2010
All Fatal Injuries	126	126	118	142	146	157
Unintentional Injuries	73	60	67	82	85	77
Transport Fatal Injuries	32	25	22	34	32	21
Other Unintentional Injuries	41	35	45	48	53	56
Self-Inflicted Injuries/Suicide	27	30	24	26	28	44
Assault/Homicide	7	10	4	11	13	7
All Other Fatal Injuries	19	26	23	23	20	29

Source: Michigan Department of Community Health, Vital Statistics, 2005-2010.

Males in Washtenaw County have a higher age-adjusted injury mortality rate (31 per 100,000 population) than females in Washtenaw County (18 per 100,000), but lower than males in the state (49 per 100,000) or the nation (54 per 100,000).⁴

Suicide

In 2010, there were 44 deaths due to completed suicides in Washtenaw County. This represents a 60% increase over previous year (see table below). This increase appears to be driven by significant increases in suicides in persons 15-24 years, as well as in persons 65 years and older.⁵

**Number of suicides, 2005-2010
Washtenaw County, Michigan
Both Sexes, All Ages⁶**

	2005	2006	2007	2008	2009	2010
All Suicides	27	30	24	26	28	44

Source: Michigan Department of Community Health, Mortality Statistics, 2005-2010.

For more information on suicide and risk for suicide in Washtenaw County, see the Mental Health section in this report.

Motor Vehicle and Pedestrian Crashes

Motor vehicle crash deaths are preventable and they are a cause of premature death. In Washtenaw County, the rate of death due to motor vehicle crashes is 7 per 100,000 residents and is lower than the state (11 per 100,000) or the nation (13 per 100,000).⁷

In 2011, law enforcement agencies in Washtenaw County recorded 9,831 crashes, a decrease of 1% from 2010. There were 34 fatal crashes, resulting in 35 deaths, reported in Washtenaw County in 2011, compared to 20 fatal crashes in 2010. The agencies reporting the highest numbers of crashes include the Ann Arbor Police Department, the Washtenaw County Sheriff, and the Pittsfield Police Department, comprising together 81% of reported crashes in the county.⁸

From 2010-2012, there were 295 traffic crashes involving pedestrians. Of these crashes, 88% resulted in injury, and there were 12 pedestrian fatalities. In this same time period, there were 294 traffic crashes involving bicyclists. Of these crashes, 82% resulted in injury, and there were two bicyclist fatalities.⁹ Washtenaw County has a lower rate of pedestrians killed by motor vehicles per 100,000 residents (0.68 per 100,000) compared to the state (1.2 per 100,000) or the nation (1.38 per 100,000).¹⁰

Childhood Injuries

Injuries from trauma are the leading cause of death between the ages of 1 and 14 years nationwide and lead to temporary or permanent disability for millions of infants and children each year. According to the University of Michigan CS Mott Children's Hospital, every year nearly 500 children are admitted to this hospital as a result of a serious injury. Another 6,500 per year are treated for an injury in their Pediatric Emergency Department.¹¹

Child Abuse, Domestic Violence, and Sexual Assault

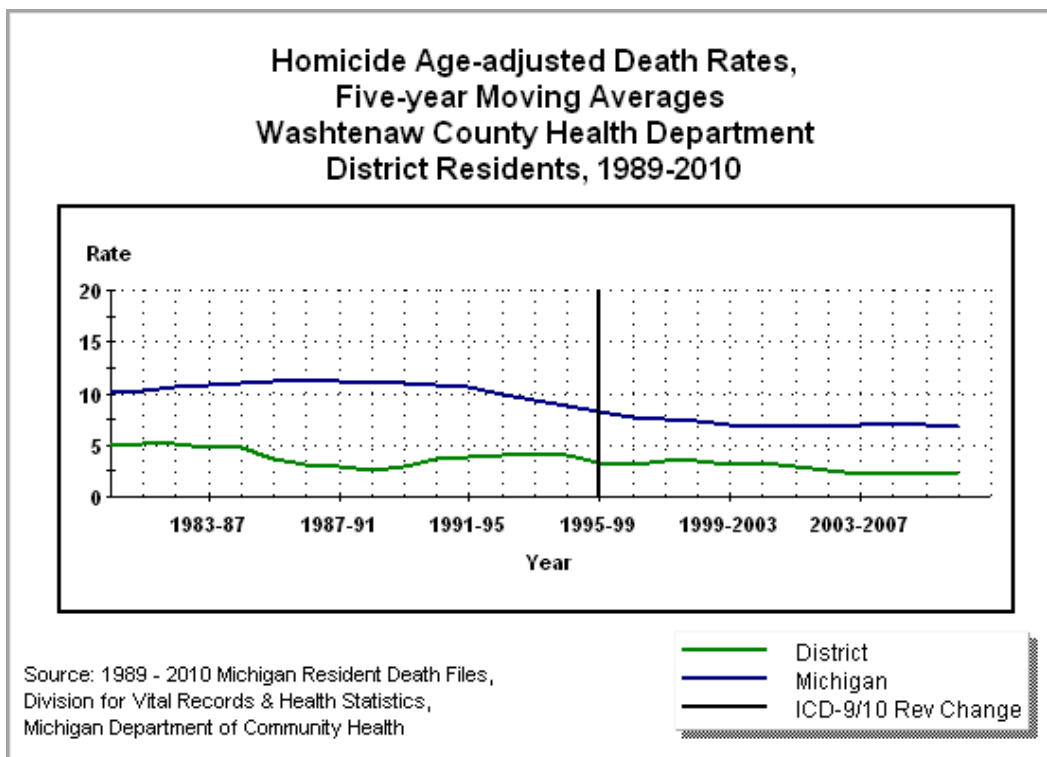
Between 2005 and 2010, the substantiated child abuse rate rose from 366 to 687 per 100,000 residents of the population.¹² During the same time period, domestic violence rates rose from 611 to 791 per 100,000, and the sexual assault rate in females 19 years or younger rose from 242 to 503 per 100,000.¹³

Falls

Fall injuries are more common among the elderly. There were 24 fatal falls in Washtenaw County in 2010, and 20 of them in residents 65 years or older.¹⁴

Homicide

The death rate due to homicide in Washtenaw County is 2 per 100,000 residents. This is lower than the state (7 per 100,000) or the nation (6 per 100,000).¹⁵ As indicated in the chart below, the death rate from homicide has declined from 1989 to 2010 in Washtenaw County and the state.



In 2010, six of the seven fatal assaults in Washtenaw involved firearms; five of the victims were male. Firearms were used in 72% of all homicides in Michigan in 2010.¹⁶

Health Factors

Health Behavior

Seat Belt Use

In Washtenaw County, 92% of adults reported consistently using a seatbelt.¹⁷

Drinking and Driving

The percentage of Washtenaw adults 18-34 that report drinking and driving has decreased from 12% in 2005 to 4% in 2010.¹⁸

According to the Washtenaw Area Transportation Study (2011)¹⁹, 3% of all crashes in Washtenaw County involved drivers under the influence of alcohol. However, drivers were under the influence of alcohol in 7% of crashes that caused injury and in 36% of fatal crashes (12 total fatalities). All of the alcohol-involved statistics are slightly up from 2010.

The annual arrest rate for adults driving under the influence of drugs or alcohol fell from 362 to 201 per 100,000 residents; this has likely contributed (along with the slowing of the economy) to the decrease in motor vehicle fatalities.²⁰

Firearms in the Home

Men are at increased risk of both suicide and homicide, especially involving firearms. In the 2010 HIP Survey, 32% of respondents reported a firearm in the home, 28% of women, and 36% of men. Of the 44 self-inflicted deaths recorded in 2010, most were among men (30) men, and 13 used firearms. Only one woman used a gun to kill herself. Washtenaw County Public Health is working with Physicians for the Prevention of Gun Violence and Washtenaw Alive to decrease both suicides and homicide deaths.

Clinical Care

Washtenaw County is home of two major hospitals, St. Joseph Mercy Health System and the UM Health System, both capable of treating severe injuries. The UM Health System is the State Burn Coordinating Center, and St. Joseph Mercy Health System is the burn surge facility, capable of accepting overflow patients when needed.

For children, UM CS Mott Children's Hospital has a Level 1 Pediatric Trauma Center, one of only three in Michigan. Clinical services include emergency, diagnostic, surgical, and acute care as well as comprehensive rehabilitation services.

Social and Economic Factors

Crime and Safety

The City of Ypsilanti had the highest number of crimes per capita in Washtenaw County in 2009 at rate of 169 per 1,000 residents compared to the county overall (72 per 1,000).²¹ According to the AnnArbor.com article, "Ypsilanti leads Washtenaw County in per capita crimes, according to data," by Tom Perkins (February 28, 2011):

"Municipalities with higher crime rates tend to have higher population densities, a younger population and higher poverty rates. The cities with younger populations also attract more common "nuisance" and petty crimes, such as alcohol-related offenses or malicious destruction of property complaints. Geography also plays a role, and municipalities in the eastern part of Washtenaw County generally reported higher rates than those in the western part."

Child Abuse

Research has identified a number of risk factors for child abuse. Parental substance abuse, parental stress and distress, marital conflict, domestic violence, poor parent child relationships, community violence, unemployment, poverty, and other socioeconomic disadvantages are some of the more commonly cited contributors.²²

Data Sources:

¹ Healthy People 2020.

² Centers for Disease Control and Prevention, National Vital Statistics System: 2006-10. Accessed using CDC WONDER. Accessed from www.chna.org.

³ Michigan Department of Community Health Vital Statistics, 2005-2010.

⁴ Centers for Disease Control and Prevention, National Vital Statistics System: 2006-10. Accessed using CDC WONDER. Accessed from www.chna.org.

⁵ Michigan Department of Community Health, Mortality Statistics.

⁶ Michigan Department of Community Health, Mortality Statistics.

⁷ Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed from www.chna.org.

⁸ The Washtenaw Area Transportation Study Annual Traffic Crash Report for Washtenaw County 2011.

⁹ Southeast Michigan Council of Governments, Traffic Crash Report.

¹⁰ National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2008-2010. Accessed from www.chna.org.

¹¹ University of Michigan CS Mott Children's Hospital website.

¹² Michigan Department of Human Services, 2005, 2010.

¹³ Michigan State Police, 2005, 2010.

¹⁴ Unintentional Fatal Injuries, 2005-2010 Washtenaw County Residents, Michigan Both Sexes, All Ages, Michigan Resident Death Files, Data Development Section, Michigan Department of Community Health.

¹⁵ Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed from www.chna.org.

¹⁶ Michigan Department of Community Health, Mortality Statistics.

¹⁷ HIP Survey, 2010.

¹⁸ HIP Survey, 2010.

¹⁹ The Washtenaw Area Transportation Study Annual Traffic Crash Report for Washtenaw County, 2011.

²⁰ Michigan State Police, 2005, 2010.

²¹ AnnArbor.com article "Ypsilanti leads Washtenaw County in per capita crimes, according to data," by Tom Perkins, dated February 28, 2011.

²² First Focus, Addressing the Needs of Vulnerable Families during an Economic Crisis, December 2008.