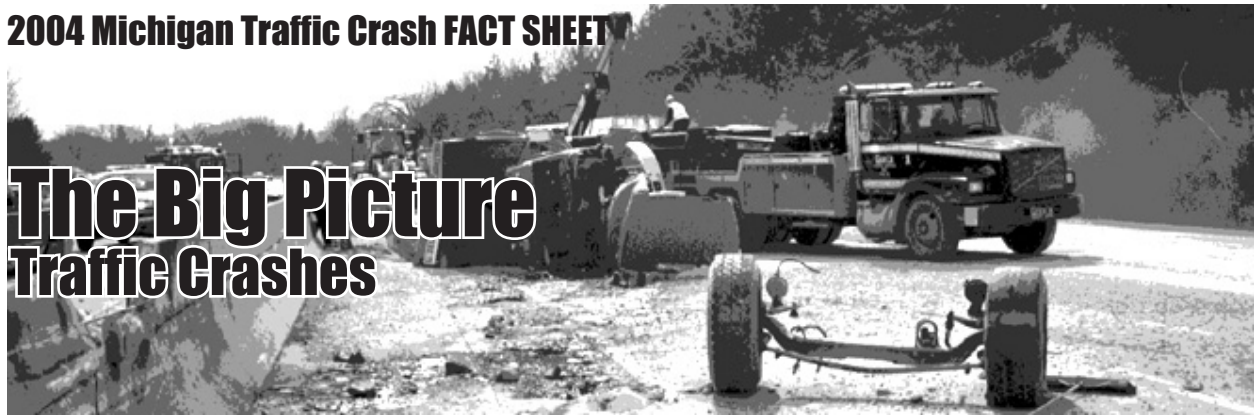


The Big Picture Traffic Crashes



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 373,028 reported crashes, of which 1,055 were fatal, 73,118 were personal injury, and 298,855 were property damage only. Compared to 2003 this is a 4.7 percent decrease in total reported crashes, a 10.0 percent decrease in fatal crashes, a 4.5 percent decrease in personal injury crashes, and a 4.7 percent decrease in property damage crashes.



1,159 persons were killed as a result of the 1,055 fatal crashes for an average of 1.1 deaths per fatal crash.



One out of every 8,725 persons in Michigan was killed in a traffic crash; one out of every 101 persons was injured.



A traffic crash was reported every 1 minute 25 seconds.



One person was killed every 7 hours and 33 minutes as a result of a traffic crash.



One person was injured every 5 minutes and 16 seconds in a traffic crash.



For each person killed, 86.0 persons were injured in crashes.



9,270 persons received A-injuries. An A-injury is incapacitating. It prevents normal activities and generally requires hospitalization.

The estimated economic loss due to traffic crashes was \$9.4 billion. If costs were spread across the state's population this would translate into a loss of \$930 per state resident.

General Facts



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



635,913 motor vehicles were involved in 373,028 reported crashes. 1,055 of these were fatal crashes. These fatal crashes resulted in 1,159 deaths, compared to the 1,283 deaths that were the result of 1,172 fatal crashes in 2003.



Of the 1,159 motor vehicle deaths in 2004, 613 (52.9%) were drivers of vehicles, 277 (23.9%) were passengers in motor vehicles, 140 (12.1%) were pedestrians, 79 (6.8%) were motorcyclists, 21 (1.8%) were bicyclists, 14 (1.2%) were snowmobile operators, 12 (1.0%) were ORV/ATV operators, 2 (0.2%) were operators of farm equipment, and 1 (0.1%) was a moped operator.



Of the 890 drivers and passengers killed, 319 (35.8%) were not wearing seatbelts and 451 (50.7%) were wearing seatbelts. It is unknown whether 120 (13.5%) of the fatalities were belted.



535 deaths resulted from 501 single vehicle fatal crashes.



A higher proportion of all crashes involved male drivers than female drivers. Of the 333,606 crashes involving male drivers, 1,176 (0.4%) were fatal. Of the 251,077 crashes involving female drivers, 475 (0.2%) were fatal.



Excessive speed was reported by police as the hazardous action of 12.4 percent of the drivers in fatal crashes.



Of all fatal crashes, 26.0 percent occurred at intersections.



Most fatal crashes occurred on dry roadways (70.8%) in clear weather conditions (48.4%).



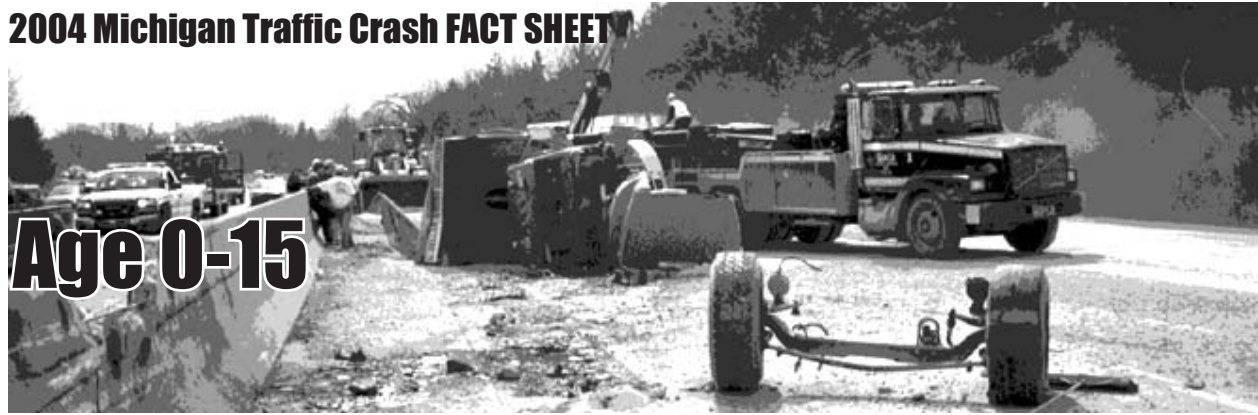
The majority of all crashes occurred during daylight hours (61.0%). Dark conditions created the greatest hazard, as they were overrepresented in fatal crashes.



In 2004:
More fatal crashes occurred between 3:00 and 5:59 PM than any other time period.
More fatal crashes occurred on both Friday and Saturday than any other day.
More fatal crashes occurred in November than any other month.

2004 Michigan Traffic Crash FACT SHEET

Age 0-15

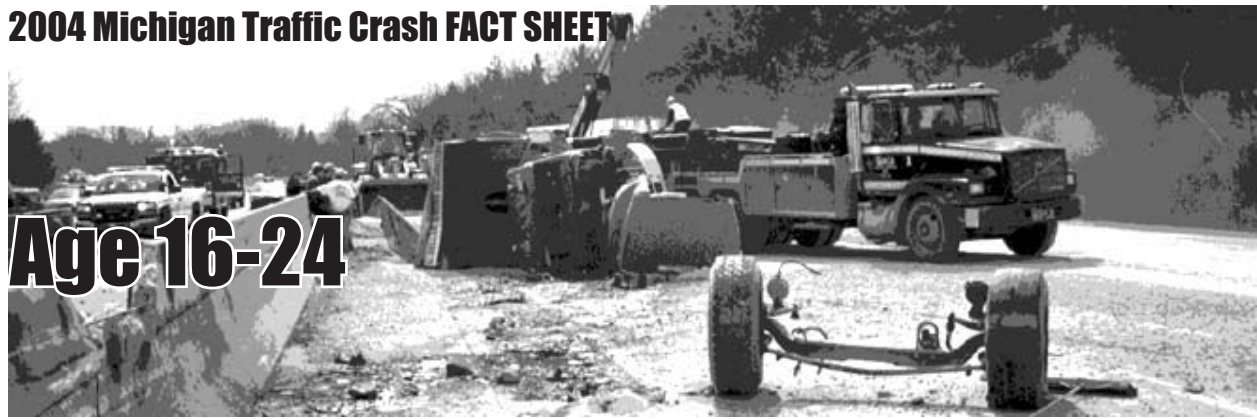


CHILDREN

- 0⁷⁵ The number one cause of accidental death for children ages 0-15 in Michigan is motor vehicle crashes.
- 0⁷⁵ 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.
- 0⁷⁵ 83 children (0-15 years old) died, and 8,073 children were injured in motor vehicle crashes.
- 0⁷⁵ Older children age 11 to 15 had the lowest restraint usage (78.8%), as reported to police at the scene of a traffic crash.
- 0⁷⁵ Children accounted for 8.6 percent of the pedestrians killed in Michigan in 2004, and 26.8 percent of all pedestrian injuries.
- 0⁷⁵ Children under 16 years of age accounted for 7 (33.3%) of the bicycles deaths in 2004.
- 0⁷⁵ There were 61,243 licensed drivers in the 0-15 age group in 2004. 53,727 children (14-15 years old) participated in the graduated driver licensing program. Special licenses within this age group included; 225 moped operators, 11 minor restricted operators for family emergencies only, and 1 chauffeur. 1,893 drivers age 0-15 were involved in crashes (15 in fatal crashes).

**It is recommended that all children age 12 and under
ride in a rear seat with appropriate restraint.**

Age 16-24



TEENS / YOUNG ADULTS

Inexperience, risk-taking behavior and 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.

- 16-24** Teenagers and young adults ages 16-24 are disproportionately involved in motor vehicle crashes.
- 16-24** According to the Michigan Department of Community Health, four out of five accidental deaths for this age group are due to motor vehicle crashes.
- 16-24** 283 persons (16-24 years old) were killed in traffic crashes, including 171 (60.4%) drivers. The 16-24 age group accounted for 24.4 percent of all traffic deaths.
- 16-24** In addition 26,819 teenagers and young adults were injured in traffic crashes.
- 16-24** There were 1,067,700 licensed drivers in the 16-24 age group in 2004. 150,220 (14.0%) of these drivers were involved in crashes (396 in fatal crashes).
- 16-24** The 16-24 age group represented 14.8 percent of Michigan's active driving population, yet drivers in this group were involved in 23.6 percent of all crashes and in 22.9 percent of all fatal crashes.
- 16-24** Generally, younger drivers were more involved in single-vehicle and off-road crashes, had the highest incidence of collision with ditches and trees, and were least likely to be alone in their car at the time of the crash.
- 16-24** Teenagers and young adults had the highest incidence of fatal crashes when their speed was too fast.
- 16-24** The weekend had a higher involvement of teen and young adult drivers in all crashes when compared to older drivers.
- 16-24** Teenagers and young adults accounted for 12.9 percent of the pedestrians killed in Michigan in 2004, and 19.0 percent of all pedestrian injuries.
- 16-24** 1 (4.8%) of the 21 bicyclist deaths in 2004 were in the 16-24 age group.

2004 Michigan Traffic Crash FACT SHEET

Age 65 and over

ELDERLY

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.

- 65+** Drivers age 65 and older made up 14.5 percent of Michigan's active driving population. They were involved in 6.8 percent of all crashes and 11.6 percent of the fatal crashes.
- 65+** Drivers and injured passengers age 75 to 104 had the highest restraint usage (95.1%), as reported to police at the scene of a crash.
- 65+** 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.
- 65+** 191 persons (65 and older) were killed in traffic crashes; 122 (63.9%) of them were drivers.
- 65+** In addition 7,542 persons age 65 and older were injured in traffic crashes.
- 65+** There were 1,044,354 licensed drivers age 65 and older in 2004. 43,146 (4.1%) of these drivers were involved in crashes (201 in fatal crashes).
- 65+** 9:00 AM to 2:59 PM shows the highest involvement for elderly drivers in all crashes when compared to the other two age groups.
- 65+** 21.4 percent of the pedestrians killed in Michigan in 2004 were age 65 and older; 6.3 percent of the pedestrians injured were age 65 and older.
- 65+** 0 (0%) bicyclists killed in 2004 were over the age of 65.

2004 Michigan Traffic Crash FACT SHEET

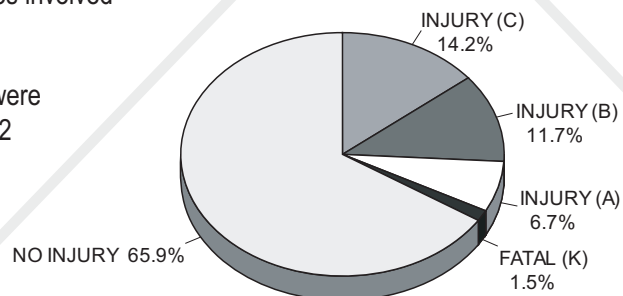
Alcohol

Information regarding alcohol involvement was collected from all investigated fatal motor vehicle traffic crashes in Michigan during 2004. A fatal crash is alcohol related if any driver, pedestrian, or bicyclist involved was reported by the police officer on the Traffic Crash Report as "had been drinking."

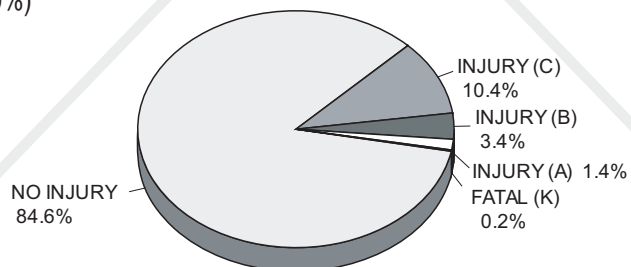
Alcohol impairment has major effects on traffic safety.

- ☒ A total of 1,055 fatal crashes occurred in Michigan in 2004. 338, or 32.0 percent, of those fatal crashes were alcohol-related.
- ☒ The fatality count of persons involved in alcohol-related fatal crashes was 364 in 2004. This accounts for 31.4 percent of the total number of persons killed (1,159).
- ☒ **Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of fatalities is almost eight times higher than in all crashes and the most serious injury level (incapacitating) is almost five times higher.**
- ☒ 63.9 percent of all alcohol-related fatal crashes involved one vehicle.
- ☒ Of the pedestrians killed in 2004, 38 deaths were the result of a had-been-drinking crash and 32 (84.2%) of these pedestrians had been drinking.
- ☒ Of the motorcyclists killed in 2004, 25 deaths were the result of a had-been-drinking crash and 22 (88.0%) of these motorcyclists had been drinking.
- ☒ Of the bicyclists killed in 2004, 6 deaths were the result of a had-been-drinking crash and 3 (50.0%) of these bicyclists had been drinking.
- ☒ Of the snowmobilers killed on Michigan roadways in 2004, 4 deaths were the result of a had-been-drinking crash and 4 (100.0%) of these snowmobilers had been drinking.

OCCUPANTS IN HBD CRASHES



OCCUPANTS IN CRASHES

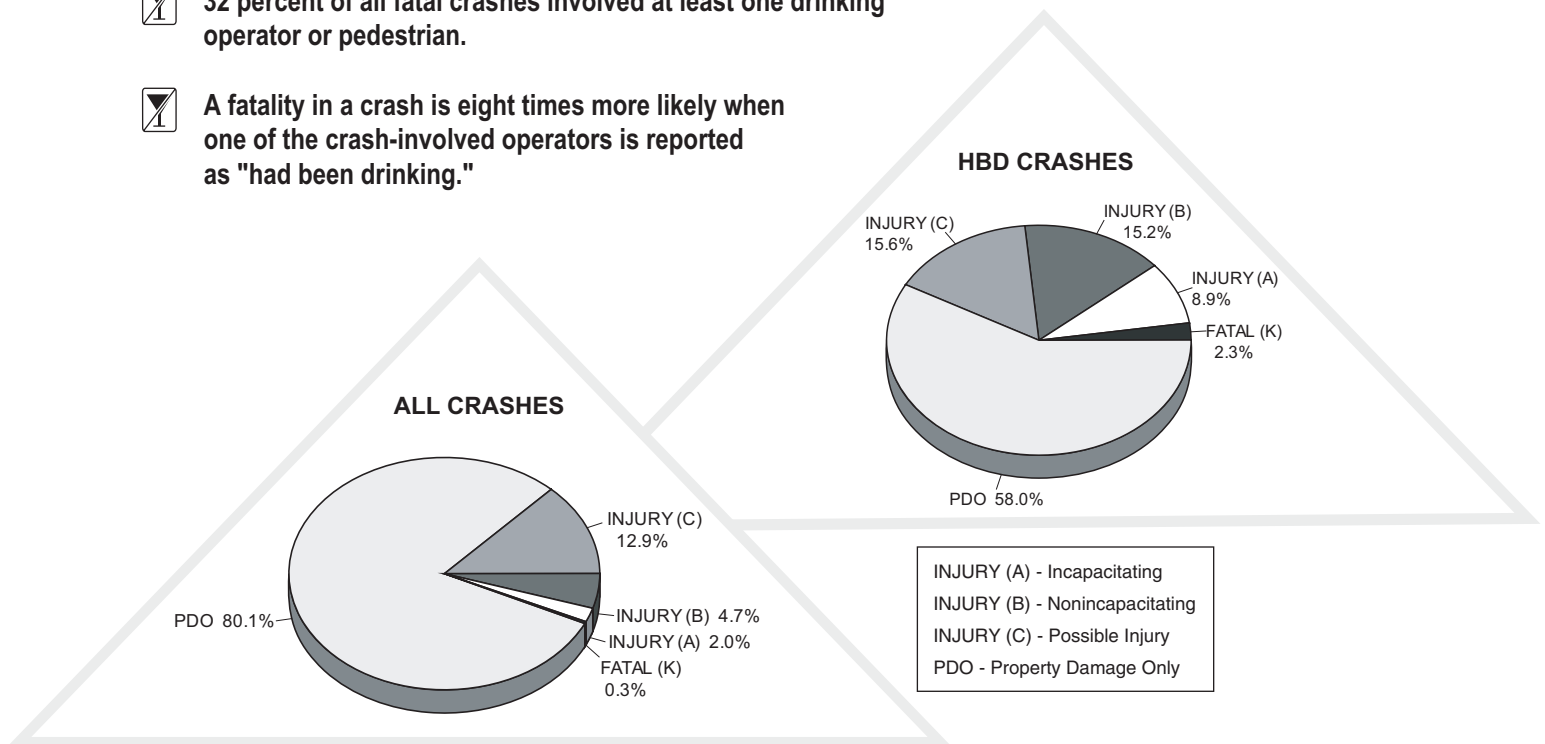


INJURY (A) - Incapacitating
 INJURY (B) - Nonincapacitating
 INJURY (C) - Possible Injury



Alcohol

- ☒ Had-been-drinking **injury** crashes peak on Saturday and Sunday, and in the hours between 9:00 PM and 2:59 AM. Midnight to 2:59AM is a particularly hazardous travel period.
- ☒ In 2004, had-been-drinking injury crashes were highest in August (575) and October (572).
- ☒ The highest number of HBD **fatal** crashes, 50, occurred in August.
- ☒ The 12:00 AM to 2:59 AM time period had the highest rate of had-been-drinking **fatal** crashes (66.2%), while the late morning hours had the lowest (4.4%).
- ☒ Saturday and Sunday had the highest proportions of alcohol-related **fatal** crashes. 192 out of 497 weekend **fatal** crashes involved drinking.
- ☒ The severity of injuries is much worse for drivers and passengers who had been drinking.
- ☒ Of the 14,421 (gender reported) drinking drivers involved in crashes, 11,179 (77.5%) were male and 3,242 (22.5%) were female.
- ☒ 4,384 (30.4%) of the (gender reported) drinking drivers in crashes were age 24 and younger.
- ☒ **32 percent of all fatal crashes involved at least one drinking operator or pedestrian.**
- ☒ **A fatality in a crash is eight times more likely when one of the crash-involved operators is reported as "had been drinking."**



2004 Michigan Traffic Crash FACT SHEET

Bicycles

This sheet addresses the problem of deaths and serious injuries among bicyclists involved in vehicle-related crashes. At least one motor vehicle needs to be involved for the crash to be reportable as a motor vehicle crash.



2,246 bicyclists were involved in motor vehicle crashes in Michigan in 2004.



21 bicyclists were killed on Michigan roadways in 2004, eleven less than reported in 2003.



1,796 bicyclist injuries were reported to police agencies.



At all ages, males (1,794) were involved in more bicycle crashes than females (452). The male to female ratio of bicycle deaths was 6:1, with 18 male bicyclists killed and 3 female bicyclists killed.



12 of the bicyclists killed (57.1%) were reported by police to be "going straight ahead" just prior to crash.



80.8 percent of all bicyclists in motor vehicle crashes and 12 of the 21 bicyclists killed were riding during daylight hours.



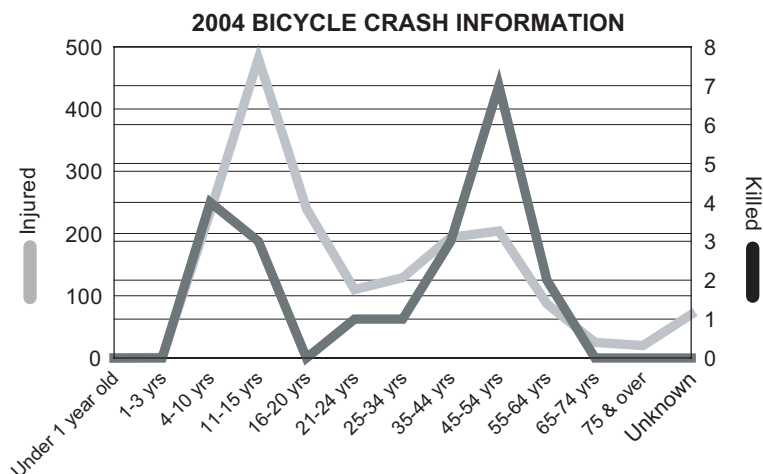
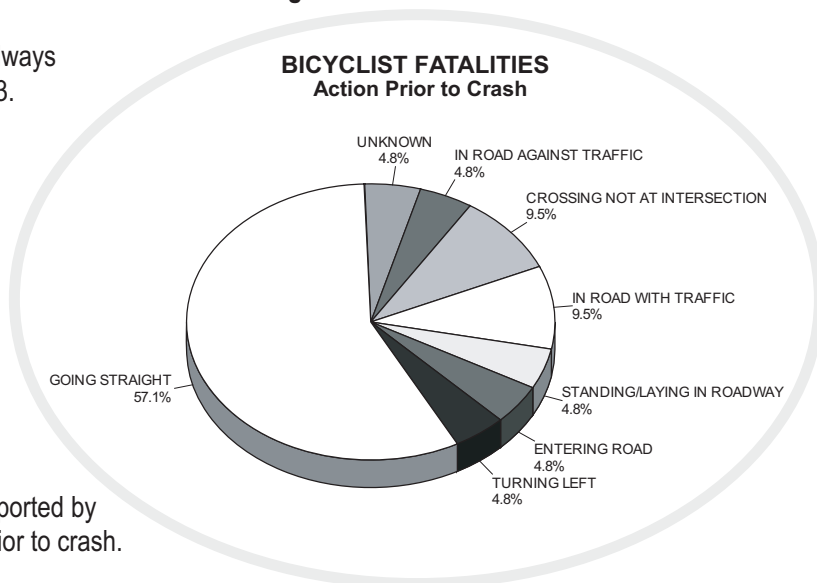
3:00 PM - 5:59 PM were the peak hours for bicyclist involvement in all crashes and injuries to bicyclists. 3:00 PM - 5:59 PM were the peak hours for bicyclist fatalities.



Of the bicyclists killed in 2004, 6 deaths were the result of a had-been-drinking crash and 3 (50.0%) of these bicyclists had been drinking.



33.3 percent of all bicyclist deaths occurred to children under 16 years of age. Children aged 11 to 15 years represented 14.3 percent of the total number of bicyclist fatalities. Children aged 4 to 10 years represented 19.0 percent of the total number of bicyclist fatalities.



2004 Michigan Traffic Crash FACT SHEET



Deer

Contrary to common belief, motor vehicle-deer crashes are happening most often in Michigan's southern, heavily populated counties.



Michigan had 62,707 reported motor vehicle-deer crashes during 2004. This is a 0.3 percent rise from 62,535 vehicle-deer crashes in 1995.



64 percent of the vehicles involved in vehicle-deer crashes in 2004 were passenger cars.



1,647 people were injured and 3 people were killed as a result of those collisions.



All motor vehicle-deer involved/associated crashes peaked during the 6:00 PM - 8:59 PM time period. Fatal deer crashes occurred during the 9:00 AM - 11:59 AM and 6:00 PM - 11:59 PM time periods.

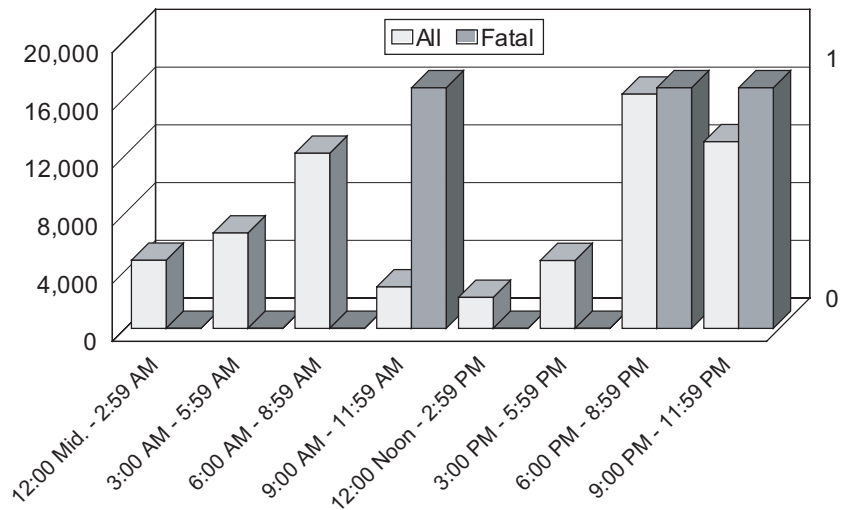


The top ten counties, each experiencing over 1,300 vehicle-deer crashes in 2004, were:
 Kent 2,433, Jackson 2,128, Calhoun 2,081, Montcalm 1,672, Ingham 1,590, Oakland 1,551, Eaton 1,522, Kalamazoo 1,382, Lapeer 1,376, Barry 1,314.

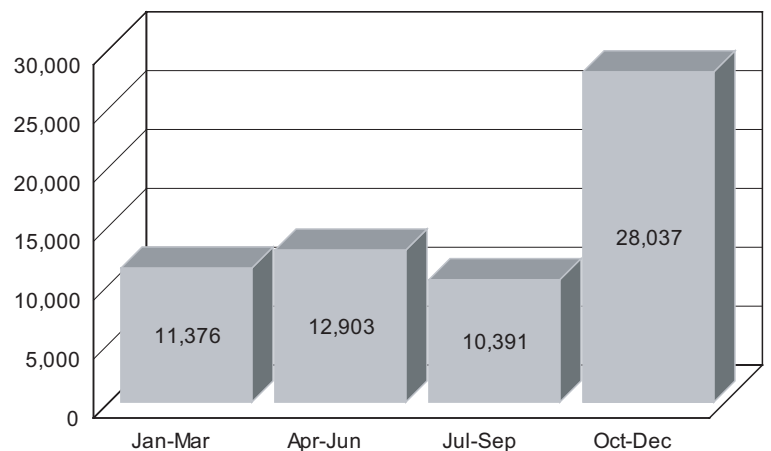


28,037 (44.7%) of all reported motor vehicle-deer collisions occurred during the fourth quarter of the year.

TIME AND SEVERITY OF ALL MOTOR VEHICLE-DEER CRASHES










All Motor Vehicle-Deer Crashes



2004 Michigan Traffic Crash FACT SHEET

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 turning, backing, and changing lanes
-  More separation of units, fire/explosion, jackknife, cargo loss/shift, and other non-collisions
-  Fewer single vehicle crashes but more sideswipes
-  Fewer drivers indicated to be speeding and failing to yield, but more drivers indicated to be making backing, lane use, and turning errors
-  More on-road crashes
-  More daytime crashes, but fewer late afternoon, evening, and night time crashes
-  More weekday crashes

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Single Vehicle	2,405	13.8	15	11.4	299	9.3
Head On	294	1.7	25	18.9	136	4.2
Head On - Left Turn	186	1.1	6	4.5	75	2.3
Angle	2,959	17.0	37	28.0	825	25.7
Rear End	4,022	23.1	28	21.2	1,087	33.9
Rear End - Left Turn	154	0.9	5	3.8	42	1.3
Rear End - Right Turn	156	0.9	0	0.0	30	0.9
Sideswipe - Same Direction	4,412	25.4	1	0.8	421	13.1
Sideswipe - Opposite Direction	947	5.5	9	6.8	88	2.7
Other	1,783	10.3	6	4.5	196	6.1
Unknown	58	0.3	0	0.0	10	0.3
Total	17,376	100.0	132	100.0	3,209	100.0

 Heavy truck/buses were involved in 4.7 percent of all traffic crashes in Michigan in 2004.

 There were 16,695 heavy truck/bus-involved **crashes** in which 129 people were killed and 4,156 injured.

Motorcycles

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



The 2004 death rate for motorcyclists was 12.0 per 100 million vehicle miles traveled compared to the overall mileage death rate of 1.1 per 100 million vehicle miles traveled.



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



There were 3,276 motorcycle-involved crashes in which 79 motorcyclists were killed and 2,679 injured.



Motorcycles were involved in 0.88 percent of all traffic crashes in Michigan in 2004.



Because motorcycles have a low profile, they tend to be less visible than other motor vehicles. 63 (79.7%) of the 79 motorcyclists killed were reported by police as "going straight ahead" just prior to crash.



Of the motorcyclists killed in traffic crashes in 2004, 95.0 percent were male.

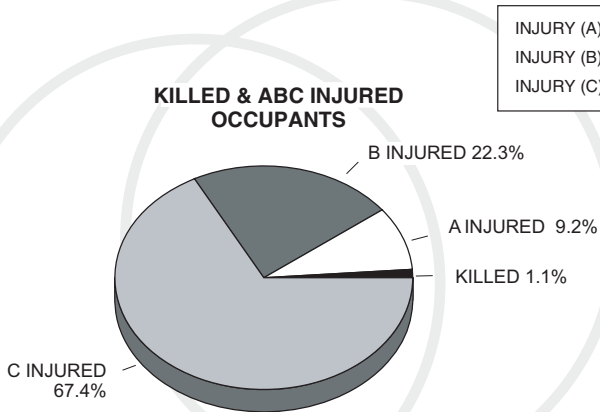
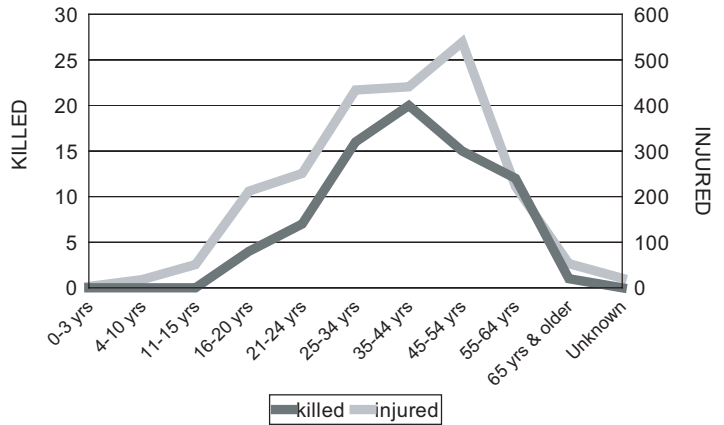


Of the motorcyclists killed in 2004, 25 deaths were the result of a had-been-drinking crash and 22 (88.0%) of these motorcyclists had been drinking.

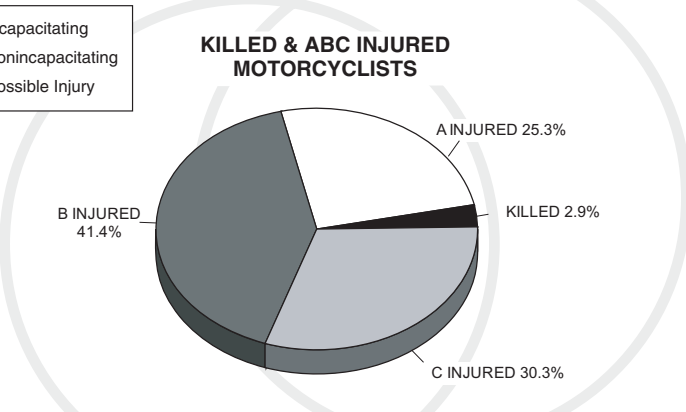


Of the male motorcyclists injured, 434 (19.3%) were 25 - 34 years old.

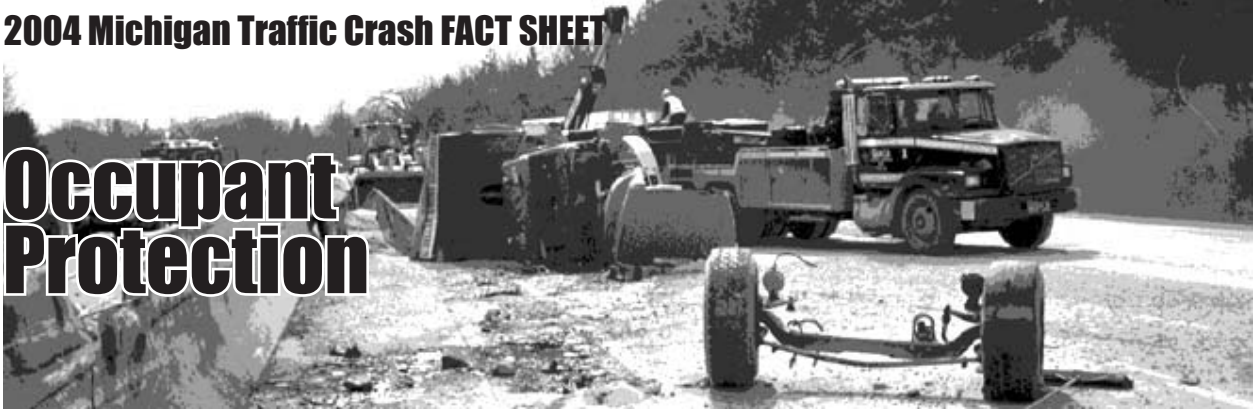
AGE OF MALE MOTORCYCLISTS KILLED & INJURED IN MOTOR VEHICLE CRASHES



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



Occupant Protection

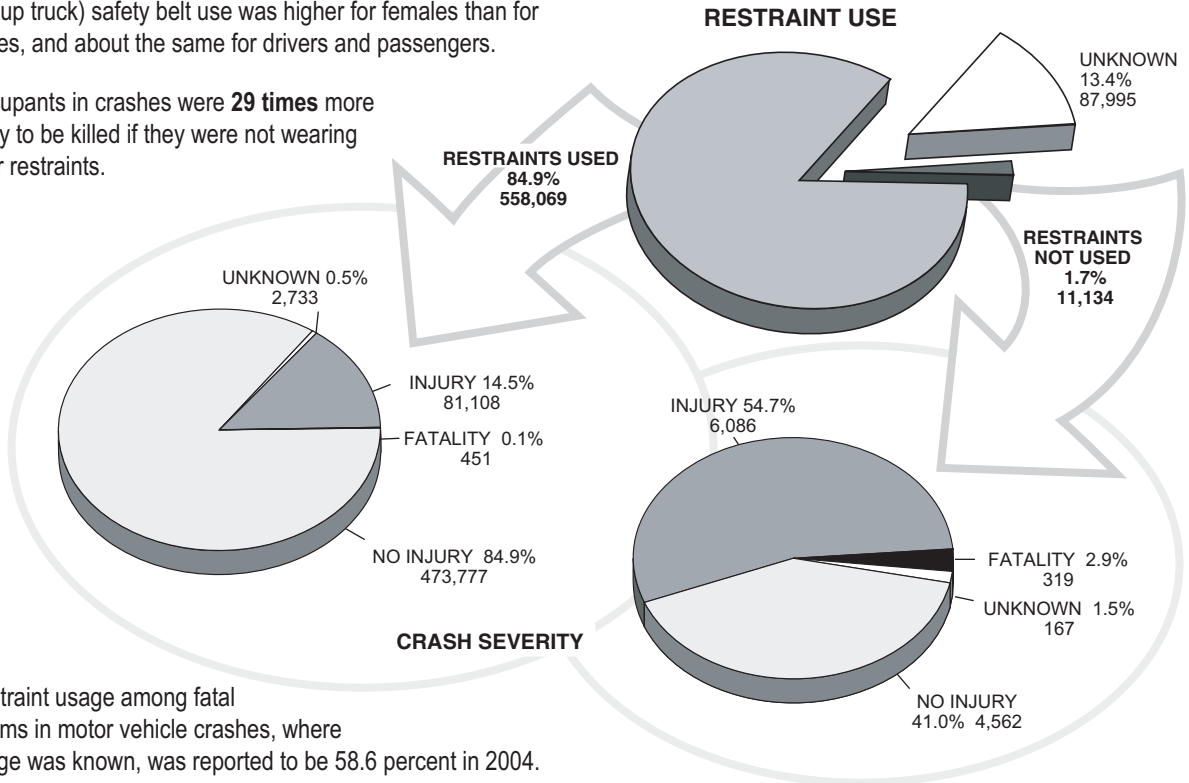


Restraint use by motorists is measured two ways: by what motorists REPORT to police at the scene of a traffic crash (reported usage), and by DIRECT OBSERVATION studies where motorists are totally unaware of the presence of researchers (observed usage).

Of the 657,198 drivers and injured passengers involved in crashes, 558,069 (84.9%) were REPORTED to have been using occupant restraints. However, a DIRECT OBSERVATION study by the University of Michigan Transportation Research Institute estimated overall safety belt use was 91.3 percent for passenger cars, 92.3 percent for sport-utility vehicles, 91.3 percent for vans/minivans, and 85.3 percent for pickup trucks in 2004. Statewide belt use for all vehicle types was 90.5 percent.

For all vehicle types (passenger, sport-utility, van/minivan, and pickup truck) safety belt use was higher for females than for males, and about the same for drivers and passengers.

Occupants in crashes were **29 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 58.6 percent in 2004.


Motor vehicle occupants aged 75 to 104 had the highest reported restraint usage (95.1%) of any age group. Children age 11 to 15 had the lowest reported restraint usage (78.8%).


Restraint use can prevent ejection from a motor vehicle. Ejection is associated with higher levels of injury severity and greater numbers of fatalities.





Pedestrians


This sheet addresses the problem of deaths and serious injuries among pedestrians involved in vehicle-related crashes. At least one motor vehicle needs to be involved for the crash to be reportable as a motor vehicle crash.


 Since 1995, a total of 1,707 pedestrians have been killed, accounting for 12.5 percent of all traffic crash deaths during that period.


 There were 2,864 pedestrians involved in motor vehicle crashes, with 140 pedestrians killed and 2,403 pedestrians injured.


 The male to female ratio of pedestrian deaths was 2.3:1.

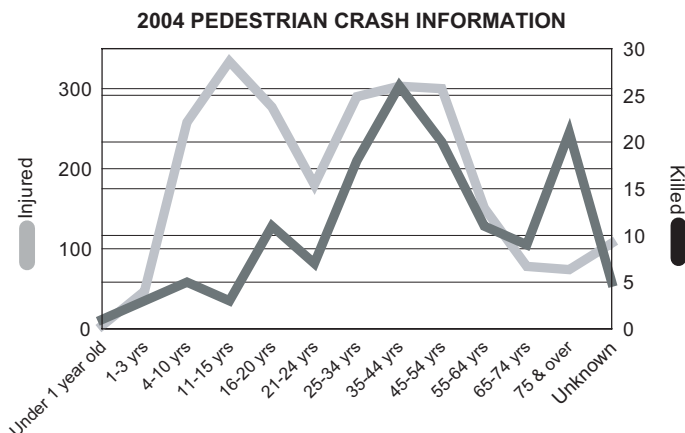
 The 140 pedestrian fatality count is a decrease of 29 deaths (20.7%) from the 2003 figure. For each pedestrian killed, there were 17.2 pedestrians injured.

 Most pedestrian crashes occurred during the evening hours (6:00 PM - 8:59 PM) under clear conditions. However, most pedestrian fatalities occurred during hours of darkness. Saturday was the deadliest day for pedestrians in 2004 with 26 fatalities.

 Of the pedestrians killed in 2004, 38 deaths were the result of a had-been-drinking crash and 32 (84.2%) 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 29.3 percent of the pedestrian fatalities.

 Of all pedestrians killed, 8.6 percent were children 0-15, 12.9 percent were age 16-24, 31.4 percent were age 25-44, 22.1 percent were age 45-64, and 21.4 percent were 65 and older.



2004 PEDESTRIAN FATALITIES BY AGE

Pedestrian Action Prior to Crash	Total	0-3	4-10	11-15	16-20	21-24	25-44	45-64	65 & over
Crossing at intersection	20	0	0	1	0	1	5	6	7
Crossing not at intersection	41	0	1	1	6	1	10	7	15
Getting on/off vehicle	1	0	0	0	0	0	0	1	0
In roadway with traffic	24	3	0	1	2	1	8	8	1
In roadway against traffic	1	0	0	0	0	0	1	0	0
Standing or lying in roadway	11*	0	0	0	1	2	4	1	2
Pushing/working on vehicle	3	0	0	0	1	0	1	0	1
Other work in roadway	1	0	0	0	0	0	1	0	0
Stopped on roadway	1	0	1	0	0	0	0	0	0
In roadway for other reason	11*	0	1	0	1	1	3	2	1
Not in roadway	8*	0	1	0	0	1	3	2	0
Other/Unknown	18*	1	1	0	0	0	8	4	3
Totals	140	4	5	3	11	7	44	31	30

* includes unknown age

