

The Big Picture Traffic Crashes



The driver, the roadway, and the motor vehicle contribute in some measure to every crash. A preponderance of evidence, however, points to driver error as a chief cause in the majority of crashes.

- There were 282,075 reported crashes, of which 868 were fatal, 51,672 were personal injury, and 229,535 were property damage only. Compared to 2009 this is a 3.1 percent decrease in total reported crashes, an increase of 7.7 percent in fatal crashes, a 1.2 percent decrease in personal injury crashes, and a 3.5 percent decrease in property damage crashes.
- 937 persons were killed as a result of the 868 fatal crashes for an average of 1.1 deaths per fatal crash.
- One out of every 10,548 persons in Michigan was killed in a traffic crash; one out of every 140 persons was injured.
- A traffic crash was reported every 1 minute and 52 seconds.
- One person was killed every 9 hours and 21 minutes as a result of a traffic crash.
- One person was injured every 7 minutes and 27 seconds in a traffic crash.
- For each person killed, 75.2 persons were injured in crashes.
- 5,980 persons received A-injuries. An A-injury is incapacitating. It prevents normal activities and requires hospitalization.

Information on the cost of crashes will be available from the National Safety Council later this year. Please check back then.

General Facts



According to the Michigan Department of Community Health, motor vehicle crashes are the leading cause of accidental death among persons aged 1 to 24 years old living in Michigan.

- 468,968 motor vehicles were involved in 282,075 reported crashes. 868 of these were fatal crashes. These fatal crashes resulted in 937 deaths, compared to the 871 deaths that were the result of 806 fatal crashes in 2009.
- Of the 937 motor vehicle deaths in 2010, 444 (47.4%) were drivers of vehicles, 168 (17.9%) were passengers in motor vehicles, 131 (14.0%) were pedestrians, 125 (13.3%) were motorcyclists, 29 (3.1%) were bicyclists, 18 (1.9%) were ORV/ATV operators, 9 (1.0%) were snowmobile operators, 9 (1.0%) were moped operators, 3 (0.3%) were gocart operators, and 1 (0.1%) was an operator of farm equipment.
- Of the 612 drivers and passengers killed, 220 (35.9%) were not wearing seatbelts and 322 (52.6%) were wearing seatbelts. It is unknown whether 70 (11.4%) of the fatalities were belted.
- 486 deaths resulted from 464 single vehicle fatal crashes.
- More male drivers are involved in crashes than female drivers. Of the 238,048 male drivers involved in crashes, 916 (0.4%) were involved in fatal crashes. Of the 197,183 female drivers involved in crashes, 374 (0.2%) were involved in fatal crashes.
- Excessive speed was reported by police as the hazardous action of 13.0 percent of the drivers in fatal crashes.
- Of all fatal crashes, 28.0 percent occurred at intersections.
- Most fatal crashes occurred on dry roadways (78.2%) in clear weather conditions (58.9%).
- The majority of all crashes occurred during daylight hours (60.6%). Dark conditions created the greatest hazard, as they were overrepresented in fatal crashes.
- In 2010:
 - More fatal crashes occurred between 3:00 and 5:59 PM than any other time period.
 - More fatal crashes occurred on Friday than any other day.
 - More fatal crashes occurred in August than any other month.

Children Age 0-15



The number one cause of accidental death for children ages 0-15 in Michigan is motor vehicle crashes.

According to figures provided by the Michigan Department of Community Health, accidental death for children in motor vehicle crashes routinely outpaces the next two most frequent causes: fire and drowning.

- 39 children (0-15 years old) were killed in motor vehicle crashes, including four drivers age 15. The 0-15 age group accounted for 4.2 percent of all traffic deaths.
- There were 52,789 licensed drivers below the age of 16 in 2010. 885 (0.2%) of these drivers were involved in crashes (nine in fatal crashes).
- In addition, 5,402 children were injured in motor vehicle crashes.
- Older children ages 11 to 15 had the lowest restraint usage (80.8%), as reported to police at the scene of a traffic crash.
- Children accounted for 3.8 percent of the pedestrians killed in Michigan in 2010, and 24.8 percent of all pedestrian injuries.
- Children under 16 years of age accounted for six (20.7%) of the bicyclist deaths in 2010.
- Of the 52,789 licensed drivers in the 0-15 age group, special licenses were issued to 158 moped operators.

Teens/Young Adults Age 16-20

Inexperience, risk-taking behavior, immaturity, and greater risk exposure (teens often drive at night with other teens in the vehicle) are all factors that increase crash risk for young drivers.

Teenagers and young adults ages 16-20 are disproportionately involved in motor vehicle crashes.

According to the Michigan Department of Community Health, three out of five accidental deaths for this age group are due to motor vehicle crashes.

- 100 persons (16-20 years old) were killed in motor vehicle crashes, including 53 (8.9%) drivers. The 16-20 age group accounted for 10.7 percent of all traffic deaths.
- In addition, 10,652 teenagers and young adults were injured in motor vehicle crashes.
- There were 521,467 licensed drivers ages 16-20 who represented 7.4 percent of Michigan's active driving population, yet the drivers in this age group represented 12.9 percent (60,721) of drivers in all crashes and 11.1 percent (147) of drivers in fatal crashes.
- Generally, younger drivers were involved in more shoulder/outside curb crashes and had a higher incidence of speeding, overturn, inability to stop in assured clear distance, collision with a ditch, and hitting a tree. They were less likely to be alone in their car at the time of the crash.
- Teenagers and young adults had the highest incidence of fatal crashes when their speed was too fast.
- The weekend had a higher involvement of teen and young adult drivers in all crashes when compared to older drivers.
- Teenagers and young adults accounted for 6.9 percent of the pedestrians killed in Michigan in 2010, and 14.1 percent of all pedestrian injuries.
- Two (6.9%) of the 29 bicyclist deaths in 2010 were in the 16-20 age group.

2010 Michigan Traffic Crash FACT SHEET



Findings show that older drivers rank lower in aggressive actions, rank higher in comprehension errors, tend to make necessary adjustments in their driving behavior (based on their own experience), and strongly desire to keep their cars to assure independence.

Safety problems for the older driver are directly tied to the aging process. Changes in vision, the ability to concentrate, and reaction time all contribute to driving errors.

- Drivers age 65 and older made up 16.8 percent of Michigan's active driving population. They represented 8.5 percent of all drivers in crashes and 14.1 percent of drivers in fatal crashes.
- There were 1,185,810 licensed drivers age 65 and older in 2010. 40,096 (8.5%) of these drivers were involved in crashes (187 in fatal crashes).
- Drivers and injured passengers age 65 to 110 had the highest restraint usage (95.7%), as reported to police at the scene of a crash.
- Older drivers were more involved in angle type crashes than younger drivers. Older drivers also had the highest incidence of failed to yield, disregard of traffic control, improper lane use, improper turn, and improper backing as a hazardous action in all crashes.
- 177 persons (65 and older) were killed in traffic crashes; 111 (62.7%) of them were drivers.
- In addition, 6,646 persons age 65 and older were injured in traffic crashes.
- 9:00 AM to 2:59 PM shows the highest involvement for senior drivers in all crashes when compared to the other two age groups.
- 19.8 percent of the pedestrians killed in Michigan in 2010 were age 65 and older; 5.6 percent of the pedestrians injured were age 65 and older.
- Four (13.8%) bicyclists killed in 2010 were over the age of 65.

2010 Michigan Traffic Crash FACT SHEET



Information regarding alcohol involvement was collected from all investigated fatal motor vehicle traffic crashes in Michigan during 2010. A fatal crash is alcohol-related if any driver, pedestrian, or cyclist involved was reported by the police officer on the Traffic Crash Report as "had been drinking."

Alcohol impairment has major effects on traffic safety.

- A total of 868 fatal crashes occurred in Michigan in 2010. 264 (30.4%) of those fatal crashes were alcohol-related.
- The fatality count of persons involved in alcohol-related fatal crashes was 283 in 2010. This accounts for 30.2 percent of the total number of persons killed (937).
- Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of fatalities is eight times higher than in all crashes and the most serious injury level (incapacitating) is 5.5 times higher.

- 68.6 percent of all alcohol-related fatal crashes involved one vehicle.

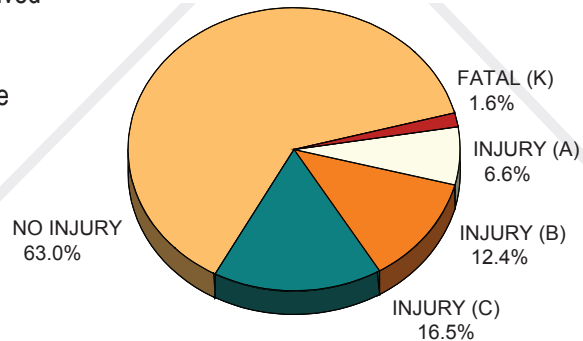
- Of the pedestrians killed in 2010, 27 deaths were the result of a had-been-drinking crash and 26 (96.3%) of these pedestrians had been drinking.

- Of the motorcyclists killed in 2010, 24 deaths were the result of a had-been-drinking crash and 22 (91.7%) of these motorcyclists had been drinking.

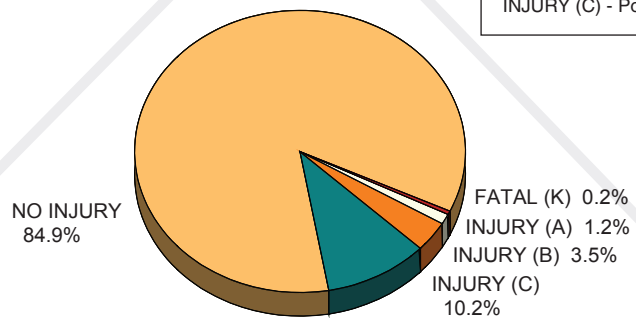
- Of the bicyclists killed in 2010, eight deaths were the result of a had-been-drinking crash and six (75.0%) of these bicyclists had been drinking.

- Of the snowmobilers killed on Michigan roadways in 2010, eight deaths were the result of a had-been-drinking crash and eight (100.0%) of these snowmobilers had been drinking.

OCCUPANTS IN HBD CRASHES



OCCUPANTS IN CRASHES

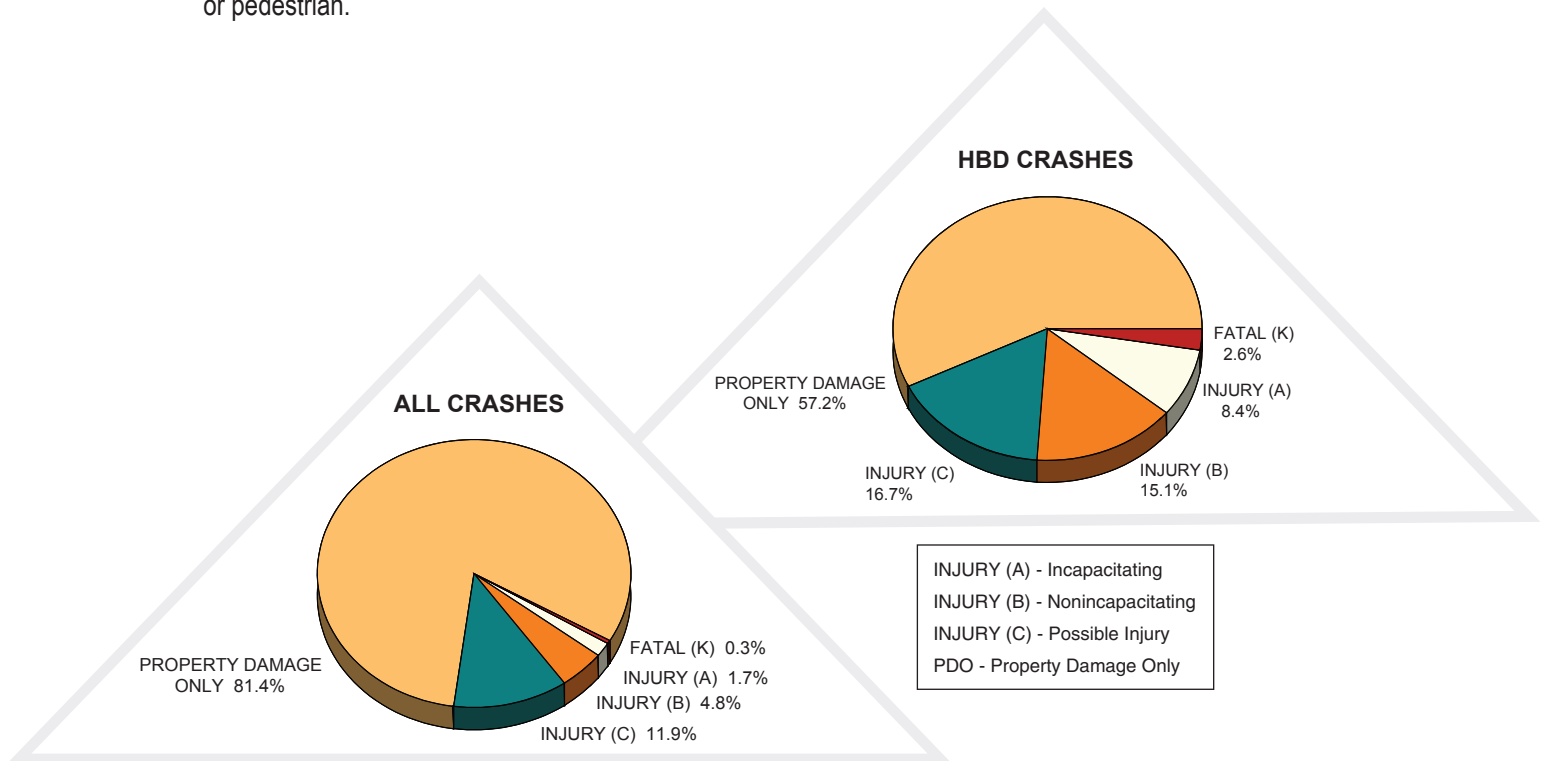


INJURY (A) - Incapacitating
 INJURY (B) - Nonincapacitating
 INJURY (C) - Possible Injury



Alcohol

- Had-been-drinking **injury** crashes peak on Saturday and Sunday, and in the hours between midnight and 2:59AM (a particularly hazardous travel period).
- In 2010, had-been-drinking **injury** crashes were highest in July (406) and August (412).
- The highest number of HBD **fatal** crashes, 31, occurred in August and October.
- The midnight to 2:59 AM time period had the highest rate of had-been-drinking **fatal** crashes (73.9%), while noon to 2:59 PM had the lowest rate (6.4%).
- The weekend had the highest proportions of alcohol-related **fatal** crashes.
- The severity of injuries is much worse for drivers and passengers who had been drinking.
- Of the 9,793 (gender reported) drinking drivers involved in crashes, 7,209 (73.6%) were male and 2,584 (26.4%) were female.
- 2,774 (28.3%) of the (gender reported) drinking drivers in crashes were age 24 and younger.
- 30.4 percent of all fatal crashes involved at least one drinking operator or pedestrian.



2010 Michigan Traffic Crash FACT SHEET

Bicycles

1,976 bicyclists were involved in motor vehicle crashes in Michigan in 2010.

29 bicyclists were killed on Michigan roadways in 2010, ten more than reported in 2009.

1,575 bicyclist injuries were reported to police agencies.

Males (1,509) were involved in more bicycle crashes than females (411). The male to female ratio of bicycle deaths was 3:1, with 22 male bicyclists killed and seven female bicyclists killed. Gender was not reported for 56 bicyclists.

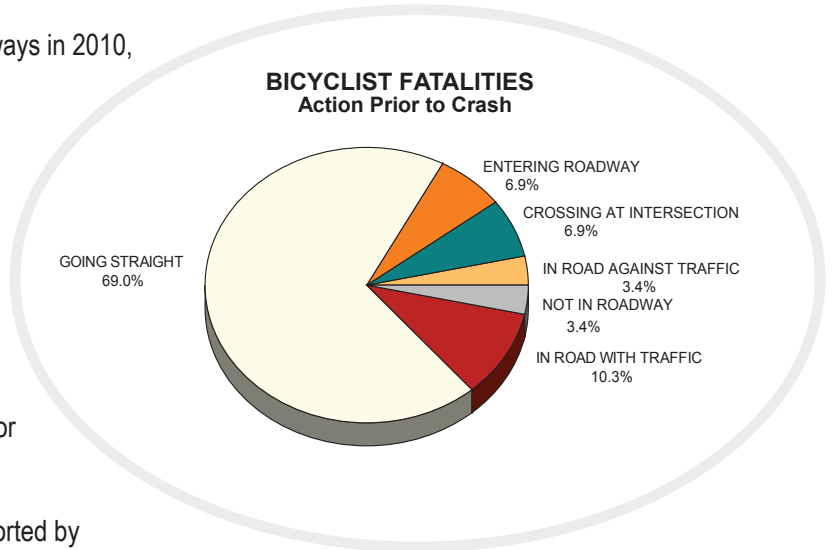
20 of the bicyclists killed (69.0%) were reported by police to be "going straight ahead" just prior to crash.

79.9 percent of all bicyclists in motor vehicle crashes and 14 of the 29 bicyclists killed were riding during daylight hours.

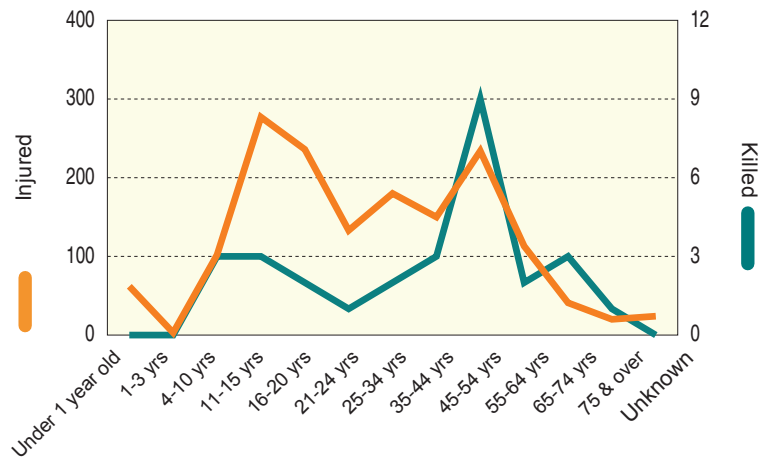
3:00 PM - 5:59 PM were the peak hours for bicyclist involvement in all crashes and injuries to bicyclists. 6:00 PM - 8:59 PM were the peak hours for bicyclist fatalities.

Of the 29 bicyclists killed in 2010, eight had been drinking and six (75.0%) of these bicyclists had been drinking.

20.7 percent of all bicyclist deaths occurred to children under 16 years of age. Children aged 11 to 15 years represented 10.3 percent of the total number of bicyclist fatalities. Adults aged 45-54 years represented 31.0 percent of the total number of bicyclist fatalities. Adults aged 65-74 years represented 10.3 percent of the total number of bicyclist

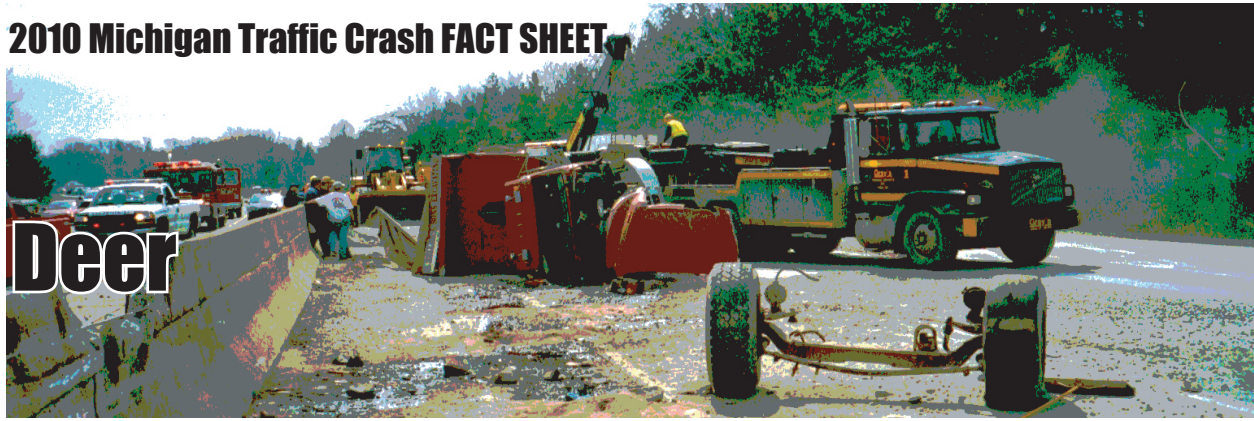


2010 BICYCLE CRASH INFORMATION



2010 Michigan Traffic Crash FACT SHEET

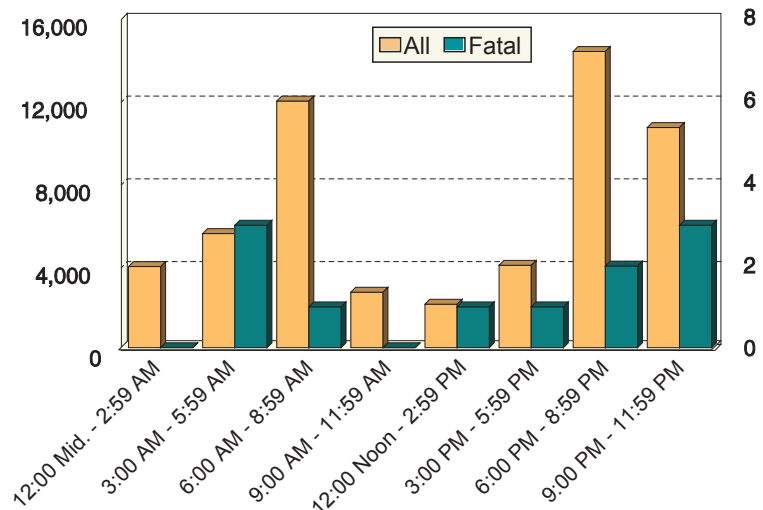
Deer



Motor vehicle-deer crashes occurred most often in Michigan's southern, heavily populated counties.

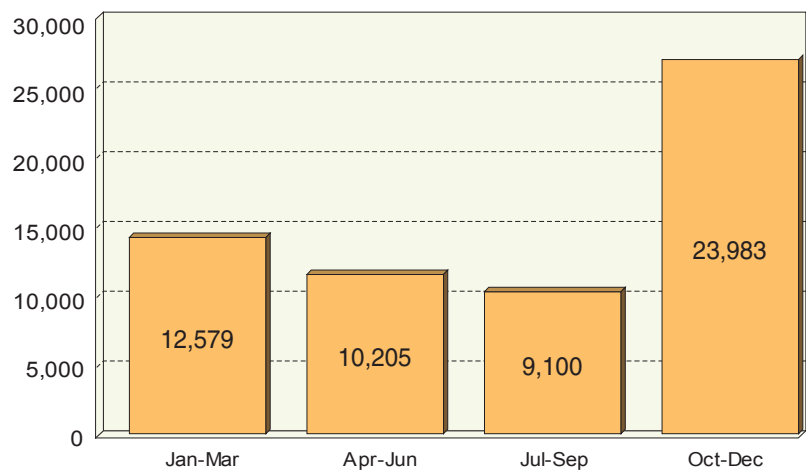
- Michigan had 55,867 reported motor vehicle-deer crashes during 2010. This is a 16.6 percent decrease over ten years.
- 71.5 percent of the vehicles involved in vehicle-deer crashes in 2010 were passenger cars.
- 1,433 people were injured and 11 people were killed as a result of those collisions, and 8 of those killed were motorcyclists.
- All motor vehicle-deer involved crashes peaked during the 6:00 PM - 8:59 PM time period. Fatal deer crashes peaked during the 3:00 AM - 5:59 AM and 9:00 PM - midnight time periods.

TIME AND SEVERITY OF ALL MOTOR VEHICLE-DEER CRASHES

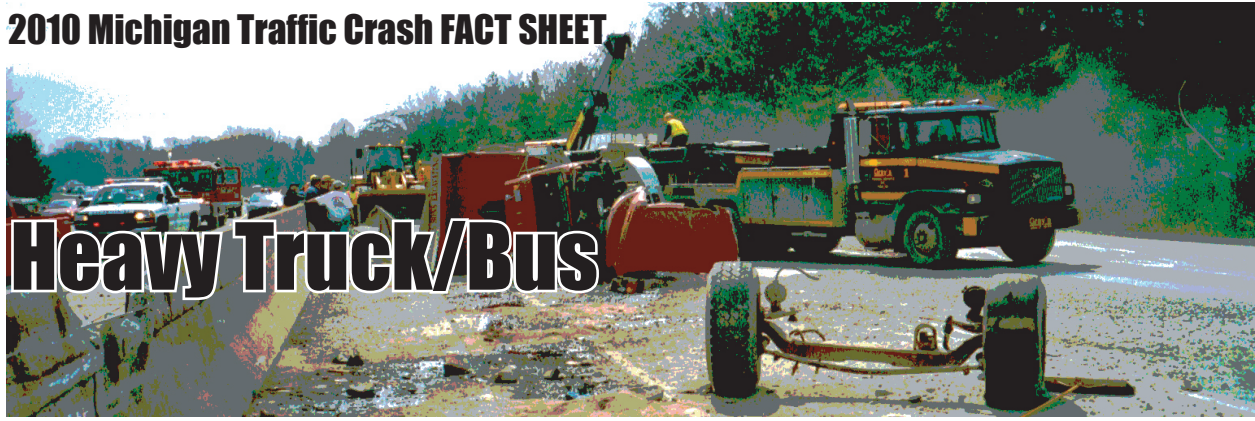


- The top ten counties, each experiencing over 1,219 vehicle-deer crashes in 2010, were:
Kent 1,976, Oakland 1,836, Jackson 1,779, Calhoun 1,618, Lapeer 1,321, Montcalm 1,319, Sanilac 1,275, Clinton 1,267, Genesee 1,259, and Eaton 1,220.
- 23,983 (42.9%) of all reported motor vehicle-deer collisions occurred during the fourth quarter of the year.

All Motor Vehicle-Deer Crashes



Heavy Truck/Bus



Heavy truck/bus crashes differ from other vehicle crashes in a number of ways. When compared to the overall crash picture, heavy truck/bus crashes involve:

- More drivers indicated to be making backing, lane use, and turning errors
 - More collisions with non-vehicles including: bridge/pier abutments, parked motor vehicles, jackknife, cargo loss/shift
 - Fewer single vehicle crashes but more sideswipes
 - Fewer drivers indicated to be speeding, failing to yield, reckless driving, disregarding traffic control, and unable to stop in assured clear distance
 - More on-road crashes
 - More daytime crashes, but fewer late afternoon, evening, and night time crashes
 - More weekday crashes
-
- Heavy truck/buses were involved in 3.8 percent of all traffic crashes in Michigan in 2010. This is an increase of 0.2 percent from 2009.
 - In 2010, there were 10,729 heavy truck/bus-involved crashes in which 95 people were killed and 2,535 injured. These are all increases from last year's numbers of 10,442 heavy truck/bus-involved crashes in which 76 people were killed and 2,377 injured.

2010 Michigan Traffic Crash FACT SHEET

Motorcycles

In a crash, motorcyclists lack the protection of an enclosed vehicle.

- The 2010 death rate for motorcyclists was 15.62 per 100 million vehicle miles traveled compared to the overall mileage death rate of 0.96 per 100 million vehicle miles traveled.

- Injuries to motorcyclists were proportionately more severe than injuries to persons in other motor vehicles.

- There were 3,362 motorcycle-involved crashes in which 125 motorcyclists were killed and 2,664 injured.

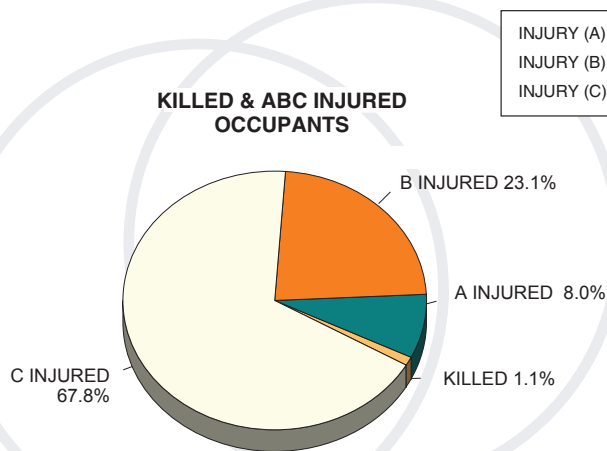
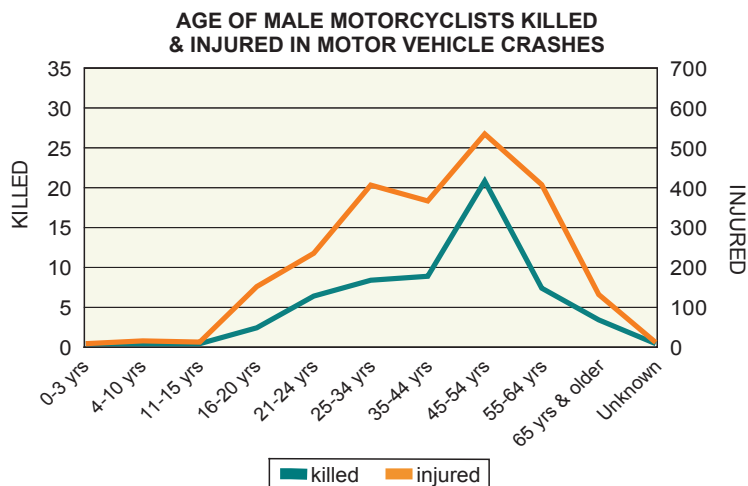
- Motorcycles were involved in 1.2 percent of all traffic crashes in Michigan in 2010.

- Because motorcycles have a low profile, they tend to be less visible than other motor vehicles. 108 (86.4%) of the 125 motorcyclists killed were reported by police as "going straight ahead" just prior to crash.

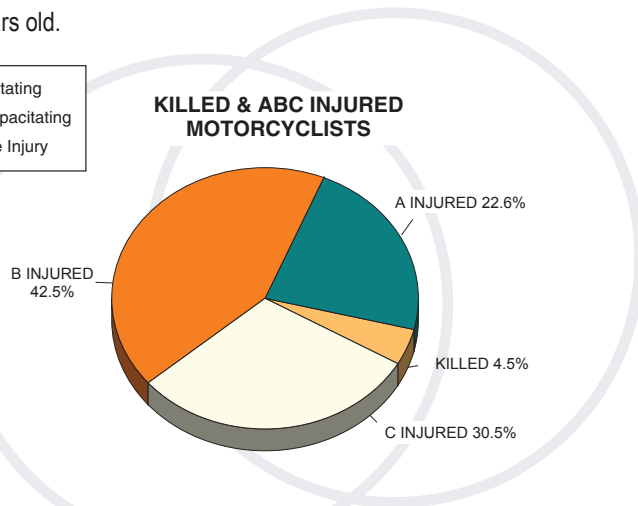
- Of the motorcyclists killed in traffic crashes in 2010, 88.0 percent were male.

- Of the motorcyclists killed in 2010, 24 deaths were the result of a had-been-drinking crash and 22 (91.7%) of these motorcyclists had been drinking.

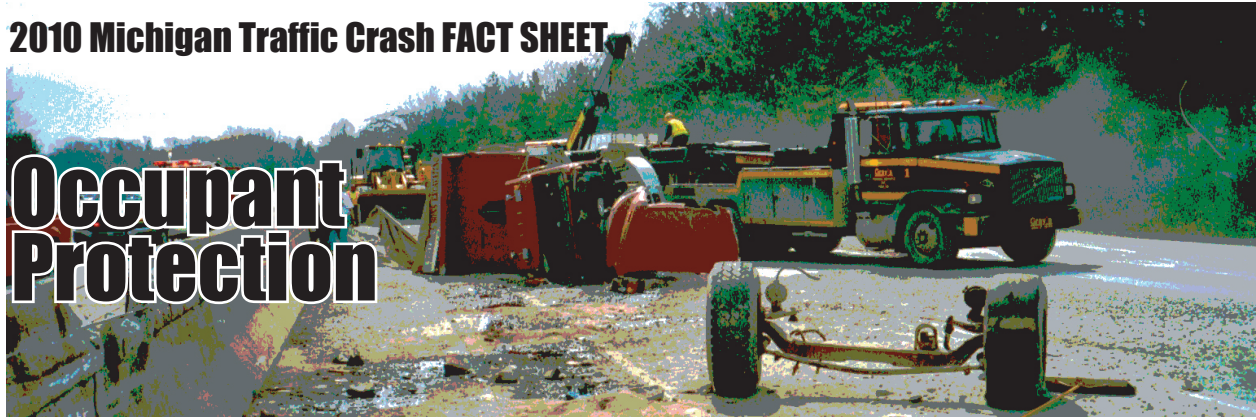
- Of the male motorcyclists injured, 529 (24.0%) were 45 - 54 years old.



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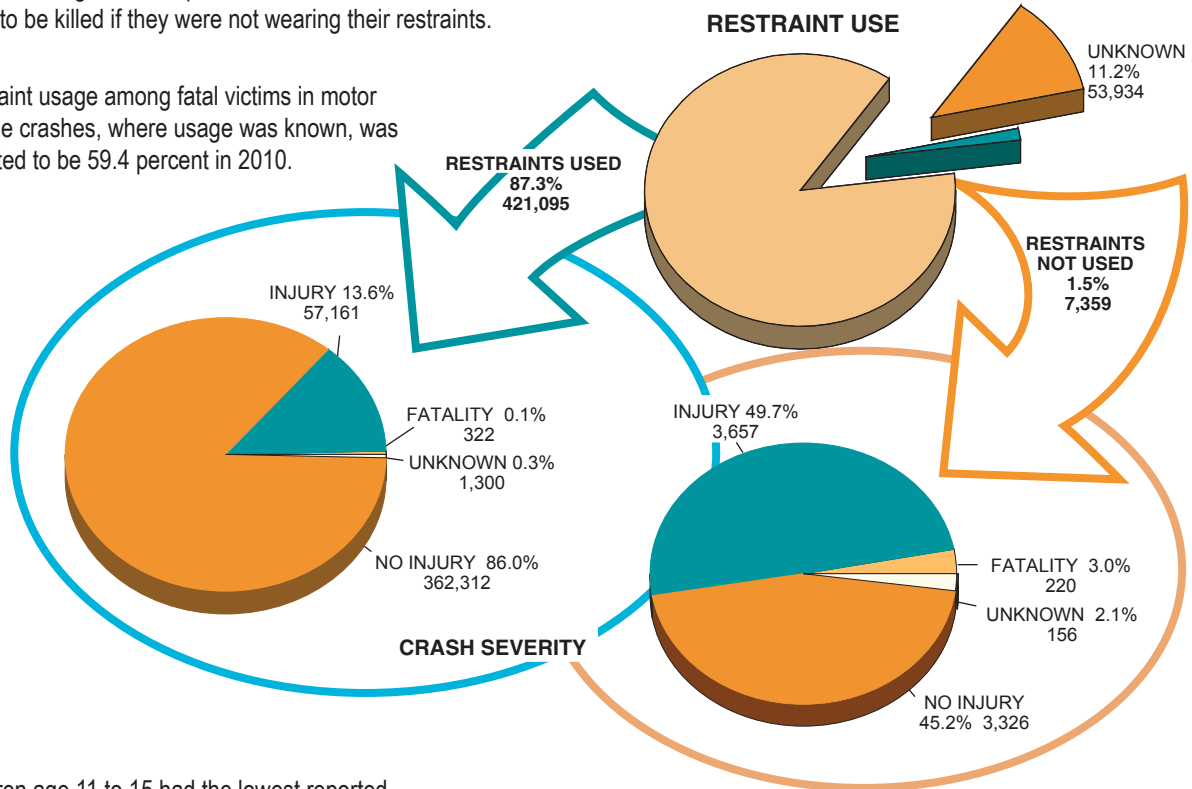


Occupant Protection



Restraint use by motorists is measured two ways: by what motorists REPORT to police at the scene of a traffic crash (reported usage), and by observation surveys where motorists are totally unaware of the presence of researchers (observed usage).

- Of the 482,388 drivers and injured passengers involved in crashes, 421,095 (87.3%) were REPORTED to have been using occupant restraints. However, an observational survey by the Wayne State University Transportation Research Group estimated statewide belt use decreased to 95.2 percent in 2010.
- The percentages of occupants in crashes were **30 times** more likely to be killed if they were not wearing their restraints.
- Restraint usage among fatal victims in motor vehicle crashes, where usage was known, was reported to be 59.4 percent in 2010.



- Children age 11 to 15 had the lowest reported restraint usage (80.8%).
- Motor vehicle occupants aged 65 to 110 had the highest reported restraint usage (95.7%) of any age group.
- Restraint use can prevent ejection from a motor vehicle. Ejection is associated with higher levels of injury severity and greater numbers of fatalities.

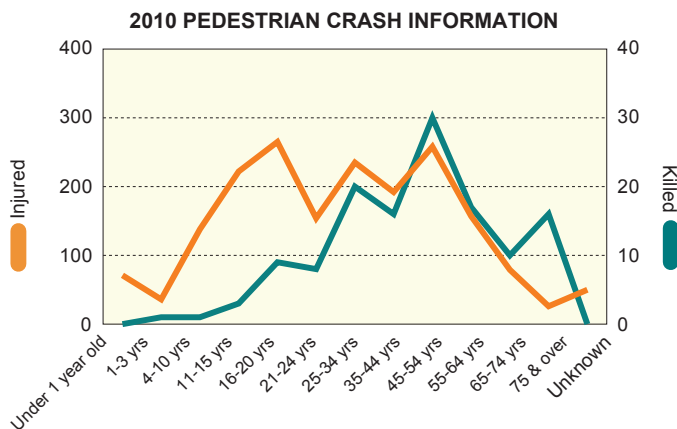


2010 Michigan Traffic Crash FACT SHEET



Pedestrians

- Since 2001, a total of 1,417 pedestrians have been killed, accounting for 12.7 percent of all traffic crash deaths during that period.
- In 2010 there were 2,333 pedestrians involved in motor vehicle crashes, with 131 pedestrians killed and 1,883 pedestrians injured.
- The male to female ratio of pedestrian deaths was 2.9:1.



- The 131 pedestrian fatality count is an increase of ten deaths (8.3%) from the 2009 figure. For each pedestrian killed, there were 14.4 pedestrians injured.
- Most pedestrians were in crashes occurring during the early evening hours (3:00 PM - 8:59 PM). However, most pedestrian fatalities occurred during hours of darkness. Thursday was the deadliest day for pedestrians in 2010 with 23 fatalities.
- Of the pedestrians killed in 2010, 27 deaths were the result of a had-been-drinking crash and 26 (96.3%) of these pedestrians had been drinking.
- Of all pedestrian actions prior to a crash, "crossing not at an intersection" is the most deadly, accounting for 36.6 percent of the pedestrian fatalities.
- Of all pedestrians killed, 3.8 percent were children 0-15, 13.0 percent were age 16-24, 27.5 percent were age 25-44, 35.9 percent were age 45-64, and 19.8 percent were 65 and older.

