2012

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 273,891 reported crashes, of which 870 (0.3%) were fatal, 51,685 (19.2%) were personal injury, and 221,336 (84.2%) were property damage only. Compared to 2011 this is a 0.7 percent increase in total reported crashes, a decrease of 3.6 percent in fatal crashes, a 1.5 percent decrease in personal injury crashes, and a 4.1 percent decrease in property damage crashes.

- 936 persons were killed as a result of the 870 fatal crashes for an average of 1.1 deaths per fatal crash.

- One out of every 11,291 persons in Michigan was killed in a traffic crash; one out of every 139 persons was injured.

- A traffic crash was reported every 1 minute and 55 seconds.

- One person was killed every 9 hours and 22 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, 81 persons were injured in crashes.

- 5,676 persons received incapacitating injuries (A-injuries), which prevent normal activities and require hospitalization.
According to the Michigan Department of Community Health, motor vehicle crashes are the leading cause of accidental death among persons age 1-24.

- 459,030 motor vehicles were involved in 273,891 reported crashes. 870 of these were fatal crashes. These fatal crashes resulted in 936 deaths.

- Of the 936 motor vehicle deaths in 2012, 483 (51.6%) were drivers of vehicles, 148 (16.8%) were passengers in motor vehicles, 133 (14.2%) were pedestrians, 129 (13.8%) were motorcyclists, 20 (2.1%) were bicyclists, eight (0.9%) were ORV/ATV operators, and five (0.7%) were snowmobile operators.

- Of the 631 drivers and passengers killed, 231 (36.6%) were not wearing seat belts and 314 (49.8%) were wearing seat belts. It is unknown whether 86 (13.6%) of the fatalities were belted. These deaths included persons in positions including the front seats, the rears seats, sleeper sections, other enclosed and unenclosed passenger or cargo areas, and those riding in or on the vehicle exterior or trailing unit.

- 467 deaths resulted from 447 single vehicle fatal crashes.

- More male drivers were involved in crashes than female drivers. Of the 266,912 male drivers involved in crashes, 656 (0.2%) were involved in fatal crashes. Of the 232,342 female drivers involved in crashes, 280 (0.1%) were involved in fatal crashes.

- Of the 1,352 drivers involved in fatal crashes where a hazardous action occurred, excessive speed was reported by police as the hazardous action for 178 (13.2%) of the drivers.

- Of the total 870 fatal crashes, 171 (19.7%) occurred at intersections.

- Most fatal crashes occurred on dry roadways (78.5%) in clear weather conditions (61.7%).

- The majority of all crashes occurred during daylight hours (61.4%). Dark conditions were overrepresented in fatal crashes.

- 139 (16.0%) fatal crashes occurred during the 9:00-11:59 PM time period, more than any other time period.

- The most fatal crashes, 154 (17.7%), occurred on Friday and Sunday.
The No. 1 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.

24 children (0-15 years old) were killed in motor vehicle crashes, including two drivers age 15. The 0-15 age group accounted for 2.6 percent of all traffic deaths.

There were 52,354 licensed drivers below the age of 16 who represented 0.7 percent of Michigan’s active driving population. Drivers in this age group represented 0.2 percent (929) of drivers in all crashes and 0.3 percent (4) of drivers in fatal crashes.

In addition, 5,367 children were injured in motor vehicle crashes.

Older children, ages 11-15, had the lowest restraint usage (83.4%), as reported to police at the scene of a traffic crash.

Children accounted for 9.0 percent (12) of the pedestrians killed in Michigan in 2012, and 21.5 percent (422) of all pedestrian injuries.

Children under 16 years of age accounted for one (5.0%) of the bicyclist deaths in 2012.

Of the 52,354 licensed drivers in the 0-15 age group, special licenses were issued to 161 moped operators.
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 (60%) accidental deaths for this age group are due to motor vehicle crashes.

- The 16-20 age group accounted for 9.6 percent (147) of all traffic deaths, 91.2 percent (134) of those deaths were drivers.
- In addition, 9,969 teenagers and young adults were injured in motor vehicle crashes, 14.1 percent of all persons injured in crashes.
- There were 494,752 licensed drivers ages 16-20 who represented 7.0 percent of Michigan's active driving population. The drivers in this age group represented 8.8 percent (40,573) of drivers in all crashes and 9.9 percent (134) 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 6.0 percent (8) of the pedestrians killed in Michigan, and 15.0 percent (294) of all pedestrian injuries.
- Two (10.0%) of the 20 bicyclist deaths in 2012 were in the 16-20 age group.
Findings show 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 ensure independence.

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

- There were 1,259,615 licensed drivers age 65 and older who represented 17.8 percent of Michigan’s active driving population. The drivers in this age group represented 8.9 percent (41,047) of drivers in all crashes and 14.5 percent (196) of drivers in fatal crashes.

- 163 persons (65 and older) were killed in traffic crashes; 121 (74.2%) of them were drivers.

- In addition, 6,798 persons age 65 and older were injured in traffic crashes, 9.6 percent of all persons injured in crashes.

- Drivers and injured passengers, age 65 to 110, had the highest restraint usage (95.8%), 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 failure to yield, disregard of traffic control, improper lane use, improper turn, and improper backing as a hazardous action in all crashes.

- Noon to 2:59 PM shows the highest involvement for senior drivers in all crashes when compared to age groups 16-20 and 21-64.

- 12.8 percent (17) of the pedestrians killed in Michigan in 2012 were age 65 and older; 6.9 percent (135) of the pedestrians injured were age 65 and older.

- Two bicyclists killed in 2012 were over the age of 65.
2012

Information regarding alcohol involvement was collected from all investigated fatal motor vehicle traffic crashes in Michigan during 2012. 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 (HBD).

- A total of 870 fatal crashes occurred in Michigan in 2012. 260 (29.9%) of those fatal crashes were alcohol-related, involving at least one drinking operator or pedestrian.
- The fatality count of persons involved in alcohol-related fatal crashes was 281 in 2012. This accounts for 30.0 percent of the total number of persons killed (936).
- Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of fatalities was eight times higher than in all crashes and the most serious injury level A (incapacitating) was over five times higher.
- 182 (70.0%) of the total 260 alcohol-related fatal crashes involved one vehicle.
- Of the 133 pedestrian deaths in 2012, 33 (24.8%) were the result of an HBD crash and 22 (66.7%) of those pedestrians had been drinking.
- Of the 129 motorcyclist deaths in 2012, 32 (24.8%) were the result of an HBD crash and 25 (78.1%) of those motorcyclists had been drinking.
- Of the 20 bicyclist deaths in 2012, two (10.0%) were the result of an HBD crash and both of those bicyclists had been drinking.
- Of the five snowmobiler deaths on Michigan roadways in 2012, four (80.0%) were the result of an HBD crash and all of those snowmobilers had been drinking.
2012 Alcohol continued

- HBD injury crashes peaked on Saturday and Sunday, and in the hours between midnight and 2:59AM (a particularly hazardous travel period).
- In 2012, HBD injury crashes were highest in July (550) and August (530).
- The highest number of HBD fatal crashes, 30, occurred in March and July.
- The midnight to 2:59 AM time period had the highest rate of HBD fatal crashes (65.1%), while 6:00 to 8:59 AM had the lowest rate (7.3%).
- Sunday had the highest proportion (45.3%) of alcohol-related fatal crashes.
- Of the 9,853 drinking drivers involved in crashes, 7,250 (73.6%) were male and 2,563 (26.0%) were female.
- 2,805 (28.5%) of the drinking drivers in crashes were age 24 and younger.
According to the Centers for Disease Control and Prevention, bicycle helmets are the single most effective countermeasure available to reduce head injuries and fatalities resulting from bicycle crashes.

- 1,981 bicyclists were involved in motor vehicle crashes in Michigan in 2012.
- 20 bicyclists were killed on Michigan roadways in 2012, four less than reported in 2011.
- 1,598 bicyclist injuries were reported to police agencies.
- Males (1,493) were involved in more bicycle crashes than females (437). The male to female ratio of bicycle deaths was 6:1, with 17 male bicyclists killed and three female bicyclists killed. Gender was not reported for 51 bicyclists.
- 13 of the bicyclists killed (65.0%) were reported by police to be "going straight ahead" just prior to crash.
- 78.9 percent of all bicyclists in motor vehicle crashes and 15 of the 20 bicyclists killed were riding during daylight hours.
- 3:00-5:59 PM were the peak hours for bicyclist involvement in all crashes and injuries to bicyclists. 6:00-8:59 PM were the peak hours for bicyclist fatalities.
- Of the 20 bicyclists killed in 2012, two (10%) were the result of a had-been-drinking crash and both of those bicyclists had been drinking.
- There was one bicyclist death for a child under 11 years of age (4 years old). There were no bicyclists killed in the 11-15 age group. Teen/young adults (ages 16-20) accounted for two (10%) of the bicyclist fatalities. Adults ages 21-64 accounted for 15 (75%) of the bicyclist fatalities. There were two fatalities in the 65 and over age group (ages 78 and 85).
Cell phone use can be a distraction for the driver, the bicyclist, and the pedestrian.

- A total of 748 crashes occurred in Michigan where a motor vehicle driver, pedestrian, or bicyclist was using a cell phone. Eight of those crashes involved a fatality: seven motor vehicle drivers and one motor vehicle passenger died.

- A total of 10 injured passengers, 56 uninjured passengers, and 3 bicyclists were also reported to be involved in the 748 crashes.

- All 3 of the bicyclists were using a cell phone. Two bicyclists suffered a possible injury and one bicyclist suffered no injury.

- Of the 746 drivers using cell phones, 196 (26.3%) were 20 years of age or less.

- The 16-20 year old age group had the highest police-reported cell phone use by drivers (26.2%).

- Of the total 748 crashes involving cell phone use, 172 (23.0%) also involved a lane departure.

- Of the total 748 crashes involving cell phone use, 302 (40.4%) were intersection related.

- There were 749 traffic units in cell phone use crashes: three bicyclists, 644 passenger cars, 62 pickup trucks, 29 van/motorhomes, six small trucks (under 10,000 lbs. GVWR), two trucks/buses over 10,000 lbs. GVWR, and six uncoded vehicles.
Motor vehicle-deer crashes occurred most often in Michigan's southern, more heavily populated counties.

- Michigan had 48,918 (17.9% of the total crashes) reported motor vehicle-deer crashes during 2012. This is a decrease of 18,842 crashes from the number experienced in 2003, a 27.8 percent decrease over 10 years.

- 36,634 (74.6%) of the vehicles involved were passenger cars.

- 1,329 people were injured and eight people were killed as a result of vehicle-deer collisions. Three (37.5%) of those killed were motorcyclists.

- All motor vehicle-deer involved crashes peaked during the 6:00-8:59 PM time period. Fatal deer crashes peaked during the 3:00-5:50 PM and 9:00 PM-12:00 AM time period.

- The top 10 counties experiencing vehicle-deer crashes in 2012 were: Oakland 1,683, Kent 1,572, Jackson 1,281, Montcalm 1,182, Lapeer 1,175, Huron 1,082, Ingham 1,065, Clinton 1,032, Ottawa 1,013, and Eaton 1,000.

- 20,838 (42.6%) of all reported motor vehicle-deer collisions occurred during the fourth quarter of the year.
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 have:

- More drivers indicated to be making backing, lane use, and turning errors.
- 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 nighttime crashes.
- More weekday crashes.

- 3.4 percent (9,388) of the 273,891 traffic crashes in Michigan in 2012 involved heavy trucks/buses.

- The 9,388 heavy truck/bus-involved crashes is a 13.8 percent decrease from last year’s number of 10,885 crashes.

- 80 people were killed, a 9.6 percent increase from last year’s number of 73.

- 2,363 people were injured, an 8.8 percent decrease from last year’s number of 2,591.
In a crash, motorcyclists lack the protection of an enclosed vehicle.

- The 2012 death rate for motorcyclists was 15.74 per 100 million vehicle miles traveled compared to the overall mileage death rate of 0.99 per 100 million vehicle miles traveled.

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

- There were 3,600 motorcycle-involved crashes in which 129 motorcyclists were killed and 2,870 injured.

- Motorcycles were involved in 1.3 percent of all traffic crashes in Michigan in 2012.

- Because motorcycles have a low profile, they tend to be less visible than other motor vehicles. 104 (80.6%) of the 129 motorcyclists killed were reported by police as "going straight ahead" just prior to crash.

- Of the motorcyclists killed in traffic crashes in 2012, 114 (88.4%) were male.

- Of the motorcyclists killed in 2012, 32 deaths were the result of a had-been-drinking crash and 28 (87.5%) of those motorcyclists had been drinking.

- Of the male motorcyclists injured, 525 (21.6%) were 45-54 years old. 17 (14.9%) men in this group were killed.
2012

Michigan continues to experience over two thousand pedestrian-involved crashes every year.

- Since 2003, a total of 1,357 pedestrians have been killed, accounting for 13.1 percent of all traffic crash deaths during that 10-year period.

- In 2012 there were 2,397 pedestrians involved in 2,281 motor vehicle crashes, with 133 (5.5%) of them killed and 1,962 (81.9%) of them injured.

- The male to female ratio of pedestrian deaths was 2:1.

- The 133 pedestrian fatality count is a decrease of seven deaths (5.0%) from the 2011 figure. For each pedestrian killed, there were 15 pedestrians injured.

- Most pedestrians were in crashes occurring during the evening hours (6:00-8:59 PM). However, most pedestrian fatalities occurred during hours of darkness.

- Saturday was the deadliest day for pedestrians in 2012 with 32 (24.1%) fatalities.

- Of the 133 pedestrians killed in 2012, 33 (24.8%) of the deaths were the result of a had-been-drinking crash and 26 (78.8%) of those pedestrians had been drinking.

- Of all pedestrian actions prior to a crash, "crossing not at an intersection" is the most deadly, accounting for 48 (36.1%) of the pedestrian fatalities.

- Of all pedestrians killed, 12 (9.0%) were age 0-15, 22 (16.5%) were age 16-24, 32 (24.1%) were age 25-44, 50 (37.6%) were age 45-64, and 17 (12.8%) were age 65 and older.
Seat belt 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 417,875 drivers and injured passengers involved in crashes for which seat belt use was known, 410,254 (98.2%) were REPORTED to have been using seat belts.

- The reported usage ratio of males (7,364) involved in crashes who did not wear seat belts to females (4,466) involved in crashes who did not wear seat belts was 1.6:1.

- 3,550 (38.0%) reported drivers and passengers in motor vehicles not wearing seat belts were under 25 years of age.

- When looking at known seat belt use for motor vehicle fatalities only, 231 people (42.4%) killed were not wearing seat belts.

- Of the total fatalities reported, there were 201 drivers and passengers killed while not wearing a seat belt in the front seat, 23 people killed while not wearing a seat belt in the rear seat, and 7 people killed while not wearing a seat belt in an other or unknown seating position.

- An observational survey by Wayne State University estimated statewide belt use at 93.6 percent in 2012.
Proper seat belt use helps to prevent ejection from a motor vehicle in a crash. Ejection is associated with higher levels of injury severity and greater numbers of fatalities. Properly worn seat belts also help to prevent contact with other occupants and interior parts of the vehicle.

As seen in the first set of charts below, death and injury are much more likely when belted occupants of motor vehicles are ejected versus those who are not ejected.

However the second set of charts indicate that injury severity is much worse for unbelted occupants in both ejected and non-ejected traffic crashes.

In 2012, a total of 374 people in motor vehicle crashes were ejected while not wearing a seat belt. Of the 374 people ejected, 215 were drivers and 159 were injured passengers. Of the unbelted people who were ejected, 81 people (21.7%) were killed.