MTCF
Michigan Traffic
Crash Facts

FACT SHEETS
2017
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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 314,921 crashes, of which 937 (0.3%) were fatal, 57,263 (18.2%) were personal injury, and 256,721 (81.5%) were property damage only. Compared to 2016 this is a 0.9 percent increase in total crashes, a decrease of 4.4 percent in fatal crashes, a 1.2 percent decrease in personal injury crashes, and a 1.4 percent increase in property damage crashes.

A total of 1,028 people were killed as a result of the 937 fatal crashes for an average of 1.1 deaths per fatal crash.

One out of every 9,691 people in Michigan was killed in a traffic crash; one out of every 127 people was injured.

For each person killed, 76.3 people were injured in crashes.

There were 6,084 people who received suspected serious injuries, which prevent normal activities and require hospitalization.

A total of 540,387 motor vehicles were involved in 314,921 reported crashes.

Of the 1,028 traffic crash deaths, 667 (64.9%) were drivers of vehicles, 182 (17.7%) were passengers in motor vehicles, 158 (15.4%) were pedestrians, and 21 (2.0%) were bicyclists.

Of the 675 drivers and passengers killed where seat belt data was collected, 206 (30.5%) were not wearing seat belts and 355 (52.6%) were wearing seat belts. It is unknown whether 114 (16.9%) of the fatalities were belted.

There were 479 deaths that resulted from 449 single-vehicle fatal crashes.

More male drivers were involved in crashes than female drivers. Of the 276,112 male drivers involved in crashes, 1,030 (0.4%) were involved in fatal crashes. Of the 221,365 female drivers involved in crashes, 446 (0.2%) were involved in fatal crashes.

Of the 847 motor vehicle drivers involved in fatal crashes where a hazardous action occurred, excessive speed was reported by police as the hazardous action for 161 (19.0%) of the drivers.

Of the 937 fatal crashes, 284 (30.3%) occurred at intersections.

Most fatal crashes occurred on dry roadways (74.7%) and in clear weather conditions (60.5%).

The majority of all crashes occurred during daylight (62.7%).

There were 63 (6.7%) fatal crashes during the 5:00-5:59 PM time period, more than any other time period.

The most fatal crashes, 153 (16.3%), occurred on Saturday.

A traffic crash was reported every 1 minute and 40 seconds.

One person was killed every 8 hours and 31 minutes as a result of a traffic crash.

One person was injured every 6 minutes and 42 seconds in a traffic crash.
According to 2015 data provided by the Michigan Department of Health and Human Services, the number one cause of unintentional fatal injuries for children ages 1-24 in Michigan is motor vehicle crashes.

The 2015 Direct Observation Survey of Child Restraint/Booster Seat Use in Michigan reported child restraint use rates of 95.7% for children age 0-3 and 49.7% for children age 4-7.

A total of 32 children (0-14 years old) were killed in motor vehicle crashes, none of whom were driving. The 0-14 age group accounted for 3.1 percent of all traffic deaths.

In addition, 4,822 children were injured in motor vehicle crashes.

Restraint usage among drivers and injured passengers age 0-14, as reported to police at the scene of a traffic crash, was 92.6%. The age group with the lowest restraint usage was children age 11 through 14 (89.4%).

Children accounted for 7.6 percent (12) of the pedestrians killed in Michigan, and 14.6 percent (284) of all pedestrian injuries.

There were no bicyclist fatalities among children under 15 years of age. This age group accounted for 214 (15.7%) of all injured bicyclists.
Inexperience, risk-taking behavior, immaturity, and greater risk exposure are all factors that increase crash risk for young drivers. According to the Insurance Institute for Highway Safety, crashes are the leading cause of death and account for almost one-third of all deaths among people age 16-19.

There were 519,340 licensed drivers ages 15-20* who represented 7.2 percent of Michigan’s driving population. The drivers in this age group represented 11.0 percent (59,199) of drivers in all crashes and 7.9 percent (121) of drivers in fatal crashes.

The 15-20 age group accounted for 7.8 percent (80) of all traffic deaths, and 57.5 percent (46) of those deaths were drivers.

In addition, 10,521 teenagers and young adults were injured in motor vehicle crashes, representing 13.4 percent of all people injured in 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.

The most common hazardous action coded for the 121 drivers age 15-20 who were involved in fatal crashes was speed too fast, with 13.2% (16) of the total.

Weekends accounted for 22.7 percent of crash involvements for drivers age 15-20, compared with only 20.5 percent of crash involvements for drivers 21 and older.

Teenagers and young adults accounted for 3.2 percent (5) of the pedestrians killed in Michigan, and 14.4 percent (280) of all pedestrian injuries.

Two (9.5%) of the 21 bicyclist deaths were in the 15-20 age group.

*Licensed drivers between the ages of 14 years and 9 months old and 15 years old are included in this total.
In Michigan, 16.7 percent of residents are age 65 or older according to 2017 estimates from the Population Division of the U.S. Census Bureau. Safety problems for the older driver are directly tied to the aging process, including changes in vision, hearing, medication, cognition, and physical condition, which all contribute to driving errors.

### INJURY SEVERITY IN MOTOR VEHICLE CRASHES WITH A DRIVER AGE 65 AND OVER

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>KILLED</td>
<td>224 (1.4%)</td>
</tr>
<tr>
<td>SUSPECTED SERIOUS INJURIES</td>
<td>1,002 (7.1%)</td>
</tr>
<tr>
<td>SUSPECTED INJURIES</td>
<td>3,868 (25.0%)</td>
</tr>
<tr>
<td>POSSIBLE INJURIES</td>
<td>10,284 (66.4%)</td>
</tr>
</tbody>
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There were 1,479,627 licensed drivers age 65 and over who represented 20.5 percent of Michigan’s active driving population. The drivers in this age group represented 10.0 percent (53,934) of drivers in all crashes and 15.0 percent (230) of drivers in fatal crashes.

A total of 202 people age 65 and over were killed in traffic crashes, and 128 (63.4%) of them were drivers.

In addition, 8,803 people age 65 and over were injured in traffic crashes, representing 11.2 percent of all people injured in crashes.

Drivers and injured passengers, age 65 to 110, had a seatbelt usage of 99.2%, 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.

Of the pedestrians killed in Michigan, 17.1 percent (27) were age 65 and over; 8.6 percent (167) of the pedestrians injured were age 65 and over.

Six (28.6%) bicyclists out of the 21 total killed were age 65 and over.
Cell phone use can be a distraction for the driver, the bicyclist, and the pedestrian. Cell phone use in crashes is measured by reported use, which is recorded by the police officer at the scene of the crash.

A total of 3,099 crashes occurred in Michigan where a motor vehicle driver, pedestrian, or bicyclist was using a cell phone. Twenty-one of those crashes involved a fatality.

A total of 3,076 motor vehicle drivers, 25 pedestrians, and nine bicyclists were reported to be using cell phones in the 3,099 crashes.

Of the 25 pedestrians using a cell phone, three pedestrians were killed, six suffered a suspected serious injury, ten suffered a suspected minor injury, and five suffered a possible injury.

Of the 3,076 motor vehicle drivers using cell phones, 618 (20.1%) were 20 years of age or younger.

There were 1,490 (48.1%) rear-end crashes where a driver was using a cell phone.

Of the total 3,099 crashes involving cell phone use, 609 (19.7%) also involved a lane departure.

Of the total 3,099 crashes involving cell phone use, 1,236 (39.9%) were intersection related.

There were 3,076 motor vehicle drivers using a cell phone in crashes: 2,713 passenger cars, 292 pickup trucks, 28 trucks or buses over 10,000 lbs., 11 small trucks under 10,000 lbs., ten vans or motorhomes, one motorcycle, four vehicle types coded as “other,” and 17 uncoded and errors.

*In 2016, the data field measuring cell phone use was changed to include multiple distraction elements. Increases in the number of cell phone crashes in 2016 and future years may be the result of the police report change.
A crash is alcohol-related if any driver, pedestrian, or cyclist involved was reported as had-been-drinking (HBD) by the police officer on the Traffic Crash Report.

Of the 937 fatal crashes that occurred in Michigan, 320 (34.2%) were alcohol-related, involving at least one drinking operator, bicyclist, or pedestrian.

There were 359 alcohol-related fatalities, which accounts for 34.9 percent of the total number of people killed (1,028).

The percentage of alcohol-related fatalities was about 11.6 times higher than fatalities in all crashes and the most serious injury level (suspected serious) was about 6.0 times higher.

There were 197 (61.6%) crashes involving one vehicle out of the 320 alcohol-related fatal crashes.

Of the 158 pedestrian deaths, 55 (34.8%) were the result of an HBD crash and 44 (80.0%) of those pedestrians had been drinking.

There were 137 motorcyclist deaths, and 42 (30.7%) of those deaths were the result of an HBD crash. Of the 42 motorcyclist alcohol-involved crash deaths, 33 (78.6%) motorcycle drivers were coded as drinking and five (11.9%) were motorcycle passengers of drinking drivers.
Out of 21 bicyclist deaths, five (23.8%) were the result of an HBD crash and one (20.0%) of those bicyclists had been drinking.

Four snowmobiler deaths occurred on Michigan roadways. There were two deaths (50.0%) that were the result of an HBD crash and both snowmobilers had been drinking.

HBD injury crashes were highest in July (390) and August (386), and the highest number of HBD fatal crashes, 39, occurred in April.

Saturday had the highest number of HBD fatal crashes at 68, followed by Sunday at 56.

Saturday had the highest proportion (44.2%) of alcohol-related fatalities when compared to all fatalities occurring on Saturday.

The 11:00-11:59 PM time period had the highest number of HBD fatal crashes with 32, while the time period from 9:00-9:59 AM had the lowest with one.

Of the 10,085 drinking drivers involved in crashes, 7,266 (72.0%) were male and 2,813 (27.9%) were female. There were six drinking drivers for whom gender was unknown.

There were 2,234 (22.2%) drinking drivers in crashes who were age 24 or younger.

Out of the total 10,085 drinking drivers in crashes, 1,294 (12.8%) of the drivers were also suspected of using drugs.
There were 1,723 bicyclists involved in motor vehicle crashes in Michigan in 2017.

A total of 21 bicyclists were killed in 21 fatal crashes on Michigan roadways. An additional 1,363 bicyclists were injured in 1,356 police-reported crashes on traffic crash records.

Male bicyclists (1,299) were involved in more bicycle crashes than female bicyclists (374), with 14 male bicyclists killed and seven female bicyclists killed. Gender was not reported for 50 bicyclists in crashes.

Police reported that 11 of the bicyclists killed (52.4%) were “going straight ahead” just prior to crash.

In motor vehicle crashes, 1,286 bicyclists were riding in daylight conditions, 27 were riding during dawn, 57 were riding during dusk, 240 were riding in dark lighted conditions, 99 were riding in dark unlighted conditions, and 14 bicyclists were riding in unknown lighting conditions.

The peak hour for bicyclist involvement in crashes was from 5:00-5:59 PM, with 168 bicyclists involved. The peak hour for bicyclist fatalities was from 8:00-8:59 PM, with four bicyclist fatalities.

Of the 21 bicyclists killed, five (23.8%) were the result of a had-been-drinking crash and one (20.0%) of those bicyclists had been drinking.

No bicyclist fatalities occurred among youth age 15 and under. Teen/young adults (ages 16-20) accounted for two (9.5%) of the bicyclist fatalities. Adults ages 21-64 accounted for 13 (61.9%) of the bicyclist fatalities. Six (28.6%) fatalities were in the 65 and over age group.

According to the Centers for Disease Control and Prevention, bicycle helmets are the single most effective countermeasure available to bicyclists to reduce head injuries and fatalities resulting from bicycle crashes.
Pedestrians are defined as a person on foot, skis, skates, rollerblades, or a non-motorized wheelchair, or the rider of a horse or a horse and buggy. Each pedestrian is listed as a separate unit on the Traffic Crash Report.

There were 2,411 pedestrians involved in 2,285 motor vehicle crashes.

Of the 2,411 pedestrians involved in crashes, 158 (6.6%) were killed and 1,945 (80.7%) were injured.

There were 111 (70.3%) male pedestrians killed and 47 (29.7%) female pedestrians killed.

Of all pedestrian actions prior to a crash, “crossing not at an intersection” was the most deadly, accounting for 55 (34.8%) of the pedestrian fatalities.

For each pedestrian killed, there were about 12 pedestrians injured.

The highest number of pedestrian-involved crashes occurred during October, with 259 (11.3%).

The time period with the most pedestrian-involved crashes occurred from 6:00-6:59 PM, with 188 (8.2%).

Thursday was the deadliest day for pedestrians with 27 (17.3%) pedestrian-involved fatal crashes and 27 (17.1%) pedestrian fatalities.

Of the 158 pedestrians killed, 55 (34.8%) of the deaths were the result of an alcohol-involved crash and 44 (80.0%) of those pedestrians had been drinking.

A total of 12 (7.6%) pedestrian fatalities occurred among youth age 15 and under. Teen/young adults (ages 16-20) accounted for five (3.2%) of the pedestrian fatalities. Adults ages 21-64 accounted for 114 (72.2%) of the pedestrian fatalities. There were 27 (17.1%) fatalities in the 65 and over age group.
The visibility of motorcycles is a major concern with regard to motorcycle crashes. A light-colored helmet and eye protection; brightly colored high visibility clothing; leather or thick protective clothing; and long sleeves, pants, over-the-ankle boots, and gloves are all recommended for motorcycle safety by the Motorcycle Safety Foundation.

**2017**

- **Injury severity for helmeted motorcyclists in crashes**
  - Possible injuries: 404 (26.4%)
  - Suspected minor injuries: 665 (43.4%)
  - Suspected serious injuries: 392 (25.6%)
  - Killed: 72 (4.7%)

- **Injury severity for unhelmeted motorcyclists in crashes**
  - Possible injuries: 131 (17.4%)
  - Suspected minor injuries: 301 (40.0%)
  - Suspected serious injuries: 261 (34.7%)
  - Killed: 59 (7.8%)

The death rate for motorcyclists was 17.7 per 100 million vehicle miles traveled compared to the overall mileage death rate of 1.0 per 100 million vehicle miles traveled.

There were 2,886 motorcycle-involved crashes in which 137 motorcyclists were killed and 2,238 were injured.

Motorcycles were involved in 0.9 percent of all traffic crashes in Michigan.

Out of the 137 motorcyclists killed, 117 (85.4%) motorcycle riders were reported by police as “going straight ahead” just prior to the crash.

There were 119 (86.9%) male motorcyclists and 18 (13.1%) female motorcyclists killed in traffic crashes.

Of the motorcyclists killed, 42 (30.7%) deaths were the result of a had-been-drinking crash and 38 (90.5%) of those motorcyclists had drivers coded as drinking.

Among the 137 motorcycle fatalities, 72 (52.6%) motorcyclists were wearing helmets and 59 (43.1%) motorcyclists were not wearing helmets. Helmet use was unknown for 6 (4.4%) motorcyclists.

A 2013 observational survey by Wayne State University estimated statewide helmet use at 73.0 percent and high-visibility gear at 5.6 percent.
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; more sideswipes; more daytime crashes; and more weekday crashes.

Heavy trucks/buses were involved in 4.1 percent (12,886) of the 314,921 traffic crashes in Michigan.

The 12,886 heavy truck/bus-involved crash count is a 7.6 percent increase from the 2016 total of 11,981 crashes.

There were 95 people killed and 3,328 people injured in heavy truck/bus crashes.

INJURY SEVERITY IN CRASHES WHERE HEAVY TRUCKS/BUSES WERE INVOLVED

- Possible Injuries (61.6%)
- Suspected Minor Injuries (25.1%)
- Suspected Serious Injuries (10.6%)
- Killed (2.8%)
School bus-related crashes include situations where the school bus was involved or other units crashed due to the presence and influence of a school bus.

There were 1,053 school bus-related crashes, three of which resulted in fatalities.

Of the 1,053 school bus-related crashes, 404 (38.4%) took place between 6:00-8:59 AM and 381 (36.2%) occurred between 3:00-5:59 PM. The remaining 268 (25.5%) crashes occurred during other times of the day.

Of the 1,053 school bus-related crashes, 490 (46.5%) occurred at an intersection.

There were 1,643 people involved and no people killed on school buses. No people on school buses received suspected serious injuries, 15 people received suspected minor injuries, and 122 people received possible injuries.

There were five pedestrians and three bicyclists involved in school bus-related crashes.

### INJURY SEVERITY IN CRASHES WHERE SCHOOL BUSES WERE INVOLVED

- **Possible Injuries:** 266 (77.1%)
- **Suspected Minor Injuries:** 55 (16.9%)
- **Suspected Serious Injuries:** 20 (5.8%)
- **Killed:** 4 (1.2%)
Deer crashes include situations where a deer is a contributing factor, but does not necessarily come in contact with a traffic unit.

Michigan had 50,949 (16.2% of the total crashes) motor vehicle-deer crashes.

Passenger cars and station wagons represented 79.2 percent (40,562) of the vehicles involved.

As a result of vehicle-deer crashes, 1,254 people were injured and 17 people were killed. Two (11.8%) of those killed were occupants in passenger vehicles, 13 (76.5%) killed were motorcyclists, and two (11.8%) were ORV/ATV riders.

Motor vehicle-deer involved crashes were highest during the 7:00-7:59 AM time period (5,238).

The top 10 counties experiencing vehicle-deer crashes were: Oakland 1,765; Kent 1,572; Jackson 1,310; Lapeer 1,185; Ottawa 1,122; Montcalm 1,075; Isabella 1,057; Huron 1,055; Genesee 1,049; and Allegan 1,044.

The highest number of vehicle-deer crashes occurred during November (9,136).

Of the motor vehicle-deer crashes, 22,165 (43.5%) occurred during the fourth quarter of the year.
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 unaware of the presence of researchers (observed usage).

Of the 542,550 reported drivers and passengers involved in crashes for which seat belt use was known, 535,161 (98.6%) were reported to have been using seat belts and 7,389 (1.4%) were reported to have not been using seat belts.

The reported percentage of male drivers and passengers (4,431) involved in crashes who did not wear seat belts out of all males in crashes for which seat belt use was known was 1.5 percent. The reported percentage of female drivers and passengers (2,925) involved in crashes who did not wear their seat belts out of all females in crashes for which seat belt use was known was 1.2 percent.

Of the reported drivers and passengers in motor vehicles crashes under 25 years of age, 3,126 (2.2%) were not wearing seat belts.

When looking at known seat belt use for motor vehicle fatalities only, 206 people (36.7%) killed were not wearing seat belts.

Of the fatalities, there were 175 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 eight people killed while not wearing seat belt in an other or unknown seating position.

A total of 321 people in motor vehicle crashes were ejected while not wearing a seat belt. Of the 321 people ejected, 202 were drivers, 116 were injured passengers, and three were uninjured passengers. Of the unbelted people who were ejected 81 people (25.2%) were killed.

A 2017 observational study by Wayne State University estimated statewide belt use at 94.1 percent.
Crashes involving speeding are the result of a hazardous action of “speed too fast.” The actual speeds of motor vehicles are not reported at the scene of the crash.

In 2017, there were 30,873 crashes involving speeding, which accounted for 9.8 percent of all crashes.

Out of the 540,387 motor vehicle drivers involved in crashes, 31,143 (5.8%) had a hazardous action of speed too fast.

In addition to the 31,143 motor vehicle drivers coded as “speed too fast,” 6 bicyclists were also reported to be speeding at the time of the crash.

Single motor vehicle crashes were the most common crash type associated with speed-involved crashes at 70.6 percent (21,783).

The highest number of excessive speed crashes occurred during icy road conditions at 8,714 (28.2%), followed by snowy road conditions with 8,156 (26.4%).

A total of 1,521 (4.9%) of the speeding motor vehicle drivers had also been drinking at the time of the crash, and 284 (0.9%) of the speeding motor vehicle drivers had also used drugs.

Excessive speed was a factor in 175 (17.0%) fatalities in motor vehicle crashes and 950 (15.6%) suspected serious injuries in 2017.

In addition to the 30,873 crashes where speeding was a hazardous action, “speed too slow” was reported as a hazardous action for 254 crashes.

**INJURY SEVERITY IN CRASHES INVOLVING SPEEDING**

- **KILLED:** 175 (2.0%)
- **SUSPECTED SERIOUS INJURIES:** 950 (15.6%)
- **SUSPECTED MINOR INJURIES:** 2,679 (30.0%)
- **POSSIBLE INJURIES:** 5,135 (57.4%)
In a red-light-running crash, at least one motor vehicle driver, pedestrian, or bicyclist disregarded a traffic control classified as a signal, related to or within 150 feet of an intersection.

There were a total of 6,072 crashes involving red-light-running in 2017, which accounts for 1.9% of the total crashes for that year.

The number of red-light running crashes increased 18.8 percent in the five-year period from 5,109 in 2013 to 6,072 in 2017.

The most common red-light-running crashes were angle crashes, which account for 78.6% of all red-light-running crashes.

Red-light-running crashes commonly involved more than one motor vehicle (98.5%).

The number of motor vehicle drivers who had-been-drinking and also ran red lights in crashes was 147 (2.4%). The number of motor vehicle drivers who were using drugs and also ran red lights in crashes was 24 (0.4%).

There were 15 motorcycle drivers who failed to stop at a red light in 2017, which is 0.2% of all motor vehicle drivers who ran red lights.

Out of the 1,028 people killed, 26 (2.5%) were the result of a red-light-running crash.

A total of 31 pedestrians and 48 bicyclists were involved in red-light-running crashes, none of whom were killed. Sixty nonmotorists were injured.

Of the 16,119 people involved in red-light-running crashes, 26 people were killed and 4,100 people were injured in 2017.