



Motorcycles

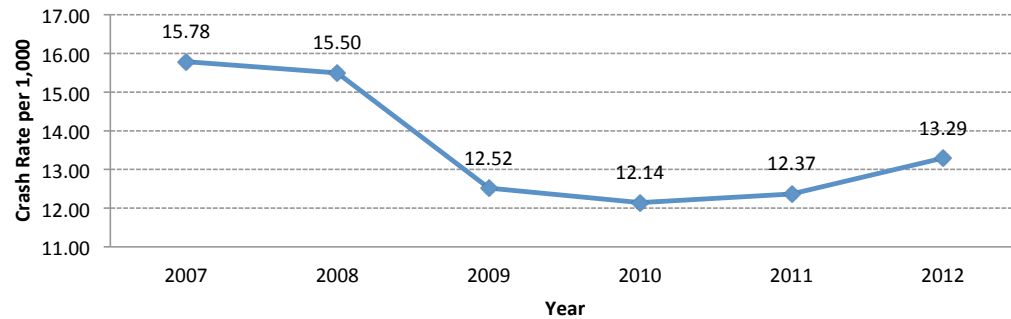
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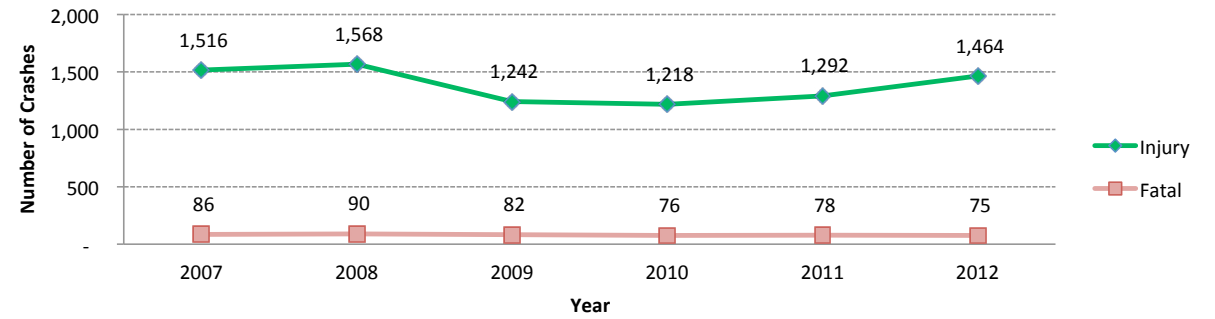
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Rate of Crashes per 1,000 Registered Motorcycles



- The rate of total motorcyclists in crashes per registered motorcycles demonstrates a notable decreasing trend from 2007 to a low point in 2010. Between 2010 and 2012, the rate increases slightly but still remained much lower than the highest rate in 2007.

Crashes Involving Motorcycles



- The number of motorcycle related injury crashes increased between 2007 and 2008; decreased to the lowest number in 2010; and then increased to a number similar to that in 2007.
- In contrast, the number of motorcycle-related fatal crashes decreased from 2007 to 2012.

| 2007–2012 RATE OF CRASHES PER 1000 REGISTERED MOTORCYCLES | | | | | | | | | |
|---|---|-------|------|--------|------|-------|------|-------|-------|
| YEAR | TOTAL REGISTERED MOTORCYCLES <small>*SOURCE CDOR</small> | PDO | | INJURY | | FATAL | | TOTAL | |
| | | # | RATE | # | RATE | # | RATE | # | RATE |
| 2007 | 157,430 | 883 | 5.61 | 1,516 | 9.63 | 86 | 0.55 | 2,485 | 15.78 |
| 2008 | 173,517 | 1,031 | 5.94 | 1,568 | 9.04 | 90 | 0.52 | 2,689 | 15.50 |
| 2009 | 174,915 | 866 | 4.95 | 1,242 | 7.10 | 82 | 0.47 | 2,190 | 12.52 |
| 2010 | 176,885 | 854 | 4.83 | 1,218 | 6.89 | 76 | 0.43 | 2,148 | 12.14 |
| 2011 | 184,174 | 908 | 4.93 | 1,292 | 7.02 | 78 | 0.42 | 2,278 | 12.37 |
| 2012 | 190,849 | 998 | 5.23 | 1,464 | 7.67 | 75 | 0.39 | 2,537 | 13.29 |

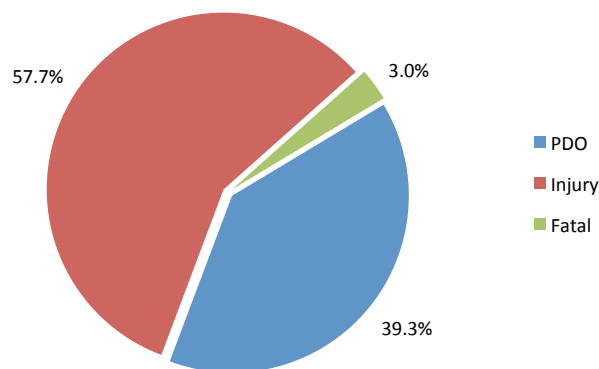
- The number of registered motorcycles consistently increased between 2007 and 2012. The greatest increase occurred between 2007 and 2008. A second notable increase (one-half the earlier change) occurred between 2010 and 2011.
- The rate of motorcycle related fatal crashes per registered motorcycles consistently decreased between 2007 and 2012.
- Property damage and injury motorcycle related crashes decreased between 2007 and 2010; but increased in 2011 and 2012.

| 2007–2012 PERCENT OF TOTAL CRASHES THAT INVOLVE MOTORCYCLES | | | | | | | | | | | | |
|---|---------------|--------------------|-----|---------------|--------------------|------|---------------|--------------------|------|---------------|--------------------|-----|
| YEAR | PDO | | | INJURY | | | FATAL | | | TOTAL | | |
| | TOTAL CRASHES | MOTORCYCLE RELATED | | TOTAL CRASHES | MOTORCYCLE RELATED | | TOTAL CRASHES | MOTORCYCLE RELATED | | TOTAL CRASHES | MOTORCYCLE RELATED | |
| | # | # | % | # | # | % | # | # | % | # | # | % |
| 2007 | 99,159 | 883 | 0.9 | 12,231 | 1,516 | 12.4 | 509 | 86 | 16.9 | 111,899 | 2,485 | 2.2 |
| 2008 | 93,146 | 1,031 | 1.1 | 11,213 | 1,568 | 14.0 | 473 | 90 | 19.0 | 104,832 | 2,689 | 2.6 |
| 2009 | 91,044 | 866 | 1.0 | 10,216 | 1,242 | 12.2 | 438 | 82 | 18.7 | 101,698 | 2,190 | 2.2 |
| 2010 | 89,183 | 854 | 1.0 | 9,523 | 1,218 | 12.8 | 411 | 76 | 18.5 | 99,117 | 2,148 | 2.2 |
| 2011 | 91,117 | 908 | 1.0 | 9,581 | 1,292 | 13.5 | 409 | 78 | 19.1 | 101,107 | 2,278 | 2.3 |
| 2012 | 90,482 | 998 | 1.1 | 9,965 | 1,464 | 14.7 | 434 | 75 | 17.3 | 100,881 | 2,537 | 2.5 |

- The percentage of motorcycle-related crashes relative to total crashes was 2.5% in 2012.
- Motorcycle-related crashes resulting in property damage only was 1.1% in 2012.
- However in 2012, the percentage of motorcycle-related crashes resulting in injury (14.7%) or fatality (17.3%) demonstrates that motorcycles were by far over-represented relative to percentage of total crashes (2.5%).
- The greatest percentage of total crashes involving motorcycles, 2.6%, occurred in 2008.

- In 2012 eight Colorado counties had more than 100 motorcycle crashes.
- El Paso (377) and Jefferson (329) had the greatest total motorcycle crashes. The other six counties included Denver (278), Adams (200), Arapahoe (217), Boulder (131), Douglas (110), and Larimer (202).

2012 Motorcycle Related Crash Severity

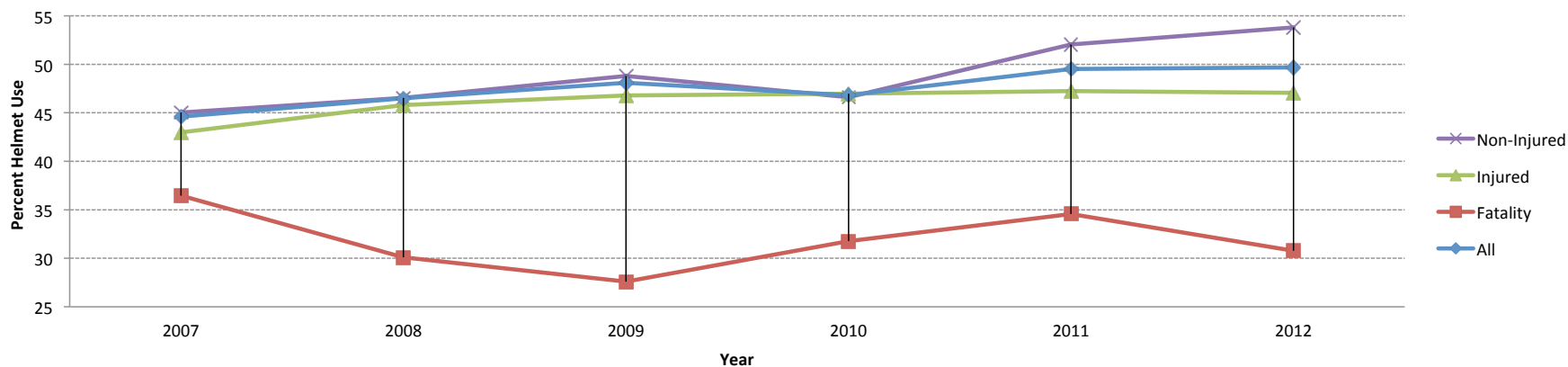


- In Colorado, 57.7% of motorcycle related crashes were injury crashes, 39.3% were property damage only, and 3.0% were fatal crashes.

| 2012 MOTORCYCLE CRASH SEVERITY BY COUNTY | | | | | | |
|--|---------|--------|-------|-------|------------------|----------|
| COUNTY | CRASHES | | | | PERSONS INVOLVED | |
| | PDO | INJURY | FATAL | TOTAL | INJURED | FATALITY |
| Adams | 83 | 114 | 3 | 200 | 120 | 6 |
| Alamosa | 2 | 1 | - | 3 | 1 | - |
| Arapahoe | 92 | 119 | 6 | 217 | 121 | 6 |
| Archuleta | 9 | 5 | - | 14 | 7 | - |
| Baca | - | - | - | - | - | - |
| Bent | - | 1 | - | 1 | 1 | - |
| Boulder | 40 | 85 | 6 | 131 | 96 | 7 |
| Broomfield | 6 | 11 | - | 17 | 12 | - |
| Chaffee | 3 | 9 | 1 | 13 | 10 | 1 |
| Cheyenne | - | - | 1 | 1 | 2 | 1 |
| Clear Creek | 7 | 12 | - | 19 | 13 | - |
| Conejos | - | 1 | - | 1 | 1 | - |
| Costilla | 1 | 1 | - | 2 | 1 | - |
| Crowley | - | - | - | - | - | - |
| Custer | 3 | 5 | - | 8 | 5 | - |
| Delta | 2 | 7 | 2 | 11 | 8 | 2 |
| Denver | 117 | 158 | 3 | 278 | 171 | 3 |
| Dolores | - | 2 | - | 2 | 3 | - |
| Douglas | 42 | 66 | 2 | 110 | 77 | 2 |
| Eagle | 8 | 9 | - | 17 | 7 | - |
| El Paso | 169 | 197 | 11 | 377 | 217 | 10 |
| Elbert | 3 | 3 | 1 | 7 | 4 | 1 |
| Fremont | 7 | 21 | 1 | 29 | 24 | 1 |
| Garfield | 10 | 14 | - | 24 | 14 | - |
| Gilpin | 7 | 3 | - | 10 | 5 | - |
| Grand | 2 | 7 | - | 9 | 8 | - |
| Gunnison | 9 | 7 | 1 | 17 | 10 | 1 |
| Hinsdale | - | 5 | - | 5 | 5 | - |
| Huerfano | - | 6 | - | 6 | 6 | - |
| Jackson | - | 4 | - | 4 | 5 | - |
| Jefferson | 130 | 190 | 9 | 329 | 205 | 8 |
| Kiowa | 1 | - | - | 1 | - | - |

| COUNTY | CRASHES | | | | PERSONS INVOLVED | |
|--------------|------------|--------------|-----------|--------------|------------------|-----------|
| | PDO | INJURY | FATAL | TOTAL | INJURED | FATALITY |
| Kit Carson | 1 | 3 | - | 4 | 3 | - |
| La Plata | 12 | 17 | 3 | 32 | 25 | 3 |
| Lake | 1 | 1 | - | 2 | 1 | - |
| Larimer | 68 | 131 | 3 | 202 | 148 | 4 |
| Las Animas | 3 | 7 | - | 10 | 8 | - |
| Lincoln | 1 | 2 | - | 3 | 2 | - |
| Logan | 1 | 3 | - | 4 | 3 | - |
| Mesa | 25 | 29 | 2 | 56 | 32 | 2 |
| Mineral | - | 3 | - | 3 | 4 | - |
| Moffat | 2 | 4 | 1 | 7 | 4 | 1 |
| Montezuma | 4 | 11 | - | 15 | 11 | - |
| Montrose | 7 | 15 | - | 22 | 17 | - |
| Morgan | 5 | 4 | 2 | 11 | 7 | 2 |
| Otero | 1 | 6 | - | 7 | 9 | - |
| Ouray | 2 | 5 | - | 7 | 4 | - |
| Park | 5 | 14 | 1 | 20 | 14 | 1 |
| Phillips | - | - | - | - | - | - |
| Pitkin | 5 | 9 | - | 14 | 9 | - |
| Prowers | - | 1 | - | 1 | 2 | - |
| Pueblo | 39 | 39 | 4 | 82 | 44 | 4 |
| Rio Blanco | - | 5 | - | 5 | 5 | - |
| Rio Grande | 1 | 1 | - | 2 | 1 | - |
| Routt | 6 | 10 | - | 16 | 11 | - |
| Saguache | 3 | 1 | - | 4 | 1 | - |
| San Juan | 1 | 4 | - | 5 | 6 | - |
| San Miguel | 2 | 2 | 1 | 5 | 3 | 1 |
| Sedgwick | - | - | - | - | - | - |
| Summit | 7 | 1 | - | 8 | 1 | - |
| Teller | 12 | 16 | - | 28 | 18 | - |
| Washington | - | - | - | - | - | - |
| Weld | 31 | 54 | 11 | 96 | 64 | 11 |
| Yuma | - | 3 | - | 3 | 2 | - |
| TOTAL | 998 | 1,464 | 75 | 2,537 | 1,618 | 78 |

2007-2012 Helmet Use of Motorcyclists (Operator and Passenger) in Crashes *Source CDOR

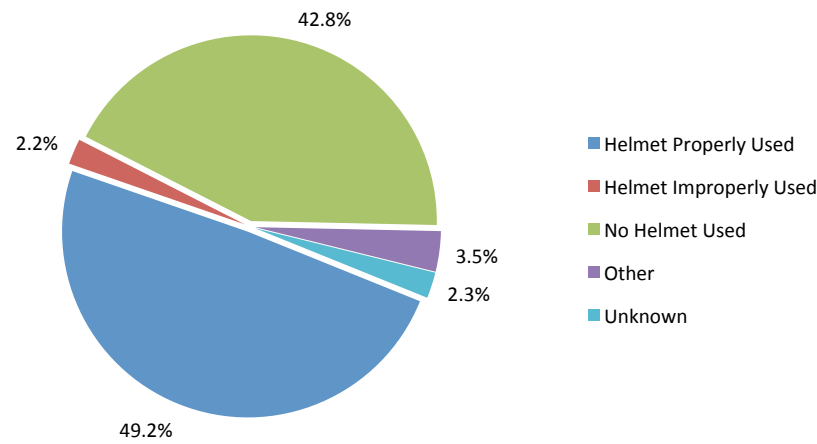


- Proper helmet use by motorcyclists (operator and passengers) in crashes increased from 43.5% in 2007 to 49.2% in 2012.
- From 2007 to 2012, the percentage of motorcyclists properly using helmets and not injured exceeded the percentage of all motorcyclists in crashes.
- Helmet use by motorcyclists injured in crashes was only slightly less than use by all motorcyclists in crashes (less than 2.5% difference).
- Statistics show that not using helmets properly leads to injuries and fatalities.

| 2007–2012 HELMET USE OF MOTORCYCLISTS IN CRASHES (OPERATOR AND PASSENGER) *SOURCE CDOR | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|------------------------|-------|---------|----------------------|------|-----------|------------------------|-------|---------|----------------------|------|-----------|------------------------|-------|---------|----------------------|------|--------------------|----------------------|------|
| YEAR | NON-INJURED | | | | | | INJURED | | | | | | FATALITY | | | | | | TOTAL | | |
| | NO HELMET | HELMET IMPROPERLY USED | OTHER | UNKNOWN | HELMET PROPERLY USED | | NO HELMET | HELMET IMPROPERLY USED | OTHER | UNKNOWN | HELMET PROPERLY USED | | NO HELMET | HELMET IMPROPERLY USED | OTHER | UNKNOWN | HELMET PROPERLY USED | | TOTAL MC OCCUPANTS | HELMET PROPERLY USED | |
| | # | # | # | # | # | % | # | # | # | # | # | % | # | # | # | # | # | % | # | # | % |
| 2007 | 352 | 22 | 53 | 131 | 457 | 45.0 | 813 | 44 | 39 | 26 | 695 | 43.0 | 46 | 4 | 2 | 2 | 31 | 36.5 | 2,717 | 1,183 | 43.5 |
| 2008 | 409 | 25 | 57 | 144 | 553 | 46.5 | 788 | 38 | 35 | 30 | 753 | 45.8 | 61 | 4 | - | - | 28 | 30.1 | 2,925 | 1,334 | 45.6 |
| 2009 | 337 | 25 | 40 | 113 | 491 | 48.8 | 612 | 25 | 46 | 31 | 628 | 46.8 | 59 | 4 | - | - | 24 | 27.6 | 2,435 | 1,143 | 46.9 |
| 2010 | 351 | 22 | 50 | 120 | 474 | 46.6 | 602 | 28 | 31 | 37 | 618 | 47.0 | 56 | 2 | - | - | 27 | 31.8 | 2,418 | 1,119 | 46.3 |
| 2011 | 385 | 23 | 53 | 43 | 547 | 52.0 | 673 | 24 | 27 | 33 | 678 | 47.2 | 44 | 4 | 1 | 4 | 28 | 34.6 | 2,567 | 1,253 | 48.8 |
| 2012 | 370 | 30 | 53 | 26 | 558 | 53.8 | 737 | 29 | 40 | 34 | 747 | 47.1 | 50 | 1 | 2 | 1 | 24 | 30.8 | 2,702 | 1,329 | 49.2 |

- Overall trend of helmet use increased between 2007 and 2012.
- Percentage of motorcyclists’ (operator and passengers) fatal crashes when properly using helmets fluctuated from 36.5% in 2007, to the lowest point of 27.6% in 2009, and increased to 30.8% in 2012.

2012 Helmet Use of Motorcyclists (Operator and Passengers) in Crashes *Source CDOR

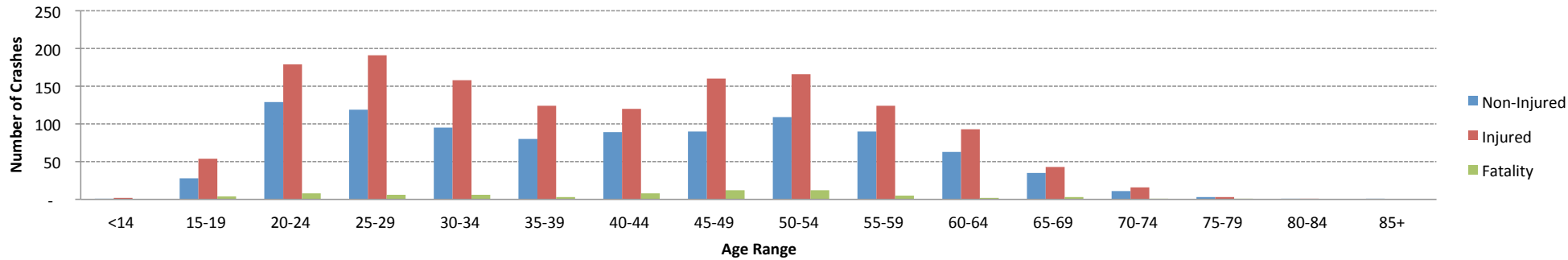


- In 2012, 45% of motorcyclists (operator and passengers) in crashes were not or not properly using helmets.
- In 2012, only 4.2% more motorcyclists in crashes were properly using helmets than those motorcyclists in crashes not properly using helmets.

| 2012 HELMET USE OF MOTORCYCLISTS (OPERATOR AND PASSENGERS) IN CRASHES *SOURCE CDOR | | | | | | | | |
|--|--------------|--------------|--------------|--------------|-----------|--------------|--------------|--------------|
| HELMET USE | NON-INJURED | | INJURED | | FATALITY | | TOTAL | |
| | # | % | # | % | # | % | # | % |
| Helmet Properly Used | 558 | 53.8 | 747 | 47.1 | 24 | 30.8 | 1,329 | 49.2 |
| Helmet Improperly Used | 30 | 2.9 | 29 | 1.8 | 1 | 1.3 | 60 | 2.2 |
| No Helmet Used | 370 | 35.7 | 737 | 46.4 | 50 | 64.1 | 1,157 | 42.8 |
| Other | 53 | 5.1 | 40 | 2.5 | 2 | 2.6 | 95 | 3.5 |
| Unknown | 26 | 2.5 | 34 | 2.1 | 1 | 1.3 | 61 | 2.3 |
| TOTAL | 1,037 | 100.0 | 1,587 | 100.0 | 78 | 100.0 | 2,702 | 100.0 |

- In 2012, only 49.2% of all motorcyclists (operator and passengers) in motorcycle-related crashes used helmets properly.
- Only 24 of the 78 motorcyclists deceased in crashes (30.8%) were using helmets properly.
- Of the total 1,037 non-injured motorcyclists in crashes in 2012, only 53.8% were using helmets properly.
- In motorcyclists' fatal crashes, 65.4% of deceased motorcyclists either were not using or not properly using helmets.

2012 Age Range of Motorcycle Operators

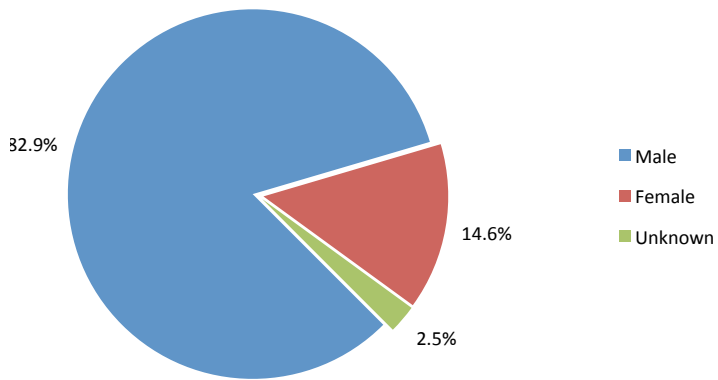


- There was a substantial increase in the number of motorcycle operators in crashes between consecutive age ranges 15–19 years and 20–24 years, 232 or 9%, and the motorcycle operators injured in crashes, 125 crashes or 8.7%.
- Overall, motorcycle operators in age range 20–29 years had the greatest number of crashes (637 total crashes, 24.6%) and injuries (370 total injuries, 25.8%).
- In the age range, 45–54 years, a second spike occurred in motorcycle operators’ crashes (551 total crashes, 21.3%) and injuries (326 total injuries, 22.7%). Motorcycle operators in four age groups encompassing 20–29, and 45–54 years accounted for 45.9% total crashes and 48.5% total injuries.

| 2012 AGE RANGE OF MOTORCYCLE OPERATORS BY SEVERITY | | | | | | | | | | |
|--|----------------|--------------|-------------|--------------|--------------|--------------|-----------|--------------|--------------|--------------|
| AGE RANGE | UNKNOWN INJURY | | NON-INJURED | | INJURED | | FATALITY | | TOTAL | |
| | # | % | # | % | # | % | # | % | # | % |
| <14 | - | 0.0 | 1 | 0.1 | 2 | 0.1 | - | 0.0 | 3 | 0.1 |
| 15-19 | - | 0.0 | 28 | 2.9 | 54 | 3.8 | 4 | 5.6 | 86 | 3.3 |
| 20-24 | 2 | 1.6 | 129 | 13.6 | 179 | 12.5 | 8 | 11.3 | 318 | 12.3 |
| 25-29 | 3 | 2.4 | 119 | 12.5 | 191 | 13.3 | 6 | 8.5 | 319 | 12.3 |
| 30-34 | 4 | 3.1 | 95 | 10.0 | 158 | 11.0 | 6 | 8.5 | 263 | 10.2 |
| 35-39 | 5 | 3.9 | 80 | 8.4 | 124 | 8.6 | 3 | 4.2 | 212 | 8.2 |
| 40-44 | - | 0.0 | 89 | 9.3 | 120 | 8.4 | 8 | 11.3 | 217 | 8.4 |
| 45-49 | 1 | 0.8 | 90 | 9.5 | 160 | 11.1 | 12 | 16.9 | 263 | 10.2 |
| 50-54 | 1 | 0.8 | 109 | 11.4 | 166 | 11.6 | 12 | 16.9 | 288 | 11.1 |
| 55-59 | - | 0.0 | 90 | 9.5 | 124 | 8.6 | 5 | 7.0 | 219 | 8.5 |
| 60-64 | - | 0.0 | 63 | 6.6 | 93 | 6.5 | 2 | 2.8 | 158 | 6.1 |
| 65-69 | - | 0.0 | 35 | 3.7 | 43 | 3.0 | 3 | 4.2 | 81 | 3.1 |
| 70-74 | - | 0.0 | 11 | 1.2 | 16 | 1.1 | 1 | 1.4 | 28 | 1.1 |
| 75-79 | - | 0.0 | 3 | 0.3 | 3 | 0.2 | 1 | 1.4 | 7 | 0.3 |
| 80-84 | - | 0.0 | 1 | 0.1 | 1 | 0.1 | - | 0.0 | 2 | 0.1 |
| 85+ | - | 0.0 | 1 | 0.1 | - | 0.0 | - | 0.0 | 1 | 0.0 |
| Unknown | 111 | 87.4 | 8 | 0.8 | 2 | 0.1 | - | 0.0 | 121 | 4.7 |
| TOTAL | 127 | 100.0 | 952 | 100.0 | 1,436 | 100.0 | 71 | 100.0 | 2,586 | 100.0 |

- Motorcycle operators age 45–49, and 50–54 years experienced the greatest percentage of fatalities (16.9%).
- The next greatest percentage of fatalities, 11.3%, occurred in motorcycle operators’ ages 20–24 and 40–44 years.

2012 Gender of Motorcyclists (Operators and Passengers) in Crashes *Source CDOR



- Male motorcyclists (operators and passengers) accounted for almost five times as many crashes as female and unknown motorcyclists combined.

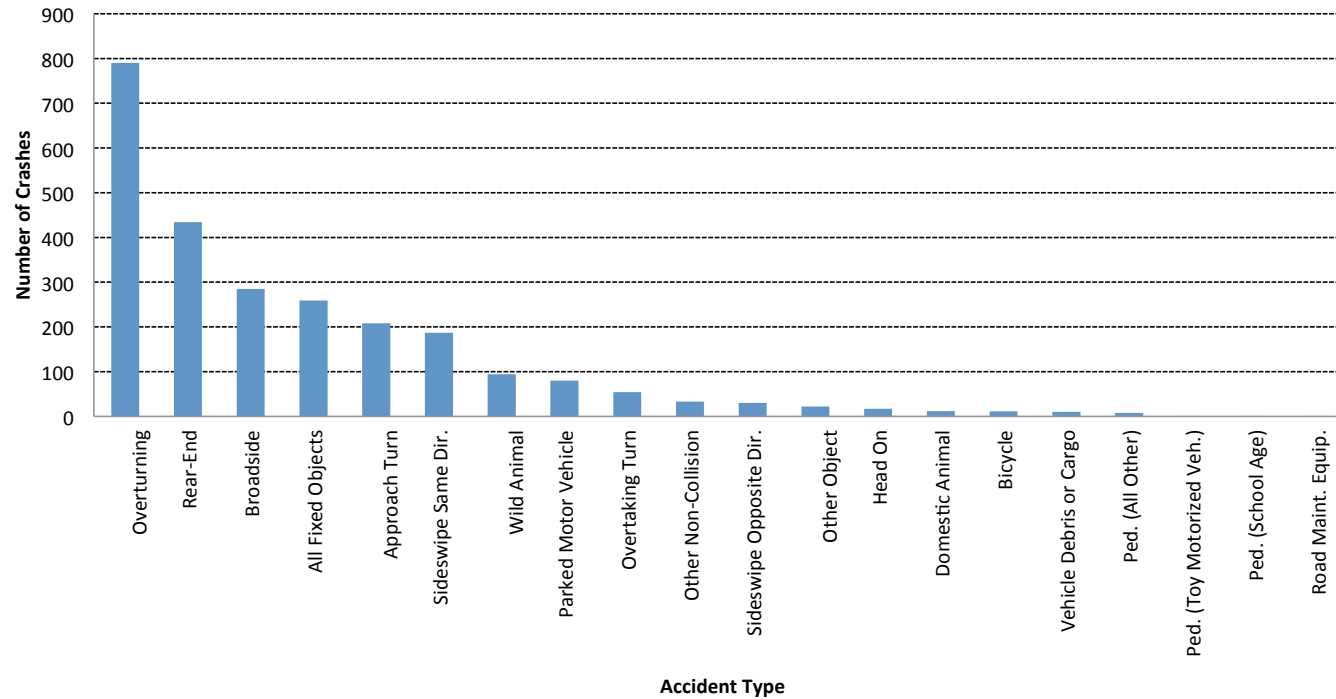
| 2012 OCCUPANT PLACEMENT OF MOTORCYCLIST (OPERATORS AND PASSENGERS) IN CRASHES *SOURCE CDOR | | | | | | | | |
|--|--------------|--------------|--------------|--------------|-----------|--------------|--------------|--------------|
| OCCUPANT PLACEMENT | NON-INJURED | | INJURED | | FATALITY | | TOTAL | |
| | # | % | # | % | # | % | # | % |
| Operator | 951 | 91.7 | 1,423 | 89.7 | 74 | 94.9 | 2,448 | 90.6 |
| Passenger | 86 | 8.3 | 164 | 10.3 | 4 | 5.1 | 254 | 9.4 |
| TOTAL | 1,037 | 100.0 | 1,587 | 100.0 | 78 | 100.0 | 2,702 | 100.0 |

- Motorcycle operators account for the majority of motorcyclists in crashes (90.6%) and motorcyclists in fatal crashes (94.9%).

| 2012 GENDER OF MOTORCYCLIST (OPERATORS AND PASSENGERS) IN CRASHES *SOURCE CDOR | | | | | | | | |
|--|--------------|--------------|--------------|--------------|-----------|--------------|--------------|--------------|
| GENDER | NON-INJURED | | INJURED | | FATALITY | | TOTAL | |
| | # | % | # | % | # | % | # | % |
| Male | 854 | 82.4 | 1,314 | 82.8 | 73 | 93.6 | 2,241 | 82.9 |
| Female | 141 | 13.6 | 249 | 15.7 | 4 | 5.1 | 394 | 14.6 |
| Unknown | 42 | 4.1 | 24 | 1.5 | 1 | 1.3 | 67 | 2.5 |
| TOTAL | 1,037 | 100.0 | 1,587 | 100.0 | 78 | 100.0 | 2,702 | 100.0 |

- Male motorcyclists account for the majority of motorcyclists in crashes (82.9%) and motorcyclists in fatal crashes (93.6%).

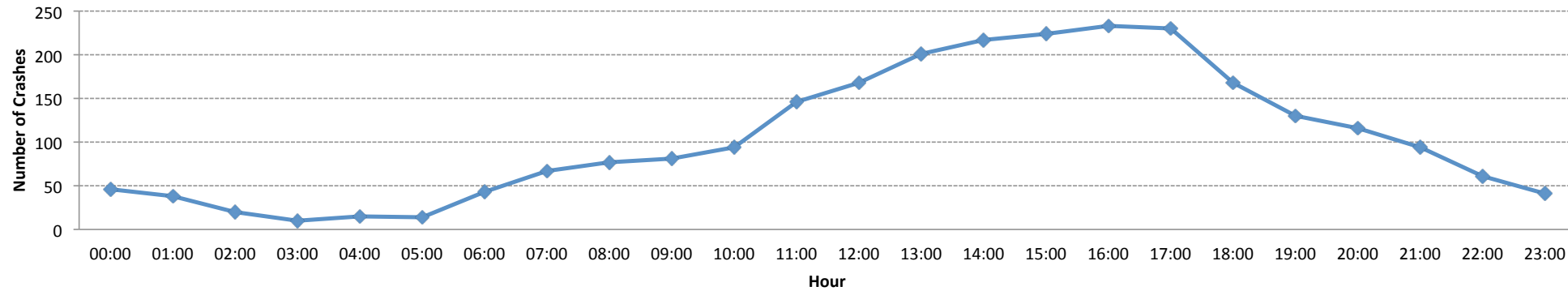
2012 Motorcycle Related Crashes by Accident Type



- Almost 31.1% of motorcycle crashes and 36.3% of injuries and fatalities resulted from motorcycles overturning.
- Almost 36.8% of motorcycle crashes resulted from being rear-ended, broadsided or sideswiped.
- Half of all motorcycle crashes involved another moving vehicles.

| 2012 MOTORCYCLE RELATED CRASHES BY ACCIDENT TYPE | | | | |
|--|------------|--------------|-----------|--------------|
| ACCIDENT TYPE | PDO | INJURY | FATAL | TOTAL |
| Overturning | 232 | 537 | 21 | 790 |
| Rear-End | 251 | 176 | 7 | 434 |
| Broadside | 110 | 170 | 5 | 285 |
| Approach Turn | 73 | 120 | 15 | 208 |
| Sideswipe Same Direction | 97 | 89 | 1 | 187 |
| Wild Animal | 23 | 70 | 1 | 94 |
| Parked Motor Vehicle | 68 | 11 | 1 | 80 |
| Curb | 18 | 53 | 8 | 79 |
| Overtaking Turn | 26 | 24 | 4 | 54 |
| Guard Rail | 10 | 22 | 4 | 36 |
| Embankment | 13 | 20 | 1 | 34 |
| Other Non-Collision | 12 | 21 | - | 33 |
| Sideswipe Opposite Direction | 10 | 19 | 1 | 30 |
| Other Object | 8 | 14 | - | 22 |
| Concrete Highway Barrier | 1 | 18 | - | 19 |
| Fence | 5 | 12 | - | 17 |
| Head On | 4 | 9 | 4 | 17 |
| Large Rocks or Boulder | 4 | 9 | 1 | 14 |
| Sign | 5 | 9 | - | 14 |
| Tree | 6 | 7 | 1 | 14 |
| Domestic Animal | 4 | 8 | - | 12 |
| Bicycle | 3 | 8 | - | 11 |
| Vehicle Debris or Cargo | 3 | 7 | - | 10 |
| Light Pole / Utility Pole | 5 | 4 | - | 9 |
| Delineator Post | 3 | 5 | - | 8 |
| Pedestrian (All Other) | 1 | 7 | - | 8 |
| Culvert or Headwall | 1 | 4 | - | 5 |
| Unknown | - | - | - | - |
| Other Fixed Object | - | 4 | - | 4 |
| Mailbox | 1 | 2 | - | 3 |
| Wall or Building | - | 2 | - | 2 |
| Barricade | - | 1 | - | 1 |
| Pedestrian (Motorized Vehicle) | 1 | - | - | 1 |
| Pedestrian (School Age) | - | 1 | - | 1 |
| Road Maintenance Equipment | - | 1 | - | 1 |
| TOTAL | 998 | 1,464 | 75 | 2,537 |

2012 Crashes Involving a Motorcycle by Hour of Day

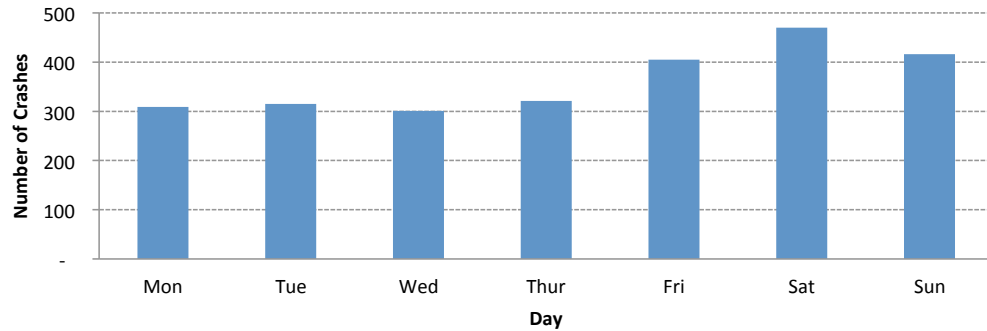


- On average, motorcycle crashes increased steadily from 5:00 AM (05:00) to peak at 4:00 PM (16:00) and sharply declined after 5:00 PM (17:00).
- On average, one-half of motorcycle crashes (50.2%) occur in the 6 hours between 12:00 PM and 6:00 PM; the other one-half occurred in the remaining 18 hours of the day.

| 2007-2012 CRASHES INVOLVING A MOTORCYCLE BY HOUR OF DAY | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| YEAR | 00:00 | 01:00 | 02:00 | 03:00 | 04:00 | 05:00 | 06:00 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 |
| 2007 | 51 | 31 | 27 | 16 | 6 | 21 | 36 | 90 | 50 | 63 | 105 | 147 | 194 | 186 | 207 | 207 | 204 | 245 | 188 | 124 | 104 | 86 | 58 | 38 |
| 2008 | 39 | 39 | 22 | 5 | 7 | 18 | 36 | 100 | 74 | 90 | 122 | 152 | 184 | 170 | 198 | 234 | 266 | 256 | 183 | 139 | 121 | 101 | 53 | 70 |
| 2009 | 27 | 19 | 25 | 8 | 7 | 13 | 32 | 50 | 55 | 55 | 75 | 142 | 161 | 164 | 192 | 205 | 197 | 206 | 158 | 118 | 109 | 75 | 50 | 38 |
| 2010 | 34 | 27 | 23 | 14 | 9 | 14 | 29 | 62 | 77 | 73 | 108 | 115 | 176 | 143 | 188 | 204 | 207 | 204 | 140 | 92 | 80 | 49 | 45 | 33 |
| 2011 | 26 | 31 | 22 | 6 | 9 | 13 | 56 | 79 | 66 | 72 | 94 | 122 | 152 | 182 | 173 | 215 | 224 | 218 | 152 | 97 | 108 | 61 | 57 | 42 |
| 2012 | 46 | 38 | 20 | 10 | 15 | 14 | 43 | 67 | 77 | 81 | 94 | 146 | 168 | 201 | 217 | 224 | 233 | 230 | 168 | 130 | 116 | 94 | 61 | 41 |

- Consistently from 2007 to 2012, the number of motorcycle crashes between 12:00 PM and 6:00 PM (6 hours) approximates the total motorcycle crashes that occurred in the remaining 18 hours of the day.

2012 Crashes Involving a Motorcycle by Day of the Week

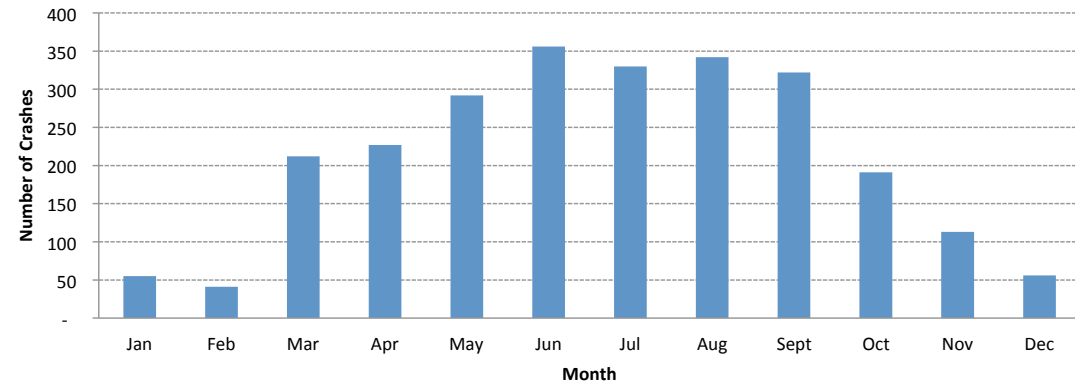


- On average, the majority of motorcycle crashes occurred on weekends, Friday through Sunday.

| 2007-2012 CRASHES INVOLVING A MOTORCYCLE BY DAY OF WEEK | | | | | | | |
|---|-----|-----|-----|------|-----|-----|-----|
| YEAR | MON | TUE | WED | THUR | FRI | SAT | SUN |
| 2007 | 263 | 292 | 255 | 309 | 389 | 490 | 487 |
| 2008 | 291 | 331 | 329 | 351 | 378 | 521 | 488 |
| 2009 | 224 | 245 | 331 | 296 | 349 | 373 | 372 |
| 2010 | 263 | 253 | 251 | 271 | 328 | 423 | 359 |
| 2011 | 277 | 232 | 258 | 282 | 385 | 446 | 398 |
| 2012 | 309 | 315 | 301 | 321 | 405 | 470 | 416 |

- From 2007 to 2012, the majority of motorcycle crashes consistently occurred on weekends, Friday through Sunday.

2012 Crashes Involving a Motorcycle by Month of Year



- On average, the greatest number of motorcycle crashes occurred in the months, May through September.
- On average, very few motorcycle crashes occurred in the winter months.

| 2007-2012 CRASHES INVOLVING A MOTORCYCLE BY MONTH OF YEAR | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
| 2007 | 11 | 44 | 159 | 183 | 274 | 398 | 395 | 343 | 323 | 199 | 136 | 20 |
| 2008 | 31 | 63 | 116 | 194 | 312 | 447 | 414 | 407 | 333 | 226 | 118 | 28 |
| 2009 | 67 | 69 | 135 | 142 | 272 | 275 | 352 | 383 | 253 | 119 | 87 | 36 |
| 2010 | 30 | 15 | 105 | 131 | 234 | 294 | 302 | 346 | 341 | 202 | 88 | 60 |
| 2011 | 31 | 31 | 91 | 178 | 211 | 356 | 353 | 410 | 320 | 216 | 61 | 20 |
| 2012 | 55 | 41 | 212 | 227 | 292 | 356 | 330 | 342 | 322 | 191 | 113 | 56 |

- Consistently over the six-year period, 2007–2012, the average number of motorcycle crashes from December through February accounted for only 4.9% of all motorcycle related crashes.

| 2012 HUMAN CONTRIBUTING FACTOR OF AT-FAULT VEHICLE | | | | |
|--|------------|--------------|-----------|--------------|
| ACTION | PDO | INJURY | FATAL | TOTAL |
| Aggressive Driving | 67 | 126 | 11 | 204 |
| Asleep At Wheel | - | 3 | - | 3 |
| Distracted/Cell Phone | 3 | 3 | 1 | 7 |
| Distracted/Other | 80 | 97 | 5 | 182 |
| Distracted/Passenger | 5 | 9 | - | 14 |
| Distracted/Radio | 2 | 3 | - | 5 |
| Driver Emotionally Upset | 1 | 5 | - | 6 |
| Driver Fatigue | 2 | 7 | 1 | 10 |
| Driver Inexperience | 162 | 245 | 6 | 413 |
| Driver Unfamiliar w/Area | 48 | 72 | 3 | 123 |
| DUI, DWAI, DUID | 33 | 142 | 16 | 191 |
| Evading Law Enforcement | 5 | 10 | 1 | 16 |
| Illness/Medical | 3 | 5 | 1 | 9 |
| None Apparent | 463 | 575 | 21 | 1,059 |
| Other Factor | 124 | 162 | 9 | 295 |
| TOTAL | 998 | 1,464 | 75 | 2,537 |

- Among at-fault drivers, driver inexperience was the most influential human contributing factor in injuries (16.8%) and total crashes (16.3%).
- Additional factors of influence included: all distractions (8.2%), aggressiveness (8.0%), and DUI (7.5%).
- The most influential factors in fatal crashes were DUI (21.3%) and aggressive driving (14.7%).

| 2012 HUMAN CONTRIBUTING FACTOR OF MOTORCYCLES ONLY | | | | |
|--|------------|--------------|-----------|--------------|
| ACTION | PDO | INJURY | FATAL | TOTAL |
| Aggressive Driving | 42 | 100 | 11 | 153 |
| Asleep At Wheel | - | 1 | - | 1 |
| Distracted/Cell Phone | - | - | 1 | 1 |
| Distracted/Other | 28 | 62 | 3 | 93 |
| Distracted/Passenger | 1 | 4 | - | 5 |
| Distracted/Radio | - | 2 | - | 2 |
| Driver Emotionally Upset | - | 3 | - | 3 |
| Driver Fatigue | 2 | 5 | - | 7 |
| Driver Inexperience | 122 | 213 | 3 | 338 |
| Driver Unfamiliar w/Area | 27 | 47 | 1 | 75 |
| DUI, DWAI, DUID | 21 | 121 | 14 | 156 |
| Evading Law Enforcement | 4 | 10 | 1 | 15 |
| Illness/Medical | 1 | 5 | - | 6 |
| None Apparent | 243 | 348 | 13 | 604 |
| Other Factor | 61 | 100 | 6 | 167 |
| TOTAL | 552 | 1,021 | 53 | 1,626 |

- Driver inexperience was the most influential human contributing factor for motorcycle operators (28.8%) and injuries (20.9%).
- The next most influential factors were DUI (9.6%) and aggressive driving (9.4%).
- The most influential factors in motorcycle fatal crashes were DUI (26.4%) and aggressive driving (20.8%).

| 2012 HUMAN CONTRIBUTING FACTOR OF NON-MOTORCYCLES ONLY | | | | |
|--|------------|------------|-----------|------------|
| ACTION | PDO | INJURY | FATAL | TOTAL |
| Aggressive Driving | 25 | 26 | - | 51 |
| Asleep At Wheel | - | 2 | - | 2 |
| Distracted/Cell Phone | 3 | 3 | - | 6 |
| Distracted/Other | 52 | 35 | 2 | 89 |
| Distracted/Passenger | 4 | 5 | - | 9 |
| Distracted/Radio | 2 | 1 | - | 3 |
| Driver Emotionally Upset | 1 | 2 | - | 3 |
| Driver Fatigue | - | 2 | 1 | 3 |
| Driver Inexperience | 40 | 32 | 3 | 75 |
| Driver Unfamiliar w/Area | 21 | 25 | 2 | 48 |
| DUI, DWAI, DUID | 12 | 21 | 2 | 35 |
| Evading Law Enforcement | 1 | - | - | 1 |
| Illness/Medical | 2 | - | 1 | 3 |
| None Apparent | 220 | 227 | 8 | 455 |
| Other Factor | 63 | 62 | 3 | 128 |
| TOTAL | 446 | 443 | 22 | 911 |

- For non-motorcycle drivers the most influential human contributing factor in crashes with motorcycles (11.7%) and resulting injuries (9.9%) was all distractions
- Non-motorcycle drivers inexperience was the second most influential factor in crashes involving motorcycles (8.2%) and related injuries (7.2%).
- Non-motorcycle drivers inexperience was the primary factor in fatalities (13.6%).

| 2012 MOTORCYCLE MOVEMENT IN CRASHES | | | | |
|-------------------------------------|------------|--------------|-----------|--------------|
| AT-FAULT MOTORCYCLE | PDO | INJURY | FATAL | TOTAL |
| Avoiding Object in Roadway | 17 | 47 | - | 64 |
| Backing | 1 | - | - | 1 |
| Changing Lanes | 16 | 29 | - | 45 |
| Drove Wrong Way | 2 | 3 | - | 5 |
| Emerging / Leaving Parked | 4 | 1 | - | 5 |
| Going Straight | 274 | 533 | 37 | 844 |
| Making Left Turn | 50 | 49 | - | 99 |
| Making Right Turn | 34 | 56 | - | 90 |
| Making U-Turn | 5 | 6 | 1 | 12 |
| Other | 29 | 53 | 2 | 84 |
| Parked | - | - | - | - |
| Passing | 20 | 25 | 3 | 48 |
| Slowing | 37 | 59 | 5 | 101 |
| Spun Out of Control | 57 | 139 | 4 | 200 |
| Stopped in Traffic | 3 | 2 | - | 5 |
| Weaving | 3 | 19 | 1 | 23 |
| TOTAL | 552 | 1,021 | 53 | 1,626 |

- Overwhelming, at-fault motorcycles were going straight prior to crashes.
- Aside from going straight, spun out of control was the second greatest movements of motorcycles in crashes (12.3%).

| 2012 MOVEMENT OF OTHER VEHICLES INVOLVED IN MOTORCYCLE CRASHES | | | | | | | | | |
|--|------------|------------|-----------|------------|----------------------------|------------|------------|-----------|--------------|
| AT-FAULT VEHICLE | PDO | INJURY | FATAL | TOTAL | ALL OTHER VEHICLES | PDO | INJURY | FATAL | TOTAL |
| Unknown | 3 | - | - | 3 | Unknown | 3 | - | - | 3 |
| Avoiding Object in Roadway | 4 | 2 | - | 6 | Avoiding Object in Roadway | 7 | 5 | - | 12 |
| Backing | 37 | 4 | - | 41 | Backing | 37 | 4 | - | 41 |
| Changing Lanes | 45 | 64 | 1 | 110 | Changing Lanes | 47 | 67 | 2 | 116 |
| Drove Wrong Way | - | 2 | 1 | 3 | Drove Wrong Way | - | 2 | 1 | 3 |
| Emerging / Leaving Parked | 19 | 5 | - | 24 | Emerging / Leaving Parked | 19 | 5 | - | 24 |
| Going Straight | 139 | 113 | 3 | 255 | Going Straight | 226 | 232 | 10 | 468 |
| Making Left Turn | 108 | 180 | 15 | 303 | Making Left Turn | 131 | 197 | 21 | 349 |
| Making Right Turn | 30 | 27 | - | 57 | Making Right Turn | 36 | 34 | 1 | 71 |
| Making U-Turn | 15 | 13 | 1 | 29 | Making U-Turn | 17 | 14 | 1 | 32 |
| Other | 15 | 21 | - | 36 | Other | 17 | 26 | - | 43 |
| Parked | - | - | - | - | Parked | 14 | 16 | 2 | 32 |
| Passing | 3 | 1 | - | 4 | Passing | 4 | 1 | - | 5 |
| Slowing | 22 | 4 | - | 26 | Slowing | 60 | 44 | 1 | 105 |
| Spun Out of Control | 2 | 2 | - | 4 | Spun Out of Control | 2 | 4 | - | 6 |
| Stopped in Traffic | 3 | 1 | - | 4 | Stopped in Traffic | 87 | 71 | 1 | 159 |
| Weaving | 1 | 4 | 1 | 6 | Weaving | 1 | 4 | 1 | 6 |
| TOTAL | 446 | 443 | 22 | 911 | TOTAL | 708 | 726 | 41 | 1,475 |

- Overwhelmingly, prior to crashes involving motorcycles at-fault vehicles were going straight or making a left turn.
- Prior to crashes involving motorcycles 33.3% of at-fault vehicles were making a left turn.
- In crashes involving motorcycles 40.6% of injury crashes occurred when the at-fault vehicle was making a left turn prior to the crash.
- In motorcycle crashes where the other vehicle was at fault, 68.2% of fatal injuries occurred when the at-fault vehicle was making a left turn prior to crash.
- When motorcycles and other vehicles were not at-fault, prior to most crashes the other vehicles were going straight or making a left turn.
- In fatal crashes involving motorcycles, at-fault and other vehicles were making left turns prior to the crash 51.2% of the time.