pennsylvania
DEPARTMENT OF TRANSPORTATION

# 2018

# PENNSYLVANIA CRASH FACTS & STATISTICS

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## *Introduction*

The ***2018 Pennsylvania Crash Facts and Statistics*** booklet is a report published by the Bureau of Maintenance And Operations, Pennsylvania Department of Transportation. Permission is given to freely copy and distribute this booklet and the information within it. This booklet can now be found on the web at http://www.dotcrashinfo.pa.gov

This publication is a statistical review of reportable motor vehicle crashes in the Commonwealth of Pennsylvania for calendar year 2018. The figures are compiled from the traffic crash reports that are submitted to the Pennsylvania Department of Transportation by state, county, municipal, and other law enforcement agencies, as specified in the Pennsylvania Vehicle Code (75 Pa. C.S., Chapter 37, Subchapter C).

Specific questions regarding data presented in this report should be addressed to:

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## *Special Thanks*

Quality information is important for creating a highly accurate publication. Our analysts and the police officers who report the crashes that are used in this publication have dedicated many of their days to providing good data. Many police departments have taken the plunge to report electronically which has improved the quality and timeliness of the data we receive. We appreciate everyone's hard work because without this effort, a book like this would not be possible.

## *How to Use This Booklet*

This booklet is divided into sections by topic. In most cases, the topics are presented at a general level and become more specific. This year's booklet is similar to last year's format with only a few minor changes related to the data. Please read the narrative and notes associated with the tables/graphs to make sure the data presented are understood.

Look over the ***Table of Contents*** on the next page to see the list of topics and sections. If you are trying to find a particular piece of information, you might be able to locate it quickly by looking at the ***Index*** on page 70.

Skim through the ***Definitions*** beginning on page 4. Some terms can be misleading or confusing, even to experienced readers. For example, an "alcohol-related" crash does not necessarily mean the driver of the vehicle causing the crash was drunk. The driver of the vehicle not at fault might have been drinking, or even a pedestrian involved with the crash might have been drinking.

Black squares containing the section title are located near the outer margins to make it easier for you to thumb through this booklet to find the section you are looking for.

**After you have used this booklet, please complete and return the feedback survey form on the last page. We read every survey returned and consider every response important. We are planning many changes with this publication in the upcoming year or two and your opinions are vital to determining what is important to include.**

## *About the Cover*

The picture on the front cover shows the result of a crash involving a hit fixed object. In 2018 the percentage of crashes involving hit fixed objects in crashes was 30.6 percent. Crashes involving hit fixed objects are a special concern to the Pennsylvania Department of Transportation. Additional information on crashes involving hit fixed objects can be found on page 15.

# Table of Contents

## *Definitions*

***Crash:*** A reportable crash is one in which an injury or a fatality occurs or at least one of the vehicles involved requires towing from the scene.

### *General Terms*

**Alcohol-Related Crash:** Any reportable crash in which one or more of the drivers was reported to have been drinking, or a drinking pedestrian was involved.
**Distracted Driving**: any activity that could divert a person's attention away from the primary task of driving. Examples of distracted driving include, but are not limited to, texting, eating, grooming, talking to passengers, etc.
**DUI:** Driving Under the Influence – specifically a driver was drinking.
**Child Passenger Restraint System:** A combination of an approved child safety seat and existing vehicle safety belt restraints. Mandatory in Pennsylvania for all passengers under age four.
**Harmful Event:** An action which occurs within a crash (e.g., hitting a tree, hitting a deer, hitting a pedestrian, hitting another vehicle, etc.) and often results in personal injury or property damage.
**Holidays:** The holiday weekend begins at 6:00 PM of the last working day before the holiday and ends at midnight on the last day of the holiday. Pre-holiday weekends and post holiday weekends are time periods equivalent to that of the weekend before or the weekend after the holiday, respectively. The same applies to holidays during the middle of the work week where no weekend is involved. It is significant to look at pre- and post-holiday statistics because, in many instances, the number of crashes and/or fatalities/injuries are equal to, or greater than, those occurring on the actual holiday weekend.
**Passive Restraint:** A safety restraint, i.e., air bag, automatic lap/shoulder harness, that is not actively engaged by a vehicle occupant.
**Reportable Crash:** A crash resulting in a fatality within 30 days of the crash; or injury in any degree, to any person involved; or crashes resulting in damage to any vehicle serious enough to require towing.
**Speed-Related Crash:** Any reportable crash in which speed was listed as a contributing factor, whether or not the driver was noted as going over the posted speed limit.
**TCD:** Traffic Control Device. Includes traffic signals, stop signs, yield signs, and railroad crossing controls.
**Vehicle Defect:** A fault in the vehicle, due to improper maintenance or other reasons, that can cause the driver to lose control, possibly resulting in a crash.
**Vehicle-Miles of Travel:** A measure that indicates the number of miles traveled by vehicles on PA roadways.
**Work Zone:** An area, usually marked by signs, barricades, or other devices indicating that highway construction or maintenance activities are going on.

### *Crash Types*

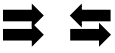
A description which characterizes the first harmful event of the crash and is described as one of the following:


**Non-Collision:** A harmful event that does not involve a collision with a fixed object or a non-fixed object. These events include explosion, fire, overturn, immersion, and vehicle struck by flying object.


**Angle:** A crash in which two vehicles on opposite roadways collide at a point of junction, such as a road intersection, driveway, or entrance ramp.


**Rear-End:** A crash in which vehicles traveling in the same direction, on the same road, collide (vehicle front into vehicle rear).


**Head-On:** A crash in which vehicles traveling in opposite directions, on the same road, collide (vehicle front into vehicle front).


**Sideswipe:** A crash between two vehicles (traveling in same direction or opposite direction) in which the sides of both vehicles engage.


**Hit Fixed Object:** A collision in which a vehicle collides with stationary object(s) along and adjacent to the roadway, (i.e. bridge piers, trees, utility poles, embankment, guiderail, etc.).


**Hit Pedestrian:** A collision between a motor vehicle and any person(s) not in or upon the vehicle.

## *Crash Severity*

**Fatal Crash:** A crash in which one or more of the involved persons died within 30 days of the crash and the fatality(ies) are attributable to the crash.
**Injury Crash:** A crash in which none of the involved persons were fatally injured, but at least one was injured.
**Property Damage Only (PDO):** A reportable crash where no one was fatally injured or injured, but damage occurred to a vehicle requiring towing.

## *Injury Severity**

**Fatal Injury:** The person dies as a result of injuries sustained in the crash within 30 days of the crash.
**Suspected Serious Injury:** Any injury other than fatal which results in one or more of the following: severe laceration, significant loss of blood, broken or distorted extremity, crush injuries, suspected skull, chest or abdominal injury, significant burns, unconsciousness, or paralysis.
**Suspected Minor Injury:** Any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
**Possible Injury:** Any injury reported or claimed which is not a fatal, suspected serious or suspected minor injury. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those which are reported by the person or are indicated by their behavior, but no wounds or injuries are readily evident.
***Note:** In 2016, the injury severity descriptions and definitions changed to match federal standards.

## *Person Type*

**Driver:** The occupant of a vehicle who is in actual physical control of a vehicle in transport or, for an out-of-control vehicle, the occupant who was in control before control was lost.
**Occupant:** Any person who is in or upon a vehicle, including the driver, passenger, and person riding on the outside of the vehicle.
**Passenger:** Any occupant of a vehicle who is not the driver.
**Pedestrian:** Any person not in or upon a vehicle.

## *Road Types*

**Local Roads:** Any roadway that is maintained by an entity other than the state. Includes county, township, town, borough, and private.
**State Highway (Interstate):** Any state-maintained roadway that carries the interstate designation and is marked with red, white, and blue shield-shaped sign.
**State Highway (Other):** Any state-maintained roadway that is not designated as an interstate. Many (but not all) such roads are marked with a black and white keystone-shaped sign.
**Turnpike:** The Pennsylvania Turnpike system, which includes the main Turnpike and other toll facilities maintained by the Pennsylvania Turnpike Commission.

## *Vehicle Types*

**Passenger Car:** Vehicle designed to transport eight people or less. Includes: convertible, hardtop, sedan, station wagon, limousine, etc.
**Light Truck / SUV / Van:** Single vehicle designed for carrying a load of property on or in the vehicle. Includes: pickup truck, sport utility vehicle, van, jeep, tow truck, etc.
**Heavy Truck:** Single vehicle or tractor-trailer combination designed for carrying a heavy load of property on or in the vehicle. Includes: single unit trucks (e.g., coal truck), tractor-trailers, motor homes, etc.
**Bus:** Vehicle designed to transport more than fifteen people. Includes school bus, cross-country bus, urban transit, trackless trolley.
**Motorcycle:** Includes: motorcycle, mo-ped, mini-bike, motor scooter, trike (motorized tricycle), go-cart, vendor cycle.
**Bicycle:** As used in this booklet, any non-motorized vehicle propelled by pedaling. Includes: unicycle, bicycle, tricycle, “Big Wheel”.
**Track/Non-Motorized Vehicle:** Includes: train, trolley, horse and buggy, horse and rider.

# Overview

The Commonwealth of Pennsylvania consists of 67 counties. Each county includes local municipalities, a combination of cities, boroughs, first class townships, and/or second class townships. In total, there are approximately 2,500 municipalities throughout the 67 counties. One of these municipalities, the Town of Bloomsburg in Columbia County, is the only official "town" in Pennsylvania.

Pennsylvania has over 120,000 miles* of roads and highways; 33% (39,739 miles*) are state highways maintained by the Pennsylvania Department of Transportation (PennDOT), and the remaining 67% (80,788 miles*) are maintained by local municipalities and other entities.

Motor-vehicle traffic crashes that occur on Pennsylvania roads and highways are investigated and reported by both the Pennsylvania State Police and the approximately 1,300 local municipal police departments. The valuable information originating from these police crash reports is the basis for the statistics that are presented throughout this booklet.

In 2018, there were 128,420 reportable traffic crashes in Pennsylvania. These crashes claimed the lives of 1,190 people and injured another 78,219 people. To add some perspective, the 2018 total of reportable traffic crashes is the fourteenth lowest total since 1950 when 113,748 crashes were reported.

Last year, there were approximately 101.6 billion vehicle-miles* of travel on Pennsylvania's roads and highways. The 2018 fatality rate of 1.17 fatalities per hundred million vehicle-miles of travel* was the second lowest ever recorded in Pennsylvania since the department started keeping records of this in 1935.

**2018 Briefs**

***On Average in Pennsylvania:***

- Each day 352 reportable traffic crashes occurred (about 15 crashes every hour).
- Each day 3 persons were fatally injured in reportable traffic crashes (one fatality every 7 hours).
- Each day 214 persons were injured in reportable crashes (about 9 injuries every hour).

***Based on Pennsylvania's 2018 population (12,807,060 people):***

- 1 out of every 44 people was involved in a reportable traffic crash.
- 1 out of every 10,762 people was fatally injured in a reportable traffic crash.
- 1 out of every 164 people was injured in a reportable traffic crash.

* For consistency purposes, the prior year's data is used at the time of publication because of timing issues. For this Crash Facts & Statistics book, 2017 information was used.

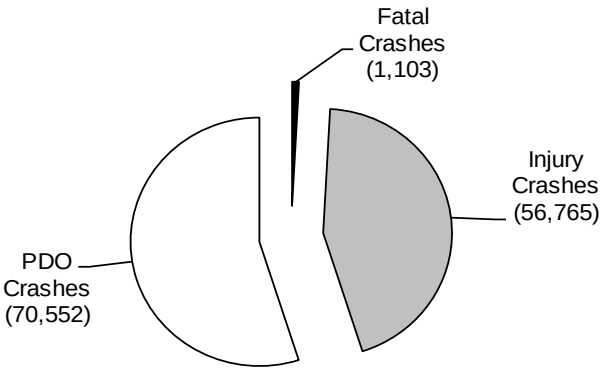
# All Crashes and Fatalities
## —WHO WAS INVOLVED—



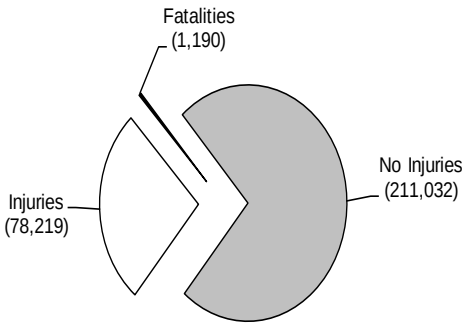
### Crashes by Injury Severity

Crashes involving fatalities and major injuries are always devastating to the family and friends of the victims. Thankfully, the vast majority of crashes are not fatal. Most crashes, however, do cause varying types of injuries. Of the total people involved in crashes in Pennsylvania in 2018, most were not injured. The 1,190 fatalities in 2018 represent the third lowest number of fatalities in Pennsylvania motor vehicle crashes over the last 91 years.

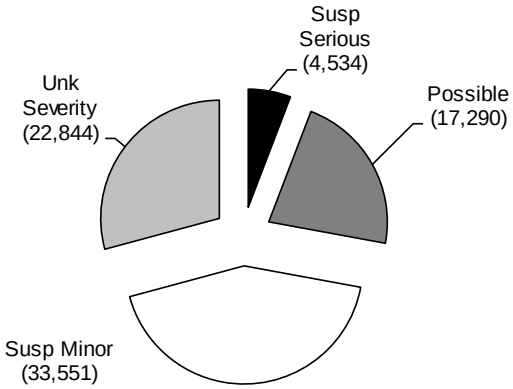
**Total Crashes**




**Total People**




**Total People--Injuries**




Please note that beginning January 1, 2016, PennDOT adopted the Federal standard for collecting injury severity data. The field descriptions and definitions changed from the state standard that had been in use for decades. This resulted in a substantial shift in severity levels. Therefore, comparison of the "Suspected Serious Injury", "Suspected Minor Injury" and "Possible Injury" categories will not be consistent for crashes taking place before versus after the adoption of the new standard.

## Fatalities and Injuries—Five-Year Trends

Total reported crashes in 2018 increased 0.2% compared to 2017; fatalities increased by 4.7% while total injuries decreased by 3.0%.

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Reported Crashes | 121,317 | 127,127 | 129,395 | 128,188 | 128,420 |
| Total Fatalities | 1,195 | 1,200 | 1,188 | 1,137 | 1,190 |
| Total Injuries | 79,758 | 82,004 | 82,971 | 80,612 | 78,219 |
| *Suspected Serious Injury* | *3,042* | *3,030* | *4,397* | *4,227* | *4,534* |
| *Suspected Minor Injury* | *12,075* | *12,503* | *26,284* | *27,237* | *33,551* |
| *Possible Injury* | *40,071* | *40,364* | *23,050* | *22,629* | *17,290* |
| *Unknown Severity* | *24,570* | *26,107* | *29,240* | *26,519* | *22,844* |
| Pedestrian Fatalities | 166 | 153 | 172 | 150 | 201 |
| Pedestrian Injuries | 3,985 | 4,002 | 4,218 | 4,106 | 4,090 |
| Motorcyclist Fatalities | 186 | 179 | 192 | 185 | 164 |
| Motorcyclist Injuries | 3,207 | 3,312 | 3,321 | 3,052 | 2,611 |
| Bicyclist Fatalities | 19 | 16 | 16 | 21 | 18 |
| Bicyclist Injuries | 1,298 | 1,268 | 1,298 | 1,127 | 962 |
| Heavy-Truck-Related Fatalities | 151 | 149 | 162 | 155 | 136 |
| Alcohol-Related Fatalities | 333 | 345 | 297 | 293 | 331 |
| Speed-Related Fatalities | 312 | 302 | 316 | 304 | 280 |
| Billions of Vehicle-Miles* | 98.6 | 99.8 | 100.9 | 101.1 | 101.6 |
| Deaths per 100 Million Vehicle-Miles* | 1.21 | 1.20 | 1.18 | 1.12 | 1.17 |

***Note:*** Speed-Related Fatalities only count those crashes where speed was considered the prime contributing factor in the crash.

* Vehicle mileage uses the prior years' vehicle mileage information (because at the time of publication, the current year's vehicle mileage is not available).

## Economic Loss Due to Reportable Traffic Crashes

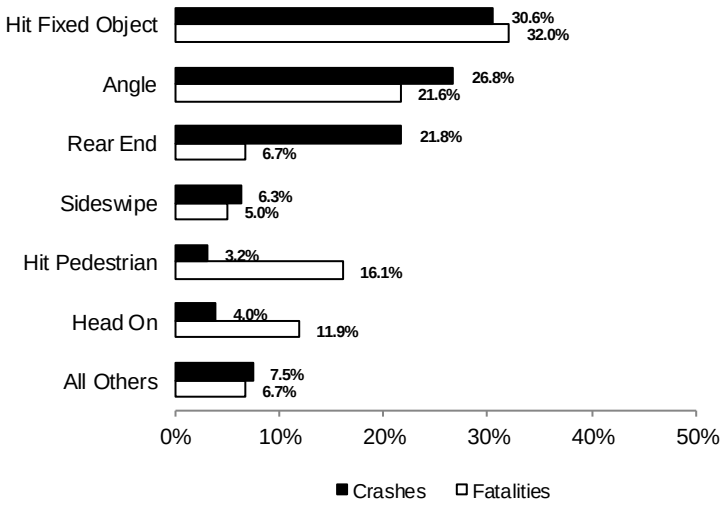
| Max Severity | Number | Average Cost | Estimated Total Costs |
|---|---|---|---|
| Fatal Injury (crashes) | 1,103 | $12,203,314 | $13,460,255,342 |
| Suspected Serious Injury (crashes) | 3,769 | $701,601 | $2,644,334,169 |
| Suspected Minor Injury (crashes) | 25,443 | $225,691 | $5,742,256,113 |
| Possible Injury (crashes) | 27,553 | $129,596 | $3,570,758,588 |
| Property Damage Only (crashes) | 70,552 | $12,110 | $854,384,720 |
| | | **TOTAL** | **$26,271,988,932** |

**In 2018, the economic loss due to traffic crashes was**
**$2,051**
**to every man, woman, and child in Pennsylvania.**

The economic loss per Pennsylvania citizen is based on the ratio of estimated total cost to the estimated total population of Pennsylvania. Also note that the Federal guidelines changed for determining the average cost of a crash in 2018. Cost is now based on max crash severity, not injury severity level.

## Crashes by Crash Type

Many different types of crashes occur on Pennsylvania roads, but certain types of crashes are more prevalent. More crashes involved a single vehicle hitting a fixed object (tree, guide rail, etc.) than any other type. Hit pedestrian crashes, though they occur much less frequently, cause the third highest number of fatalities.

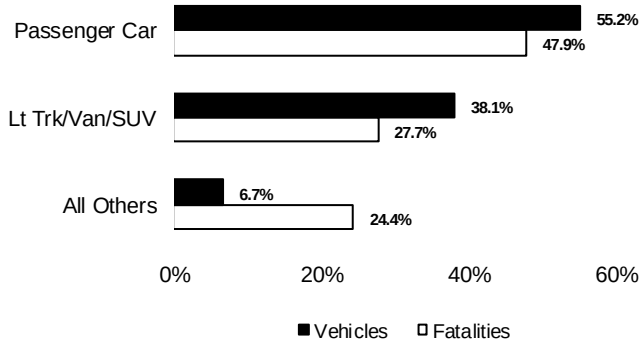



| Crash Type | Crashes | Fatalities |
|---|---|---|
| Angle | 34,346 | 257 |
| Backing Up | 448 | 0 |
| Head On | 5,089 | 141 |
| Hit Fixed Object | 39,261 | 381 |
| Hit Pedestrian | 4,045 | 191 |
| Non-Collision | 4,098 | 59 |
| Rear End | 27,958 | 80 |
| Sideswipe | 8,138 | 60 |
| Other | 5,037 | 21 |
| **TOTAL** | **128,420** | **1,190** |

*Note that, by definition, a Hit Pedestrian Crash only involves those crashes where the pedestrian being struck was the first harmful event. Therefore, the pedestrian crashes and deaths shown in this section are slightly different than those shown elsewhere in this book, which include all pedestrian harmful events.

## Vehicles Involved in Crashes

Passenger cars were involved in more crashes than all other vehicle types combined. Coupled with light trucks, vans, and SUVs they accounted for the vast majority of crashes and occupant fatalities. Compared with previous years, light truck, van, and SUV vehicles in 2018 were involved in a lower percentage of crashes. Occupant fatalities of motorcycles decreased from 185 in 2017 to 164 in 2018.



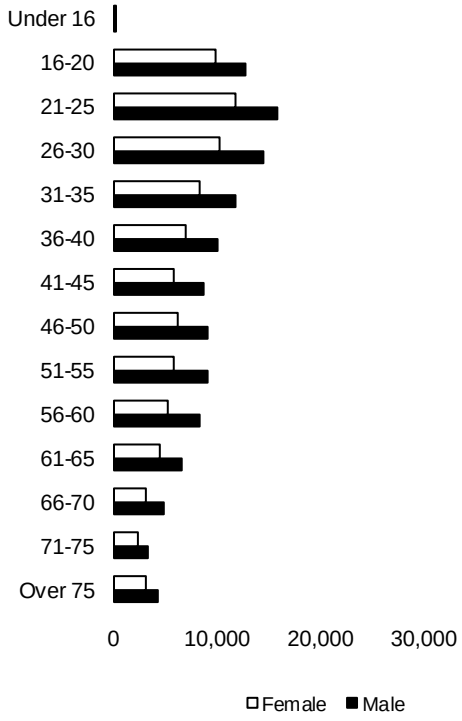

| | Vehicles | Occupant Fatalities |
|---|---|---|
| Passenger Car | 117,406 | 473 |
| Lt Trk/Van/SUV | 81,112 | 274 |
| Heavy Truck | 7,910 | 21 |
| Motorcycle | 2,776 | 164 |
| Bicycle | 980 | 18 |
| Commercial Bus | 626 | 4 |
| School Bus | 312 | 0 |
| Other | 1,716 | 34 |

## Driver Involvement in Crashes by Age and Sex

In most age groups, male drivers are involved in more crashes than female drivers. Male drivers ages 21-25 were involved in more crashes than drivers in any other age group (male or female).

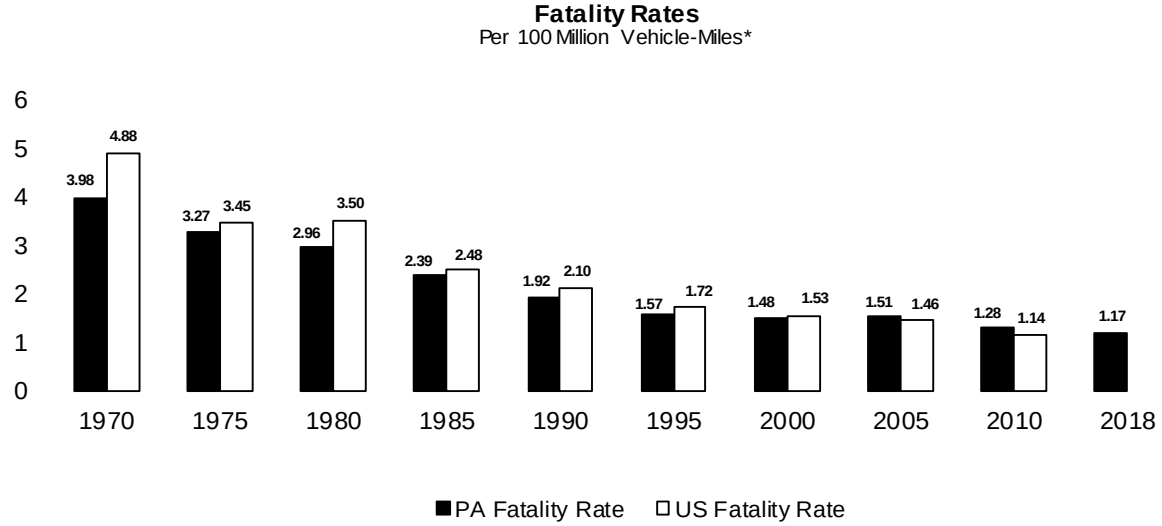
| Driver | Male | Female | Total Drivers |
|---|---|---|---|
| Under 16 | 84 (0.1%) | 28 (0.0%) | **112** |
| 16-20 | 12,939 (10.6%) | 9,913 (11.7%) | **22,852** |
| 21-25 | 15,872 (13.1%) | 11,964 (14.1%) | **27,836** |
| 26-30 | 14,679 (12.1%) | 10,409 (12.3%) | **25,088** |
| 31-35 | 11,991 (9.9%) | 8,388 (9.9%) | **20,379** |
| 36-40 | 10,254 (8.4%) | 7,013 (8.3%) | **17,267** |
| 41-45 | 8,797 (7.2%) | 5,941 (7.0%) | **14,738** |
| 46-50 | 9,124 (7.5%) | 6,213 (7.3%) | **15,337** |
| 51-55 | 9,222 (7.6%) | 5,879 (6.9%) | **15,101** |
| 56-60 | 8,374 (6.9%) | 5,395 (6.4%) | **13,769** |
| 61-65 | 6,738 (5.5%) | 4,519 (5.3%) | **11,257** |
| 66-70 | 4,879 (4.0%) | 3,146 (3.7%) | **8,025** |
| 71-75 | 3,425 (2.8%) | 2,334 (2.8%) | **5,759** |
| Over 75 | 4,408 (3.6%) | 3,252 (3.8%) | **7,660** |
| Unknown | 850 (0.7%) | 272 (0.3%) | **1,122** |
| **DRIVERS** | **121,636 (100.0%)** | **84,666 (100.0%)** | **206,302** |

***Note:*** Does not include 3,808 drivers of unknown sex or drivers of non-motorized vehicles.




## Highway Crash Historical Data

Fatality rates have fallen dramatically over the past 60 years as vehicles, roadways, and other factors have improved. Pennsylvania's fatality rate has also been lower than the US average for most years since 1937. Please note that the 2018 US average fatality rate was not finalized by the time of this publication. The chart below shows the periodic fatality rates since 1970.




* Beginning in 1999, vehicle mileage uses the prior years' vehicle mileage information (because at the time of publication, the current years' vehicle mileage is not available).

| Year | Total Crashes | Total Fatalities | Total Injuries | Registered Vehicles | Motor Vehicle Mileage* | PA Fatality Rate** | US Fatality Rate** |
|---|---|---|---|---|---|---|---|
| 1951 | 123,088 | 1,642 | 65,643 | 3,413,836 | 28.8 | 5.70 | 7.10 |
| 1952 | 126,820 | 1,680 | 67,143 | 3,510,064 | 30.5 | 5.50 | 7.10 |
| 1953 | 129,791 | 1,643 | 70,531 | 3,684,468 | 31.6 | 5.20 | 6.70 |
| 1954 | 130,326 | 1,538 | 68,571 | 3,903,917 | 32.0 | 4.80 | 6.10 |
| 1955 | 147,837 | 1,737 | 76,836 | 4,045,995 | 34.5 | 5.00 | 6.10 |
| 1956 | 160,371 | 1,790 | 84,813 | 4,175,217 | 36.5 | 4.90 | 6.10 |
| 1957 | 161,080 | 1,698 | 84,755 | 4,250,576 | 37.7 | 4.50 | 5.80 |
| 1958 | 156,825 | 1,654 | 86,733 | 4,355,813 | 38.5 | 4.30 | 5.40 |
| 1959 | 157,191 | 1,685 | 90,807 | 4,507,262 | 39.2 | 4.30 | 5.40 |
| 1960 | 159,051 | 1,609 | 92,792 | 4,707,055 | 40.2 | 4.00 | 5.30 |
| 1961 | 156,559 | 1,486 | 73,997 | 4,842,400 | 40.2 | 3.70 | 5.20 |
| 1962 | 161,557 | 1,625 | 81,936 | 4,849,400 | 41.7 | 3.90 | 5.30 |
| 1963 | 174,527 | 1,830 | 86,892 | 5,117,229 | 44.6 | 4.10 | 5.50 |
| 1964 | 183,910 | 1,889 | 93,564 | 5,351,350 | 46.1 | 4.10 | 5.70 |
| 1965 | 213,769 | 2,079 | 111,123 | 5,436,349 | 48.3 | 4.30 | 5.60 |
| 1966 | 254,450 | 2,180 | 116,537 | 5,497,000 | 55.1 | 4.27 | 5.70 |
| 1967 | 243,798 | 2,331 | 126,417 | 5,673,000 | 53.4 | 4.37 | 5.50 |
| 1968 | 279,663 | 2,410 | 138,389 | 5,791,000 | 56.1 | 4.29 | 5.40 |
| 1969 | 292,192 | 2,401 | 141,728 | 5,879,000 | 58.6 | 4.10 | 5.21 |
| 1970 | 311,981 | 2,255 | 136,518 | 5,947,000 | 56.7 | 3.98 | 4.88 |
| 1971 | 301,374 | 2,299 | 127,318 | 6,079,000 | 60.9 | 3.78 | 4.57 |
| 1972† | 277,556 | 2,352 | 135,938 | 6,244,000 | 67.0 | 3.51 | 4.43 |
| 1973 | 307,648 | 2,444 | 145,452 | 7,007,192 | 66.5 | 3.67 | 4.24 |
| 1974 | 277,271 | 2,155 | 132,689 | 8,354,063 | 63.9 | 3.37 | 3.59 |
| 1975 | 288,245 | 2,082 | 134,969 | 8,654,333 | 63.7 | 3.27 | 3.45 |
| 1976 | 303,771 | 2,025 | 135,308 | 9,124,915 | 69.4 | 2.92 | 3.33 |
| 1977 | 234,702 | 2,071 | 148,725 | 8,833,745 | 72.3 | 2.87 | 3.35 |
| 1978‡ | 158,361 | 2,137 | 146,403 | 7,254,893 | 72.7 | 2.94 | 3.39 |
| 1979 | 156,622 | 2,204 | 144,300 | 7,451,021 | 70.3 | 3.14 | 3.50 |
| 1980 | 142,489 | 2,114 | 133,716 | 7,307,974 | 71.3 | 2.96 | 3.50 |
| 1981 | 138,764 | 2,049 | 131,301 | 7,252,836 | 71.5 | 2.87 | 3.30 |
| 1982 | 131,579 | 1,848 | 126,026 | 7,417,311 | 71.3 | 2.59 | 2.88 |
| 1983 | 131,081 | 1,752 | 126,707 | 7,562,726 | 72.3 | 2.42 | 2.69 |
| 1984 | 139,914 | 1,752 | 134,714 | 7,724,686 | 74.1 | 2.36 | 2.68 |
| 1985 | 143,244 | 1,809 | 140,067 | 7,860,497 | 75.6 | 2.39 | 2.48 |
| 1986 | 150,683 | 1,928 | 148,044 | 7,793,921 | 77.2 | 2.50 | 2.48 |
| 1987 | 152,631 | 2,006 | 151,457 | 8,313,799 | 78.9 | 2.54 | 2.40 |
| 1988 | 152,906 | 1,932 | 154,018 | 8,452,365 | 81.3 | 2.38 | 2.32 |
| 1989 | 151,461 | 1,878 | 152,589 | 8,605,747 | 84.5 | 2.22 | 2.20 |
| 1990 | 141,340 | 1,646 | 142,945 | 8,675,835 | 85.7 | 1.92 | 2.10 |
| 1991 | 130,404 | 1,661 | 130,446 | 8,757,129 | 87.3 | 1.90 | 1.90 |
| 1992 | 133,913 | 1,545 | 133,113 | 8,915,621 | 89.0 | 1.74 | 1.80 |
| 1993 | 134,315 | 1,530 | 131,503 | 9,044,901 | 90.8 | 1.68 | 1.80 |
| 1994 | 134,171 | 1,440 | 130,678 | 9,255,714 | 92.3 | 1.56 | 1.83 |
| 1995 | 136,804 | 1,480 | 133,177 | 9,271,517 | 94.5 | 1.57 | 1.72 |
| 1996 | 142,867 | 1,470 | 136,949 | 9,411,261 | 96.4 | 1.53 | 1.69 |
| 1997 | 143,981 | 1,562 | 138,820 | 9,692,499 | 98.3 | 1.59 | 1.64 |
| 1998 | 140,972 | 1,486 | 134,092 | 9,842,427 | 100.4 | 1.48 | 1.58 |
| 1999+ | 144,171 | 1,549 | 133,783 | 9,901,148 | 100.4 | 1.54 | 1.55 |
| 2000 | 147,253 | 1,520 | 131,471 | 10,085,392 | 102.5 | 1.48 | 1.53 |
| 2001 | 131,358 | 1,532 | 117,915 | 10,629,896 | 103.5 | 1.48 | 1.51 |
| 2002 | 138,115 | 1,618 | 109,900 | 10,519,757 | 103.5 | 1.56 | 1.51 |
| 2003 | 140,197 | 1,577 | 112,615 | 10,768,222 | 104.8 | 1.50 | 1.48 |
| 2004 | 137,410 | 1,490 | 108,146 | 10,921,683 | 106.1 | 1.40 | 1.46 |
| 2005 | 132,840 | 1,616 | 102,223 | 11,058,567 | 107.2 | 1.51 | 1.46 |
| 2006 | 128,342 | 1,525 | 97,971 | 11,086,810 | 107.9 | 1.41 | 1.41 |
| 2007 | 130,675 | 1,491 | 95,585 | 11,220,816 | 108.1 | 1.38 | 1.36 |
| 2008 | 125,327 | 1,468 | 88,711 | 11,301,853 | 108.4 | 1.35 | 1.27 |
| 2009 | 121,242 | 1,256 | 87,132 | 11,324,357 | 107.0 | 1.17 | 1.13 |
| 2010 | 121,312 | 1,324 | 87,948 | 11,373,291 | 103.3 | 1.28 | 1.11 |
| 2011 | 125,395 | 1,286 | 87,835 | 11,477,916 | 101.2 | 1.27 | 1.10 |
| 2012 | 124,092 | 1,310 | 86,846 | 11,508,559 | 100.2 | 1.31 | 1.16 |
| 2013 | 124,149 | 1,208 | 83,089 | 11,616,715 | 99.5 | 1.21 | 1.10 |
| 2014 | 121,317 | 1,195 | 79,758 | 11,715,722 | 98.6 | 1.21 | 1.07 |
| 2015 | 127,127 | 1,200 | 82,004 | 11,974,651 | 99.8 | 1.20 | 1.13 |
| 2016 | 129,395 | 1,188 | 82,971 | 12,066,651 | 100.9 | 1.18 | 1.16 |
| 2017 | 128,188 | 1,137 | 80,612 | 11,832,317 | 101.1 | 1.12 | 1.16 |
| 2018 | 128,420 | 1,190 | 78,219 | 12,036,372 | 101.6 | 1.17 | --- |

* In billions

** Per 100 million vehicle-miles

† From 1972 to 1978, reportable crashes defined as over $200 in damage

‡ From 1978 to present, reportable crashes defined as involving any type of injury and/or vehicle(s) requiring towing from the scene

\+ Beginning in 1999, motor vehicle mileage and PA Fatality Rate uses the prior years' motor vehicle mileage information (because at the time of publication, the current years' roadway mileage is not available)

# —WHAT CONDITIONS WERE—



## Crashes by Weather and Road Surface Conditions

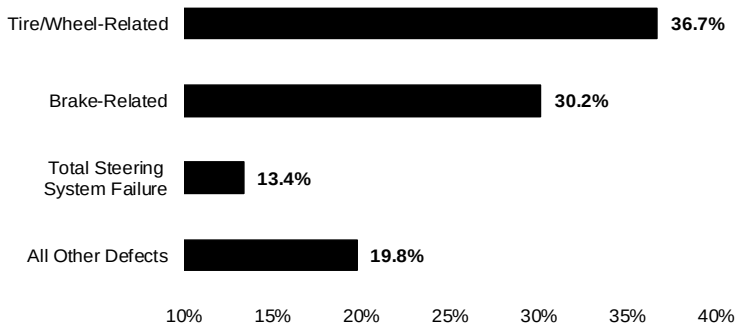
Adverse weather and road surface conditions negatively affect vehicle handling and driver sight. Interestingly, the vast majority of crashes occurred under no adverse conditions. This can be attributed to: 1) weather and roads being clear and dry most of the time and 2) drivers failing to use caution under optimal road conditions. The figures shown in both tables are for all highway types.

| Weather Condition | Crashes | Fatalities |
|---|---|---|
| No Adverse Conditions | 96,317 (75.0%) | 973 (81.8%) |
| Rain/Rain & Fog | 20,213 (15.7%) | 157 (13.2%) |
| Snow/Sleet/Freezing Rain | 9,802 (7.6%) | 30 (2.5%) |
| Fog/Smoke, Etc. | 781 (0.6%) | 14 (1.2%) |
| Other | 1,307 (1.0%) | 16 (1.3%) |
| **TOTAL** | **128,420 (100.0%)** | **1,190 (100.0%)** |

| Road Surface Condition | Crashes | Fatalities |
|---|---|---|
| Dry | 87,303 (68.0%) | 909 (76.4%) |
| Wet | 28,092 (21.9%) | 226 (19.0%) |
| Snow/Slush | 7,903 (6.2%) | 27 (2.3%) |
| Ice/Ice Patches | 4,468 (3.5%) | 18 (1.5%) |
| Other | 654 (0.5%) | 10 (0.8%) |
| **TOTAL** | **128,420 (100.0%)** | **1,190 (100.0%)** |

## Crashes Involving Vehicle Defects

Improperly-maintained vehicles can lead to crashes. In 2018, tire/wheel and brake-related failures again contributed to the majority of vehicle defect related crashes. The percentages in the graph below refer to the number of crashes involving vehicle defects.

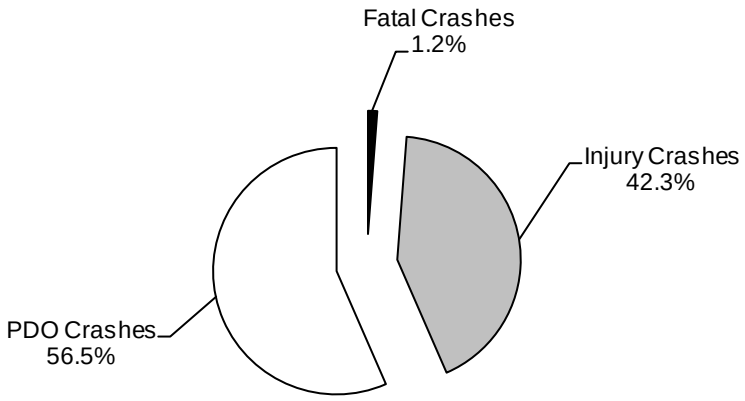



| Vehicle Defect | Crashes |
|---|---|
| Tire/Wheel-Related | 906 |
| Brake-Related | 744 |
| Total Steering System Failure | 330 |
| Power Train Failure | 225 |
| Suspension | 85 |
| Unsecure/Shifted Trailer Load | 53 |
| Body/Doors/Hood, Etc. | 33 |
| Vehicle Lighting-Related | 24 |
| Other Known Defects | 67 |

**Note:** The above list only counts crashes where a vehicle defect was the primary contributing factor in the crash.

## Work Zone Crashes

Work zones are potentially dangerous areas because conditions are constantly changing. Drivers do not always anticipate these changes nor exercise the appropriate level of caution. 43 percent of work zone crashes in 2018 contained fatalities or injuries.




Total Crashes: **1,659**

Total Fatally Injured: **23** (Workers Fatally Injured: 3)

Total Injured: **1,110**

## Work Zone Crashes—Vehicles Involved

| Vehicle Type | State Hwy (Interstate) | State Hwy (Other) | Turnpike | Local Road |
|---|---|---|---|---|
| Passenger Car | 588 (46.0%) | 703 (49.1%) | 93 (33.0%) | 79 (53.7%) |
| Light Truck/SUV | 432 (33.8%) | 585 (40.8%) | 100 (35.5%) | 49 (33.3%) |
| Heavy Truck/Bus | 234 (18.3%) | 113 (7.9%) | 82 (29.1%) | 12 (8.2%) |
| Motorcycle | 12 (0.9%) | 16 (1.1%) | 4 (1.4%) | 4 (2.7%) |
| Other | 12 (0.9%) | 16 (1.1%) | 3 (1.1%) | 3 (2.0%) |
| **TOTAL** | **1,278 (100.0%)** | **1,433 (100.0%)** | **282 (100.0%)** | **147 (100.0%)** |

***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates. Legally parked vehicles are not included in the above table.

## Work Zone Crashes by Road Type—Five-Year Trends*

| Year | Road Type | Crashes | | Fatalities | |
|---|---|---|---|---|---|
| | | *Number* | *% Total* | *Number* | *% Total* |
| 2014 | State Hwy (Interstate) | 530 | 28.7% | 12 | 50.0% |
| | State Hwy (Other) | 952 | 51.6% | 7 | 29.2% |
| | Turnpike | 244 | 13.2% | 4 | 16.7% |
| | Local Road | 119 | 6.5% | 1 | 4.2% |
| | Other/Unknown Road | 0 | 0.0% | 0 | 0.0% |
| | **TOTAL** | **1,845** | **100.0%** | **24** | **100.0%** |
| 2015 | State Hwy (Interstate) | 610 | 31.5% | 4 | 17.4% |
| | State Hwy (Other) | 962 | 49.7% | 13 | 56.5% |
| | Turnpike | 264 | 13.6% | 5 | 21.7% |
| | Local Road | 99 | 5.1% | 1 | 4.4% |
| | Other/Unknown Road | 0 | 0.0% | 0 | 0.0% |
| | **TOTAL** | **1,935** | **100.0%** | **23** | **100.0%** |
| 2016 | State Hwy (Interstate) | 660 | 31.8% | 4 | 25.0% |
| | State Hwy (Other) | 971 | 46.8% | 9 | 56.3% |
| | Turnpike | 348 | 16.8% | 1 | 6.3% |
| | Local Road | 95 | 4.6% | 2 | 12.5% |
| | Other/Unknown Road | 1 | 0.1% | 0 | 0.0% |
| | **TOTAL** | **2,075** | **100.0%** | **16** | **100.0%** |
| 2017 | State Hwy (Interstate) | 721 | 40.6% | 12 | 63.2% |
| | State Hwy (Other) | 778 | 43.8% | 4 | 21.1% |
| | Turnpike | 186 | 10.5% | 2 | 10.5% |
| | Local Road | 93 | 5.2% | 1 | 5.3% |
| | Other/Unknown Road | 0 | 0.0% | 0 | 0.0% |
| | **TOTAL** | **1,778** | **100.0%** | **19** | **100.0%** |
| 2018 | State Hwy (Interstate) | 650 | 39.2% | 13 | 56.5% |
| | State Hwy (Other) | 759 | 45.8% | 9 | 39.1% |
| | Turnpike | 159 | 9.6% | 0 | 0.0% |
| | Local Road | 91 | 5.5% | 1 | 4.4% |
| | Other/Unknown Road | 0 | 0.0% | 0 | 0.0% |
| | **TOTAL** | **1,659** | **100.0%** | **23** | **100.0%** |

***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## Crashes with Roadside Objects and Animals

Unfortunately, roadside objects were hit often in Pennsylvania crashes. While there are many different roadside objects, a few are more predominant in crashes than others. The table below lists crashes with various types of roadside objects no matter the sequence of harmful events.



| Roadside Object | Crashes | % Total | Fatalities | % Total |
|---|---|---|---|---|
| Hit Bridge | 626 | 0.5% | 10 | 0.8% |
| Hit Building | 1,343 | 1.1% | 17 | 1.4% |
| Hit Culvert | 754 | 0.6% | 14 | 1.2% |
| Hit Curb | 3,613 | 2.8% | 43 | 3.6% |
| Hit Ditch | 3,265 | 2.5% | 32 | 2.7% |
| Hit Embankment | 6,565 | 5.1% | 89 | 7.5% |
| Hit Fence or Wall | 2,708 | 2.1% | 33 | 2.8% |
| Hit Fire Hydrant | 436 | 0.3% | 2 | 0.2% |
| Hit Guiderail | 7,184 | 5.6% | 112 | 9.4% |
| Hit Impact Attenuator | 180 | 0.1% | 3 | 0.3% |
| Hit Mailbox(es) | 1,318 | 1.0% | 19 | 1.6% |
| Hit Median Barrier | 5,068 | 4.0% | 33 | 2.8% |
| Hit Other Fixed Object | 4,164 | 3.2% | 67 | 5.6% |
| Hit Parked Vehicle | 7,907 | 6.2% | 44 | 3.7% |
| Hit Rock(s) or Obstacle on Roadway | 482 | 0.4% | 3 | 0.3% |
| Hit Signal/Sign Support | 2,619 | 2.0% | 55 | 4.6% |
| Hit Snow Bank | 129 | 0.1% | 1 | 0.1% |
| Hit Temporary Construction Barrier | 40 | 0.0% | 2 | 0.2% |
| Hit Traffic Island or Channelization | 207 | 0.2% | 2 | 0.2% |
| Hit Tree(s) or Shrubs/Hedges | 8,848 | 6.9% | 208 | 17.5% |
| Hit Utility Pole(s) | 8,745 | 6.8% | 103 | 8.7% |
| Hit Deer | 4,149 | 3.2% | 12 | 1.0% |
| Hit Other Animal | 220 | 0.2% | 0 | 0.0% |

***Note:*** "% Total" lists the percentage compared to *all* crashes or fatalities, not only the ones listed in this table. Also note that a single crash can involve a collision with multiple objects.

## *—WHERE THEY HAPPENED—*

### *Crashes by Road Type****

| | State Hwy (Interstate) | State Hwy (Other) | Turnpike | Local Road | Other |
|---|---|---|---|---|---|
| Crashes | 11,477 | 82,559 | 2,709 | 31,664 | 11 |
| Persons Fatally Injured | 91 | 893 | 14 | 192 | 0 |
| Persons Injured | 6,433 | 52,278 | 1,263 | 18,255 | 7 |
| Miles of Maintained Road | 1,374 | 39,188 | 554 | 80,218 | --- |
| 100 MVM* Traveled | 201.1 | 582.6 | 63.3 | 169.3 | --- |
| Crashes/MVM* | 0.57 | 1.42 | 0.43 | 1.87 | --- |
| Persons Fatally Injured/100 MVM* | 0.45 | 1.53 | 0.22 | 1.13 | --- |
| Persons Injured/MVM* | 0.32 | 0.90 | 0.20 | 1.08 | --- |

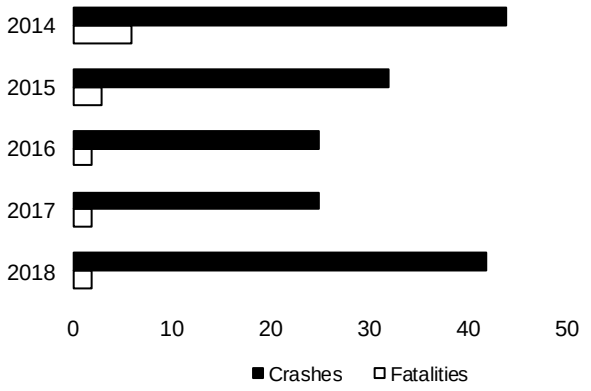
* MVM = million vehicle-miles

***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates. The road mileage and MVM data are from the 2017 Highway Performance Monitoring System (HPMS) package and reflects 2017 length and travel activity data. Ramps are included as part of the roadway to which it is connected.

***Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## Crashes Between Trains and Other Vehicles—Five-Year Trends

Motor vehicle/train crashes make up a very small percentage of total crashes. In the last five years, only 15 fatalities have occurred in this type of crash. In 2018, two fatalities occurred.

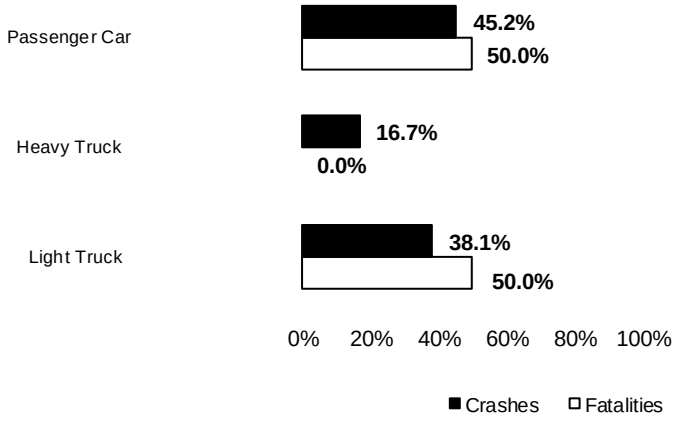



| Year | Crashes | Fatalities |
|---|---|---|
| 2014 | 44 | 6 |
| 2015 | 32 | 3 |
| 2016 | 25 | 2 |
| 2017 | 25 | 2 |
| 2018 | 42 | 2 |



## Train/Vehicle Crashes by Vehicle Type

Passenger cars, light trucks, vans, and SUVs were the predominant vehicle types involved in crashes with trains in 2018. In 2018, heavy truck involvement with trains increased to 7 crashes from 3 in 2017.




| Vehicle Type | Crashes | Fatalities |
|---|---|---|
| Passenger Car | 19 | 1 |
| Light Truck | 16 | 1 |
| Heavy Truck | 7 | 0 |
| Bicycle | 0 | 0 |
| Commercial Bus | 0 | 0 |
| Motorcycle | 0 | 0 |
| School Bus | 0 | 0 |
| Unknown | 0 | 0 |
| **TOTAL** | **42** | **2** |

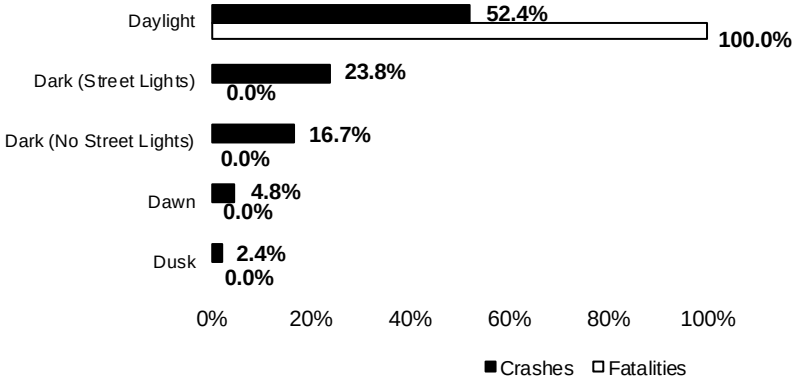
## *Train/Vehicle Crashes by Road Type**

| Road Type | Crashes | Fatalities |
|---|---|---|
| Local Road | 25 | 1 |
| State Hwy (Other) | 17 | 1 |
| **TOTAL** | **42** | **2** |



*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## *Train/Vehicle Crashes by Light Level*




| Light Level | Crashes | Fatalities |
|---|---|---|
| Daylight | 22 | 2 |
| Dark (Street Lights) | 10 | 0 |
| Dark (No Street Lights) | 7 | 0 |
| Dawn | 2 | 0 |
| Dusk | 1 | 0 |
| **TOTAL** | **42** | **2** |

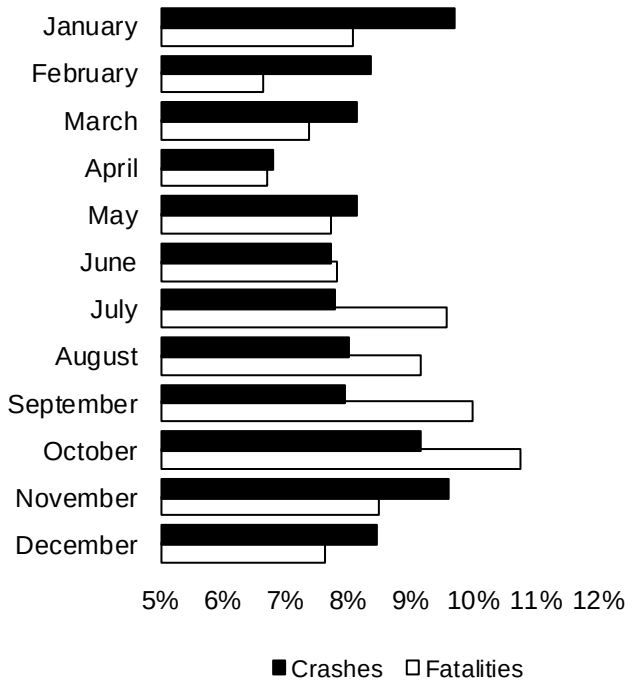
## *Train/Vehicle Crashes by County*

| County | Crashes | Fatalities |
|---|---|---|
| Adams | 1 | 0 |
| Allegheny | 4 | 0 |
| Berks | 2 | 0 |
| Blair | 1 | 0 |
| Bucks | 1 | 0 |
| Carbon | 1 | 0 |
| Cumberland | 1 | 0 |
| Delaware | 2 | 0 |
| Erie | 3 | 1 |
| Fayette | 1 | 0 |
| Jefferson | 1 | 0 |
| Juniata | 1 | 0 |
| Lancaster | 2 | 0 |
| Lehigh | 2 | 0 |
| Luzerne | 3 | 0 |

| County | Crashes | Fatalities |
|---|---|---|
| Mifflin | 1 | 0 |
| Montgomery | 5 | 1 |
| Northumberland | 2 | 0 |
| Philadelphia | 1 | 0 |
| Washington | 3 | 0 |
| Wayne | 1 | 0 |
| York | 3 | 0 |
| Butler | 0 | 0 |
| Cambria | 0 | 0 |
| Cameron | 0 | 0 |
| Centre | 0 | 0 |
| **TOTAL** | **42** | **2** |

# —WHEN THEY HAPPENED—

## Crashes by Month

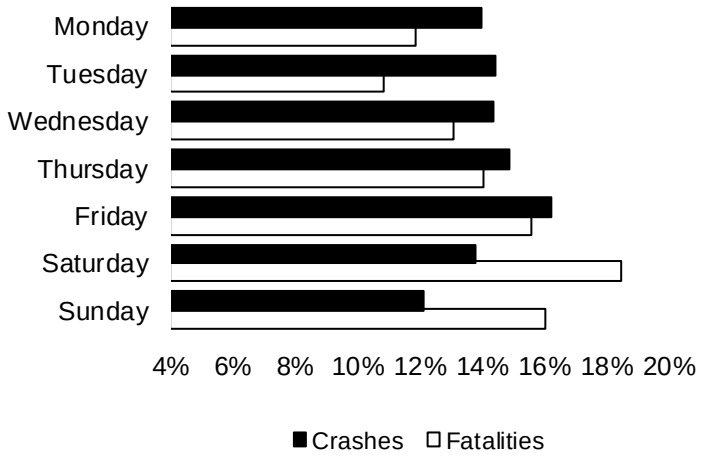



| Month | Crashes | Fatalities |
|---|---|---|
| January | 12,501 (9.7%) | 96 (8.1%) |
| February | 10,740 (8.4%) | 79 (6.6%) |
| March | 10,457 (8.1%) | 88 (7.4%) |
| April | 8,727 (6.8%) | 80 (6.7%) |
| May | 10,479 (8.2%) | 92 (7.7%) |
| June | 9,921 (7.7%) | 93 (7.8%) |
| July | 10,028 (7.8%) | 114 (9.6%) |
| August | 10,302 (8.0%) | 109 (9.2%) |
| September | 10,226 (8.0%) | 119 (10.0%) |
| October | 11,777 (9.2%) | 128 (10.8%) |
| November | 12,371 (9.6%) | 101 (8.5%) |
| December | 10,891 (8.5%) | 91 (7.7%) |
| **TOTAL** | **128,420 (100.0%)** | **1,190 (100.0%)** |



## Crashes by Day of Week

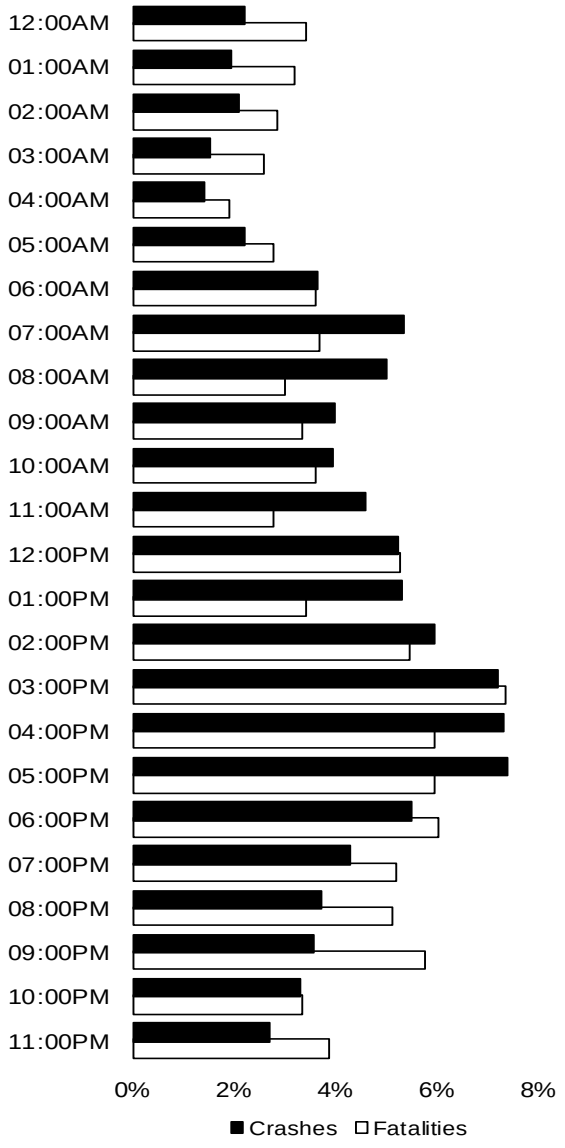
More crashes occurred on Thursday and Friday. The number of fatalities on weekends (Saturday and Sunday) is proportionally greater than the number of crashes. This could be attributed to alcohol use. (See ***Victims of Fatal Crashes by Day of Week***, page 29).




| Day | Crashes | Fatalities |
|---|---|---|
| Monday | 17,993 (14.0%) | 141 (11.9%) |
| Tuesday | 18,556 (14.5%) | 129 (10.8%) |
| Wednesday | 18,490 (14.4%) | 156 (13.1%) |
| Thursday | 19,151 (14.9%) | 167 (14.0%) |
| Friday | 20,899 (16.3%) | 186 (15.6%) |
| Saturday | 17,713 (13.8%) | 220 (18.5%) |
| Sunday | 15,618 (12.2%) | 191 (16.1%) |
| **TOTAL** | **128,420 (100.0%)** | **1,190 (100.0%)** |

## Crashes by Hour of Day

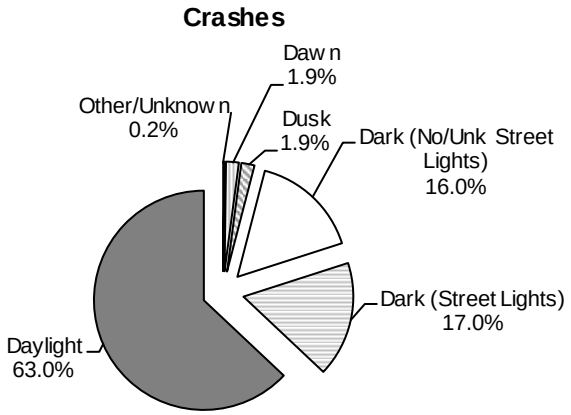
Some hours of the day are more dangerous than others with regard to crashes and fatalities. Not surprisingly, crashes and fatalities were higher during peak traffic times. Some hours of the day experience a low percentage of crashes, but they are much more deadly. For example, only 3.6% of all crashes in 2018 occurred in the 9:00 PM hour, but 5.8% of all fatalities —the fifth highest percentage—occurred then. The higher volume of traffic itself is a factor during peak traffic hours, particularly the rush-hours.

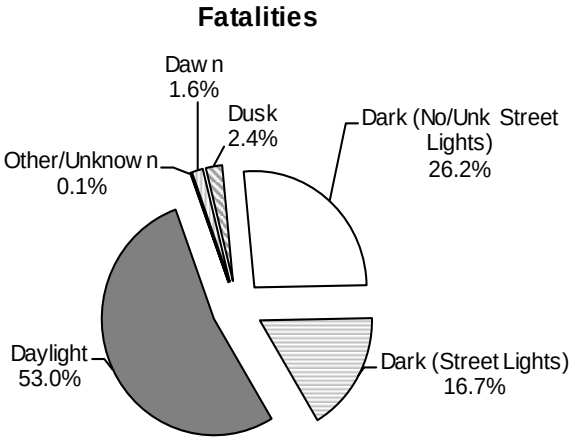



| Hour | Crashes | Fatalities |
|---|---|---|
| 12:00AM | 2,832 | 41 |
| 01:00AM | 2,492 | 38 |
| 02:00AM | 2,689 | 34 |
| 03:00AM | 1,990 | 31 |
| 04:00AM | 1,829 | 23 |
| 05:00AM | 2,821 | 33 |
| 06:00AM | 4,692 | 43 |
| 07:00AM | 6,878 | 44 |
| 08:00AM | 6,450 | 36 |
| 09:00AM | 5,141 | 40 |
| 10:00AM | 5,103 | 43 |
| 11:00AM | 5,939 | 33 |
| 12:00PM | 6,736 | 63 |
| 01:00PM | 6,838 | 41 |
| 02:00PM | 7,697 | 65 |
| 03:00PM | 9,271 | 88 |
| 04:00PM | 9,411 | 71 |
| 05:00PM | 9,528 | 71 |
| 06:00PM | 7,103 | 72 |
| 07:00PM | 5,540 | 62 |
| 08:00PM | 4,786 | 61 |
| 09:00PM | 4,614 | 69 |
| 10:00PM | 4,256 | 40 |
| 11:00PM | 3,476 | 46 |

## Crashes by Light Level

In 2018, more crashes occurred in daylight than all other light levels combined. This is not surprising, since more vehicles are on the road during daylight. However, fatalities in 2018 occurred slightly less often during non-daylight hours (dark and dusk/dawn conditions). If 2018 fatalities per 1000 crashes are compared (Daylight — 7.8 fatalities per 1000 crashes versus Non-Daylight — 11.8 fatalities per 1000 crashes), it is apparent that non-daylight crashes resulted in fatalities more often than daylight crashes.



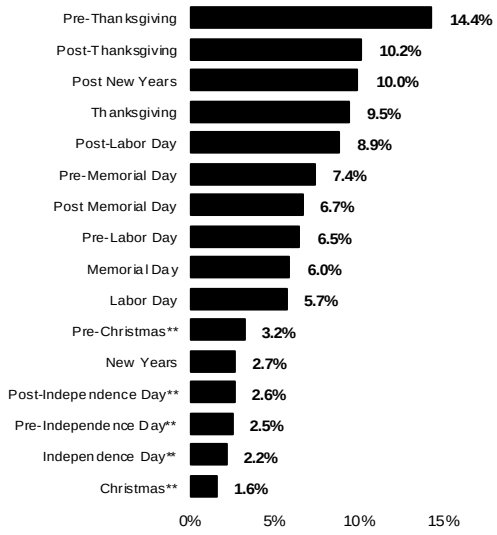




| Light Level | Crashes | Fatalities |
|---|---|---|
| Daylight | 80,862 | 631 |
| Dark (Street Lights) | 21,845 | 199 |
| Dark (No/Unk Street Lights) | 20,552 | 312 |
| Dusk | 2,489 | 28 |
| Dawn | 2,408 | 19 |
| Other/Unknown | 264 | 1 |
| **TOTAL** | **128,420** | **1,190** |

## *Crashes by Holiday*

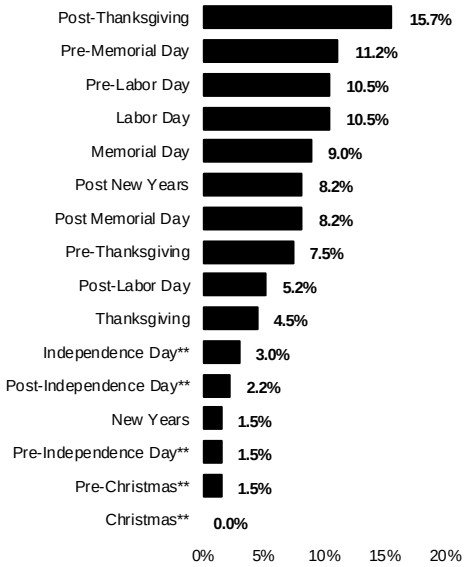
Crashes increased during holiday periods due to the volume of traffic on the roadway. Many times the weekend before and the weekend after the holiday have nearly as many crashes and fatalities, and sometimes more. The graphs below illustrate the ranking in descending order, of total crashes and fatalities, respectively, for each holiday period. The table shows a breakdown of crashes and fatalities for each holiday period in 2018.

**Crashes**




| Period* | Crashes | Fatalities |
|---|---|---|
| New Years | 405 | 2 |
| Post New Years | 1,507 | 11 |
| Pre-Memorial Day | 1,121 | 15 |
| Memorial Day | 898 | 12 |
| Post Memorial Day | 1,007 | 11 |
| Pre-Independence Day** | 379 | 2 |
| Independence Day** | 326 | 4 |
| Post-Independence Day** | 398 | 3 |
| Pre-Labor Day | 987 | 14 |
| Labor Day | 864 | 14 |
| Post-Labor Day | 1,343 | 7 |
| Pre-Thanksgiving | 2,164 | 10 |
| Thanksgiving | 1,427 | 6 |
| Post-Thanksgiving | 1,532 | 21 |
| Pre-Christmas** | 487 | 2 |
| Christmas** | 239 | 0 |
| **TOTAL** | **15,084** | **134** |

**Fatalities**




* See *Holidays* under **Definitions** for explanation of pre- and post-holiday weekends.

** Not part of a holiday weekend in 2018.

# Drivers

## Drivers Overview

Every traffic crash involves 3 elements: the driver, roadway, and vehicle. It has been stated nationally that 85-90% of all traffic crashes involve some sort of driver error that contributes to the crash. Therefore, as drivers, we can greatly impact traffic safety by driving smart and driving defensively.

Of all drivers represented in crashes, the young driver and the older driver are two groups that stand out. Young drivers (ages 16-21) are the least experienced drivers and they are also prone to over zealous driving performance, perhaps due to their youth and peer pressure. Older drivers (ages 65 & over) on the other hand experience driving difficulties related to deteriorating physical abilities (eyesight, hearing, head movement, etc.).



## Crashes Involving Driver Error

Some form of poor/degraded driver performance is present in the majority of crashes. Alcohol use and speeding continue to be big contributors to fatal crashes.

| Contributing Factor | Crashes | Fatal Crashes |
|---|---|---|
| Speed-Related | 32,710 | 397 |
| Drinking Driver | 8,519 | 150 |
| Improper Turning-Related | 12,871 | 76 |
| Careless/Illegal Passing | 4,848 | 68 |
| Distracted Driver | 14,292 | 63 |
| Proceeded Without Clearance | 8,895 | 40 |
| Drowsy Drivers | 2,533 | 15 |
| Tailgating | 7,310 | 11 |

***Note:*** Drinking driver and drowsy driver factors determined from the driver's condition field.

## Single and Multiple Vehicle Crashes of Young and Older Drivers

As the table below shows, older drivers are over-represented in multiple vehicle crashes, due in part to the loss of physical and cognitive abilities. Younger drivers are also over-represented in multi-vehicle crashes as younger drivers are more easily distracted while driving.

| Number of Vehicles | All Drivers | Young Drivers (16-21) | Older Drivers (65-74) | Older Drivers (75+) |
|---|---|---|---|---|
| **Single Vehicle Crash** | 44.8%<br>57,414 crashes | 36.3%<br>9,710 crashes | 21.3%<br>3,003 crashes | 22.0%<br>1,866 crashes |
| **Multiple Vehicle Crash** | 55.2%<br>70,854 crashes | 63.7%<br>17,029 crashes | 78.7%<br>11,108 crashes | 78.0%<br>6,617 crashes |



## Drivers in Crashes by Age Group

Looking at the 2018 Pennsylvania driver data, as driver age groups increased in age, the percentage of Pennsylvania total drivers involved in crashes within each age group decreased considerably. Note the percentage of 16-year old drivers involved in crashes. This number is significantly lower than other young driver age groups due to a law enacted in December 1999 that required a mandatory six month waiting period between obtaining a Learner's Permit and testing for licensure. It also reflected the limited time 16-year old drivers used the roads and the more controlled situations in which they are permitted to drive during the permit process. Driver inexperience and less cautious driving often are attributed characteristics given to the reason all young driver ages have higher rates.

| Age Group | PA Drivers Involved in Crashes | *PA Total Drivers | % Involved in Crashes |
|---|---|---|---|
| 16 | 1,841 | 41,995 | 4.4% |
| 17 | 4,663 | 106,318 | 4.4% |
| 18 | 5,109 | 116,831 | 4.4% |
| 19 | 5,088 | 125,174 | 4.1% |
| 20 | 4,686 | 127,983 | 3.7% |
| 21 | 4,905 | 128,241 | 3.8% |
| 22-24 | 14,954 | 401,904 | 3.7% |
| 25-29 | 22,976 | 728,691 | 3.2% |
| 30-39 | 34,931 | 1,448,195 | 2.4% |
| 40-54 | 40,796 | 2,160,130 | 1.9% |
| 55-59 | 12,806 | 850,775 | 1.5% |
| 60-64 | 10,696 | 832,153 | 1.3% |
| 65-69 | 7,925 | 700,146 | 1.1% |
| 70-74 | 5,668 | 542,472 | 1.0% |
| 75 and Over | 8,290 | 814,033 | 1.0% |
| Unknown | 51 | N/A | N/A |

* PA Total Drivers includes total PA Licensed Drivers and PA Drivers who have their Learner's Permit (no driver's license).

## Comparison of Young and Older Drivers by Crash Type

Young drivers are slightly under-represented in hit fixed object crashes (single vehicle run-off-the-road type crashes), while older drivers are heavily over-represented in angle and rear-end crashes (multiple vehicle interaction type crashes).

| Crash Type | All Drivers | Young Drivers (16-21) | Older Drivers (65-74) | Older Drivers (75+) |
|---|---|---|---|---|
| **Non-Collision** | 3.2%<br>4,090 crashes | 2.3%<br>619 crashes | 1.8%<br>248 crashes | 1.1%<br>93 crashes |
| **Rear-End** | 21.8%<br>27,949 crashes | 24.8%<br>6,643 crashes | 27.6%<br>3,900 crashes | 22.2%<br>1,885 crashes |
| **Head-On** | 4.0%<br>5,084 crashes | 4.5%<br>1,208 crashes | 5.4%<br>757 crashes | 5.4%<br>454 crashes |
| **Backing Up** | 0.4%<br>446 crashes | 0.3%<br>66 crashes | 0.5%<br>70 crashes | 0.6%<br>50 crashes |
| **Angle** | 26.8%<br>34,335 crashes | 30.7%<br>8,219 crashes | 39.1%<br>5,511 crashes | 46.2%<br>3,916 crashes |
| **Sideswipe** | 6.3%<br>8,121 crashes | 4.8%<br>1,284 crashes | 7.0%<br>984 crashes | 6.1%<br>515 crashes |
| **Hit Fixed Object** | 30.6%<br>39,192 crashes | 29.7%<br>7,933 crashes | 13.7%<br>1,935 crashes | 14.4%<br>1,222 crashes |
| **Hit Pedestrian** | 3.1%<br>4,017 crashes | 1.0%<br>254 crashes | 2.4%<br>335 crashes | 2.5%<br>211 crashes |
| **Other** | 3.9%<br>5,034 crashes | 1.9%<br>513 crashes | 2.6%<br>371 crashes | 1.6%<br>137 crashes |

* Crash Type refers to the first event of the *crash* which may or may not be an event of the drivers above.

## Intersection vs. Non-Intersection Crashes of Young and Older Drivers

In keeping with the data presented previously on single vehicle versus multiple vehicle crashes, older drivers are more likely to be involved in crashes at intersections compared to other age groups. Intersections can be confusing and problematic for the older driver, as numerous and complex movements are present.

| | All Drivers | Young Drivers (16-21) | Older Drivers (65-74) | Older Drivers (75+) |
|---|---|---|---|---|
| **Intersection** | 38.0%<br>48,736 crashes | 41.1%<br>10,977 crashes | 48.4%<br>6,828 crashes | 53.3%<br>4,520 crashes |
| **Non-Intersection** | 62.0%<br>79,532 crashes | 59.0%<br>15,762 crashes | 51.6%<br>7,283 crashes | 46.7%<br>3,963 crashes |

# Alcohol-Related Crashes

## Alcohol Overview

- In Pennsylvania, drinking and driving remains a top safety issue. In 2018, alcohol-related crashes decreased to 9,811 from 10,346 alcohol-related crashes in 2017. In 2018, alcohol-related fatalities increased to 331 from 293 alcohol-related fatalities in 2017.

- Of particular concern is the involvement of drinking drivers under the age of 21. 29% of the driver fatalities in the 16-20 age group were drinking drivers, up from 18% in 2017. Improvement in this age group is a very important need.

- Of equal focus is the 21 to 25 age group, in which 43% of the driver fatalities were drinking drivers. This age group had the worst percentage of all groups, and was up from 31% in 2017. The 26 to 30 age group decreased to 36% from 42% in 2017.



- In 2018, alcohol-related fatalities were 28% of the total traffic fatalities, less than in 2014 and 2015.

- Pennsylvania continues to take an aggressive posture to prevent and deter drinking and driving (particularly through the widespread use of sobriety checkpoints and saturation patrols).

**2018 Briefs**

- 331 people died in alcohol-related crashes.

- 90% of the alcohol-related occupant fatalities (drivers and passengers) were in the vehicle driven by the drinking driver; 75% were the drinking drivers themselves.

- 73% of the drinking drivers in traffic crashes were male.

- 67% of the alcohol-related crashes were during the hours of darkness, usually on weekends.

- On average each day, 27 alcohol-related traffic crashes occurred.

- On average each day, 0.9 persons were fatally injured in alcohol-related traffic crashes.

- On average each day, 17 persons were injured in alcohol-related traffic crashes.

## Alcohol Involvement in Crashes

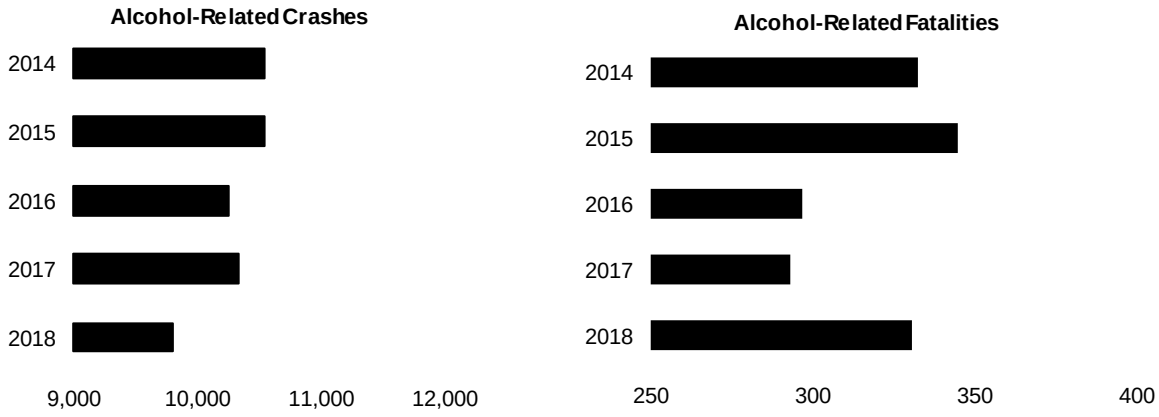
Although alcohol-related crashes accounted for approximately 8% of the total crashes in 2018, they resulted in 28% of all persons fatally injured in crashes. Alcohol-related crashes were 4.7 times more likely to result in fatal injury than those not related to alcohol (3.1% of the alcohol-related crashes resulted in fatal injury, compared to 0.7% of crashes which were not alcohol-related). "PDO Crashes" in the table below refers to property damage only crashes.

| | Fatal Crashes | Fatalities | Injury Crashes | Injuries | PDO Crashes |
|---|---|---|---|---|---|
| Alcohol-Related | 307 (27.8%) | 331 (27.8%) | 4,665 (8.2%) | 6,227 (8.0%) | 4,839 (6.9%) |
| Non-Alcohol-Related | 796 (72.2%) | 859 (72.2%) | 52,089 (91.8%) | 72,007 (92.0%) | 65,698 (93.1%) |
| **TOTAL** | **1,103 (100.0%)** | **1,190 (100.0%)** | **56,754 (100.0%)** | **78,234 (100.0%)** | **70,537 (100.0%)** |

## Alcohol-Related Crashes—Five-Year Trends

Alcohol-related crashes decreased in 2018, and were the lowest total in the last five years. Alcohol-related fatalities increased in 2018, and were the third lowest total in the last five years. Alcohol-related fatalities are trending downward.






| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Crashes | 10,550 | 10,558 | 10,256 | 10,346 | 9,811 |
| *Fatal Crashes* | 311 | 321 | 270 | 280 | 307 |
| *Injury Crashes* | 5,377 | 5,274 | 4,911 | 4,908 | 4,665 |
| *PDO Crashes* | 4,862 | 4,963 | 5,075 | 5,158 | 4,839 |
| Fatalities | 333 | 345 | 297 | 293 | 331 |
| Injuries | 7,265 | 7,055 | 6,589 | 6,565 | 6,227 |
| Fatal Crashes per 100,000 Licensed Drivers | 3.5 | 3.6 | 3.0 | 3.1 | 3.4 |
| Fatalities per 100,000 Licensed Drivers | 3.7 | 3.9 | 3.3 | 3.3 | 3.7 |

## *Victims of Alcohol-Related Fatal Crashes*

There were 273 driver and passenger fatalities in alcohol-related crashes in 2018, while 245 (90 %) were the drinking drivers or their passengers.

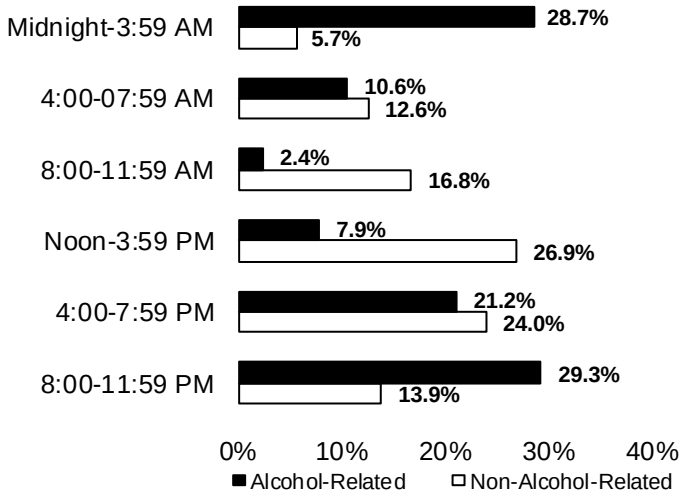
| Persons Involved | Fatalities |
|---|---|
| **Drivers** | **224** |
| *Drinking Drivers* | *204 (91.1%)* |
| *Non-Drinking Drivers* | *20 (8.9%)* |
| **Passengers** | **49** |
| *Passengers with Drinking Driver* | *41 (83.7%)* |
| *Passengers with Non-Drinking Driver* | *8 (16.3%)* |
| **Pedestrians** | **55** |
| *Drinking Pedestrian* | *41 (74.6%)* |
| *Non-Drinking Pedestrian* | *14 (25.5%)* |
| **TOTAL FATALITIES*** | **331** |

**Includes 3 victims, status unknown*



## *Victims of Fatal Crashes by Time of Day*

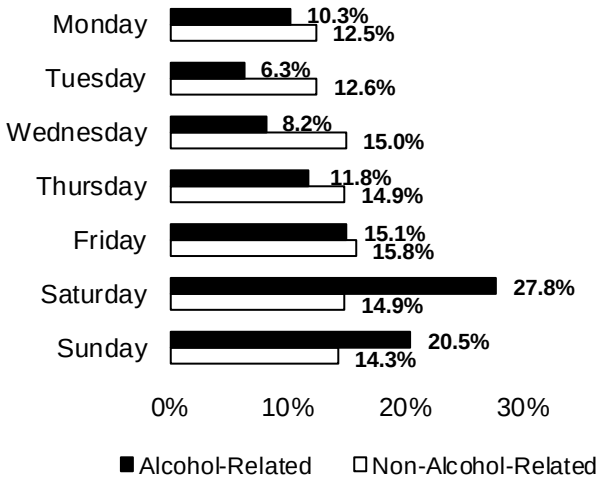
Alcohol-related crashes occurring between 8:00 PM and 4:00 AM produced the vast majority of fatalities (58% of alcohol-related fatalities). In contrast, over half of the fatalities (51%) from non-alcohol-related crashes resulted from crashes occurring between noon and 8:00 PM.




| Time of Occurrence | Non-Alcohol-Related | Alcohol-Related |
|---|---|---|
| Midnight-3:59 AM | 49 | 95 |
| 4:00-07:59 AM | 108 | 35 |
| 8:00-11:59 AM | 144 | 8 |
| Noon-3:59 PM | 231 | 26 |
| 4:00-7:59 PM | 206 | 70 |
| 8:00-11:59 PM | 119 | 97 |
| Time Unknown | 2 | 0 |
| **TOTAL FATALITIES** | **859** | **331** |

## Victims of Fatal Crashes by Day of Week

Under half (48%) of alcohol-related fatal crash victims were the result of crashes occurring on Saturday and Sunday, while fatal crash victims of non-alcohol-related crashes tended to be distributed more evenly throughout the work week with the fewest occurring on Monday and Tuesday.

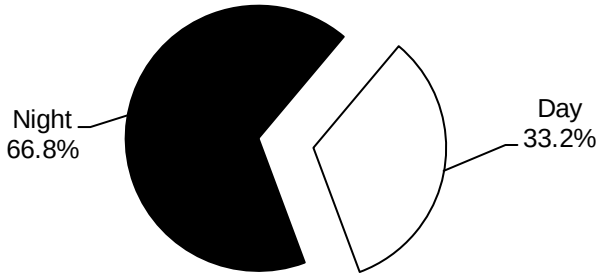



| Day of Occurrence | Non-Alcohol-Related | Alcohol-Related |
|---|---|---|
| Monday | 107 | 34 |
| Tuesday | 108 | 21 |
| Wednesday | 129 | 27 |
| Thursday | 128 | 39 |
| Friday | 136 | 50 |
| Saturday | 128 | 92 |
| Sunday | 123 | 68 |
| **TOTAL FATALITIES** | **859** | **331** |



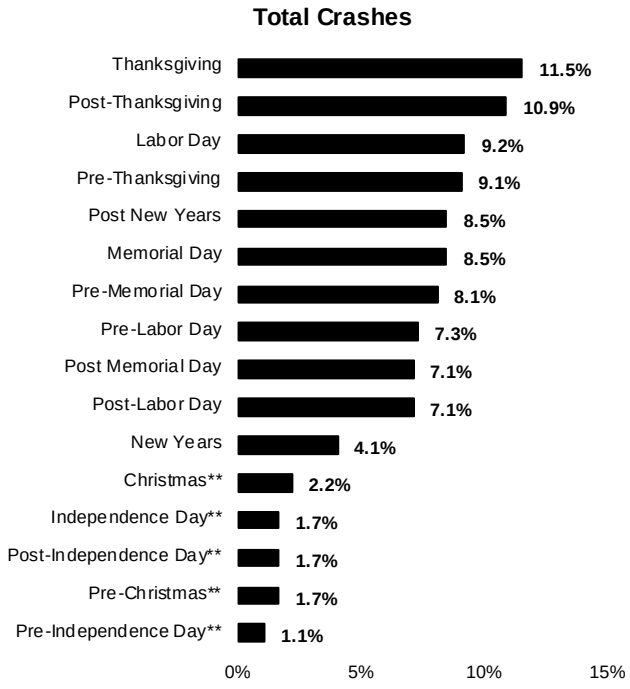
## Alcohol-Related Crashes—Day vs. Night

66.8% of alcohol-related crashes occurred at night. The graph below shows the breakdown of alcohol-related crashes by day and night.

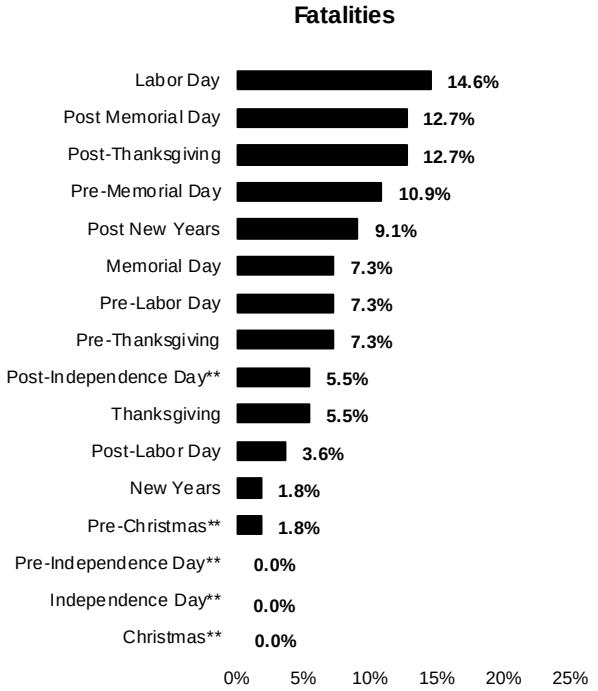


## *Alcohol-Related Holiday Crashes*

In 2018, 10% of all holiday crashes involved alcohol use; however, 41% of fatalities that occurred during holiday weekends were related to alcohol use. (See ***Crashes by Holiday***, page 22.)




| Period* | Crashes | Fatalities |
|---|---|---|
| New Years | 62 | 1 |
| Post New Years | 130 | 5 |
| Pre-Memorial Day | 124 | 6 |
| Memorial Day | 130 | 4 |
| Post Memorial Day | 109 | 7 |
| Pre-Independence Day** | 17 | 0 |
| Independence Day** | 26 | 0 |
| Post-Independence Day** | 26 | 3 |
| Pre-Labor Day | 112 | 4 |
| Labor Day | 141 | 8 |
| Post-Labor Day | 109 | 2 |
| Pre-Thanksgiving | 139 | 4 |
| Thanksgiving | 176 | 3 |
| Post-Thanksgiving | 166 | 7 |
| Pre-Christmas** | 26 | 1 |
| Christmas** | 34 | 0 |
| **TOTAL** | **1,527** | **55** |




* See *Holidays* under **Definitions** for explanation of pre- and post-holiday weekends.

** Not part of a holiday weekend in 2018.

## Driver Involvement in Alcohol-Related Crashes by Vehicle Type

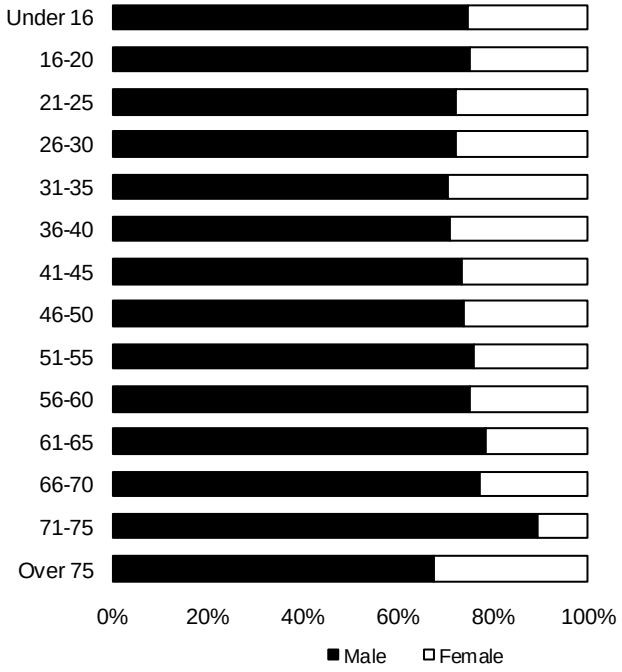
Motorcyclists had the largest percentage of drinking drivers to total drivers; this is compared to the drivers of other types of vehicles. Drinking drivers of passenger cars, light trucks, vans, and sport utility vehicles were nearly equal to the average for drivers of all vehicle types. Bus and heavy truck drivers accounted for very few of the drinking drivers in crashes.

| | | | |
|---|---|---|---|
| **Total Drivers in Crashes 210,108** | Passenger Car | | 116,586 |
| | Lt Trk/SUV/Van | | 80,591 |
| | Heavy Truck | | 7,826 |
| | Motorcycle | | 2,772 |
| | Bus | | 937 |
| | Other | | 1,396 |
| **Drinking Drivers in Crashes 9,585 (4.6% of total)** | Passenger Car | 5,600 | (4.8% of total) |
| | Lt Trk/SUV/Van | 3,580 | (4.4% of total) |
| | Heavy Truck | 42 | (0.5% of total) |
| | Motorcycle | 288 | (10.4% of total) |
| | Bus | 1 | (0.1% of total) |
| | Other | 74 | (5.3% of total) |



## Drinking Drivers in Crashes by Age and Sex

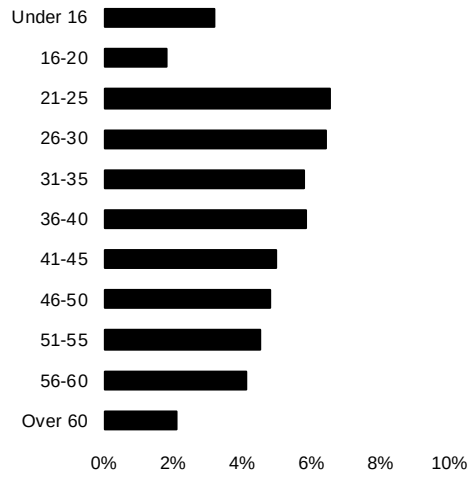
In 2018, roughly 3 out of 4 drinking drivers in crashes were male (across most age groups), with only slight variations among the age groups. The table below does not include an additional 60 drivers for whom age and/or sex were not known.




| Age Group | Male | Female | Total |
|---|---|---|---|
| Under 16 | 3 | 1 | 4 |
| 16-20 | 312 | 102 | 414 |
| 21-25 | 1,329 | 502 | 1,831 |
| 26-30 | 1,174 | 447 | 1,621 |
| 31-35 | 840 | 350 | 1,190 |
| 36-40 | 724 | 294 | 1,018 |
| 41-45 | 547 | 195 | 742 |
| 46-50 | 554 | 192 | 746 |
| 51-55 | 528 | 163 | 691 |
| 56-60 | 431 | 141 | 572 |
| 61-65 | 280 | 76 | 356 |
| 66-70 | 150 | 44 | 194 |
| 71-75 | 78 | 9 | 87 |
| Over 75 | 40 | 19 | 59 |
| **Total** | **6,990** | **2,535** | **9,525** |

## *Drinking Drivers vs. Non-Drinking Drivers Involved in Crashes by Age Group*

In 2018, as the table and graph below show, the two age groups from 21 to 30 had the highest percentage of drinking drivers within their respective age groups. After age 40, the percentage of drinking drivers within the succeeding age groups steadily declined. The Under 16 age group continues to be of particular concern, as it included 4 drinking drivers.

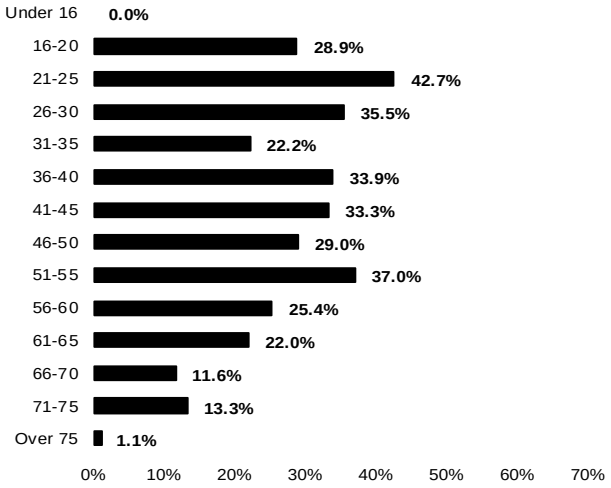



| Age Group | Drinking Driver | Non-Drinking Driver |
|---|---|---|
| Under 16 | 4 (3.2%) | 120 (96.8%) |
| 16-20 | 415 (1.8%) | 22,510 (98.2%) |
| 21-25 | 1,834 (6.6%) | 26,125 (93.4%) |
| 26-30 | 1,623 (6.4%) | 23,600 (93.6%) |
| 31-35 | 1,193 (5.8%) | 19,296 (94.2%) |
| 36-40 | 1,021 (5.9%) | 16,329 (94.1%) |
| 41-45 | 743 (5.0%) | 14,055 (95.0%) |
| 46-50 | 747 (4.9%) | 14,656 (95.2%) |
| 51-55 | 691 (4.6%) | 14,458 (95.4%) |
| 56-60 | 572 (4.1%) | 13,238 (95.9%) |
| Over 60 | 698 (2.1%) | 32,087 (97.9%) |



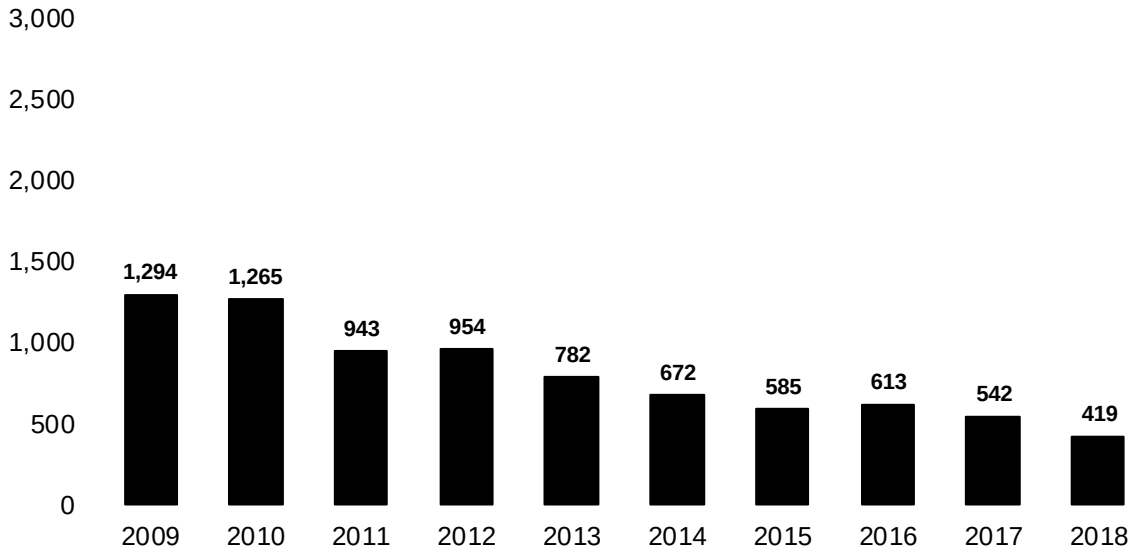
## *Drinking Driver Fatalities as a Percentage of Total Driver Fatalities, by Age Group*

The graph below shows drinking driver fatalities as a percentage of total driver fatalities within each respective age group for 2018 crashes. The age group from 21 to 25 had the highest percentage, with 43% of the driver fatalities in this age group being a drinking driver. The 16-20 age group increased from 18.0% in 2017. In 2018, there were no drivers under the age of 16 who chose to combine alcohol usage and driving without a license.



## *Underage Drinking Drivers in Pennsylvania Crashes—Historical Data*

Act 31, commonly known as the "*Underage Drinking Law*," went into effect on May 24, 1988. From that year, and until 1994, the number of underage drinking drivers involved in Pennsylvania crashes declined each year. From 1997 until 2002, the amount of underage drinking drivers remained consistently high. From that point until 2015 there has been a downward trend with 2009, 2010, 2012 and 2016 disrupting the steady decrease.



# Seat Belts, Child Safety Seats, and Air Bags

## Restraints Overview

### *Safety Belts*

- Pennsylvania's seat belt law requires that drivers and front seat passengers be properly buckled when riding in a passenger car, Class 1 and Class 2 truck, or motor home. Children age 8 and older, but under age 18, are required to be secured in a seat belt system anywhere in the vehicle due to the law becoming effective on February 21, 2003.
- A driver under the age of 18 may not operate a motor vehicle when the number of passengers exceeds the number of available seat belts in the vehicle.
- The combination of lap/shoulder seat belts, when used, reduces the risk of fatal injuries to front seat passenger car occupants by 45% and the risk of suspected minor-to-critical injuries by 50%. For light truck occupants, seat belts reduce the risk of fatal injuries by 60% and the risk of suspected minor -to-critical injuries by 65%.
- All passengers should wear a seat belt whenever riding in a motor vehicle—even for short distances. Three out of four crashes occur within 25 miles of home.
- If everyone wore seat belts when riding in a motor vehicle, hundreds of lives in Pennsylvania alone would be saved (see page 36). Research shows that children are likely to be buckled 92% of the time when adults are buckled and only 72% of the time when adults are *not* buckled. Everyone should buckle up, every time!

### *Child Safety Seats*

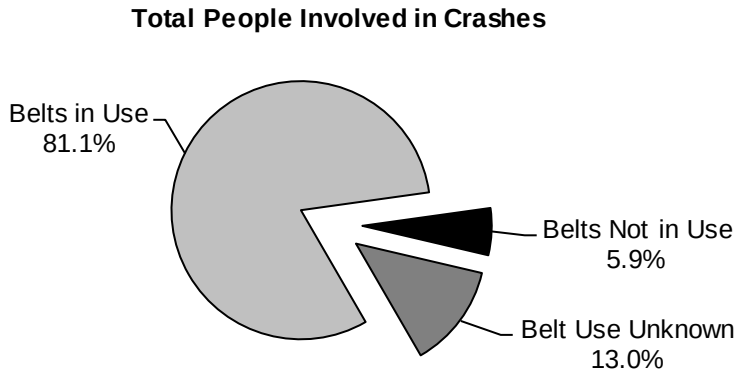
- Pennsylvania law requires that children under the age of 4 to be properly restrained in a child passenger restraint system when riding anywhere in a vehicle. Children under 2 must be secured in a rear-facing car seat until the child outgrows the maximum weight and height limits designated by the car seat manufacturer. Children age 4 up to age 8, are required to be in an appropriately fitting child booster seat when riding anywhere in a vehicle. Children from age 8 up to age 18 must be in a seat belt.
- Research shows that child safety seats, when properly installed, reduce the risk of fatal injury by 71% for infants and 54% for toddlers.
- When placing a child safety seat in a vehicle, follow the manufacturer's instructions for the vehicle and the child safety seat instructions exactly. There are different types of child safety seats—infant, convertible, and booster. Children ages 2 to 3 should be kept rear-facing as long as possible, until they reach the top height or weight limit allowed by the car seat's manufacturer. Children ages 4 to 7 should be kept forward-facing with a harness until they reach the top height or weight limit allowed by the car seat's manufacturer. Children ages 8 to 12 should be kept in a booster seat until they are big enough to fit the seat belt properly, that is, the lap belt must lie snugly across the upper thighs and the shoulder belt should lie snugly across the shoulder and chest and not cross the neck or face.
- Children should ride in the rear seat whenever possible, and should always be properly buckled.

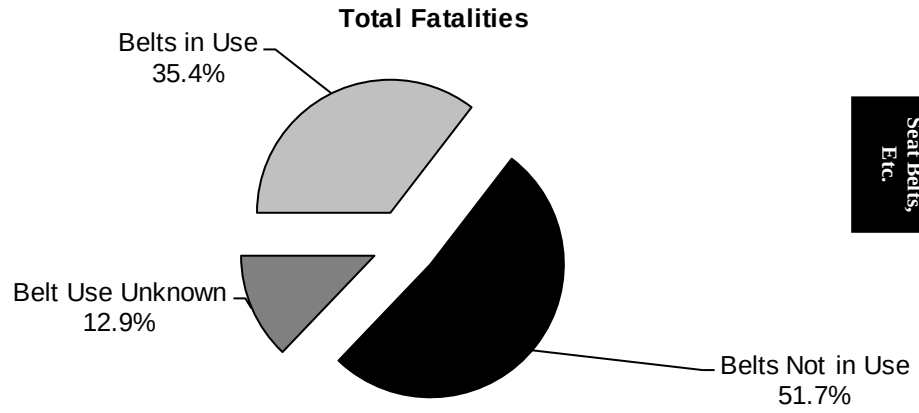
### *Air Bag Safety*

- Driver and front seat passenger air bags have been required in new passenger cars since 1998 and light trucks since 1999. However, air bags are supplemental protection devices. Everyone should still buckle up with both lap and shoulder belts on every trip.
- *Child Safety*
  - Children age 12 and under should ride buckled up in the back seat.
  - Infants in rear-facing child safety seats should **NEVER** ride in the front seat of a vehicle equipped with a passenger-side air bag.
  - If an older child must ride in a front seat equipped with a passenger-side air bag, put the child in a front-facing seat or belt-positioning booster seat for the proper weight of the child, or use a correctly fitting lap/shoulder belt, **and** move the vehicle seat as far back as possible.
- *Adult Safety*
  - Everyone should buckle up with both lap and shoulder belts on every trip.
  - The lap belt should be worn under the abdomen and low across the hips. The shoulder portion should come over the collarbone away from the neck and cross over the breastbone.
  - Driver and front passenger seats should be moved as far back as practical, particularly for shorter people.

## *Seat Belt Use in Crashes—Total People Involved*

Seat belts have proven to be effective in reducing the severity of injuries sustained in a crash. In 2018, as shown in the two pie graphs below, 81.1% of all people involved in crashes were wearing seat belts. 51.7% of all people who died in crashes were not wearing seat belts. The table at the bottom shows the total number of people involved in crashes in 2018 by severity of injury and belt use.





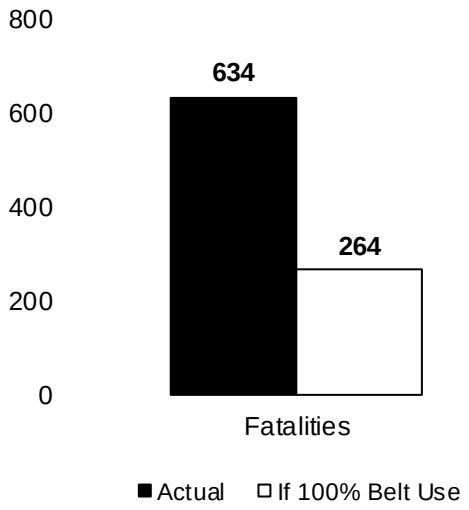

| | Belts in Use | Belts Not in Use | Belt Use Unknown |
|---|---|---|---|
| Fatal Injury | 272 | 397 | 99 |
| Suspected Serious Injury | 1,731 | 1,006 | 483 |
| Suspected Minor Injury | 24,235 | 3,266 | 2,532 |
| Possible Injury | 11,789 | 1,098 | 2,802 |
| Unknown Severity | 14,129 | 2,127 | 3,837 |
| No Injury | 169,822 | 8,199 | 25,814 |
| **TOTAL** | **221,978** | **16,093** | **35,567** |

***Note:*** Vehicles involved include passenger cars, light trucks, SUVs, vans, and heavy trucks. "Belts Not Available" is included in "Belts Not In Use".

## *Seat Belt Use in Crashes—Impact on Fatalities and Injuries*

The table and graph below display the estimated impact that seat belts worn 100% of the time would have on traffic fatalities and injuries. The numbers in parentheses, in the last row, are the estimated decreases in 2018 fatalities and injuries if 100% seat belt use was achieved. (***Note***: The data below is for passenger cars, small trucks, SUVs and vans.) 370 people would have survived if they had worn their belts.

| | | Injuries | | | |
|---|---|---|---|---|---|
| | **Fatalities** | *Susp Ser* | *Susp Min* | *Possible* | *None* |
| Belts Used | 255 | 1,660 | 22,753 | 24,446 | 146,260 |
| Belts Not Used | 379 | 966 | 3,143 | 3,158 | 8,966 |
| **TOTAL** | **634** | **2,626** | **25,896** | **27,604** | **155,226** |
| ***If 100% Belt Use*** | **264** | **1,782** | **24,572** | **26,183** | **157,311** |
| **Net Increase/(Decrease)** | **(370)** | **(844)** | **(1,324)** | **(1,421)** | **2,085** |




***Note:*** "No Belts" is included in "Belts Not Used".

***Note***: Starting in 2016, the data presented is for passenger cars, small trucks, SUVs and vans. Prior to 2016 only passenger cars were evaluated.

## Seat Belt Use in Crashes—Historical Data

On November 1, 1983, Pennsylvania passed a primary law requiring that drivers secure children under age 4 in an approved child passenger restraint system when riding in a passenger car, Class I truck, Class II truck, classic motor vehicle, antique motor vehicle, or motor home registered in Pennsylvania. Children ages 1 to 4 could be in the back seat in a child safety belt in lieu of a child passenger restraint system. Fines began taking effect January 1, 1985.

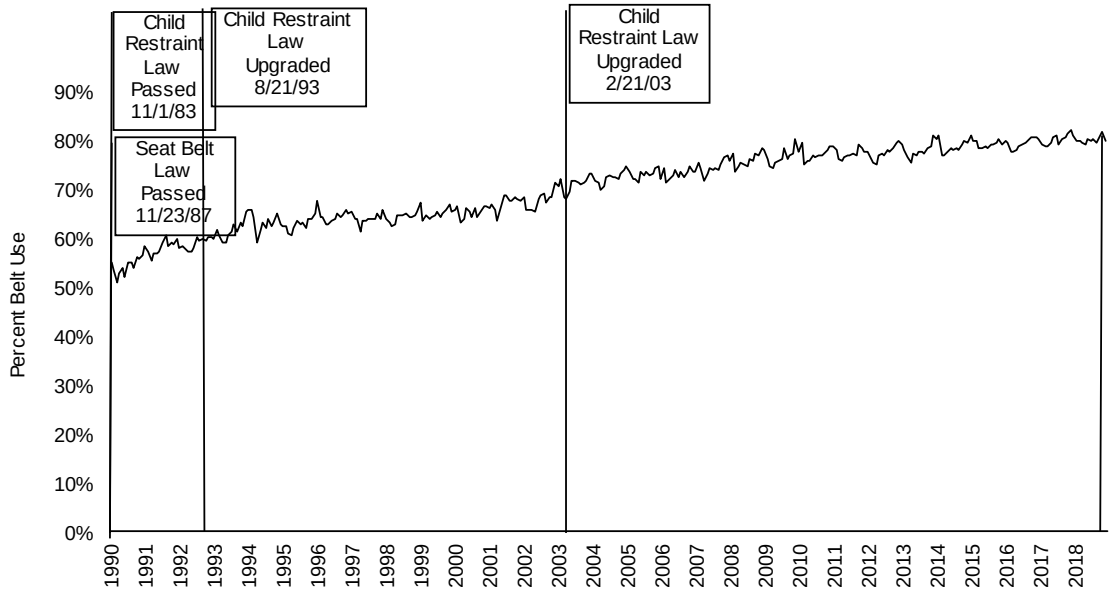
On November 23, 1987, Pennsylvania passed a safety belt law. The law requires that drivers and front seat passengers of a passenger car, Class I and Class II trucks, or motor home wear a properly-adjusted and fastened safety belt. The driver is responsible for securing children ages 4 to 18 in a safety belt when riding in the front seat. This is a secondary violation. Fines began taking effect March 23, 1988.

Effective August 21, 1993, the child passenger restraint law was upgraded requiring that drivers (not just those with vehicles registered in Pennsylvania) secure a child up to age 4 in a child passenger restraint system when sitting anywhere in the vehicle.

Effective February 21, 2003, the child passenger restraint law was upgraded requiring that children ages 4 through 7 be in an appropriately fitting child booster seat and those children ages 8 through 17 be secured in a seat belt system whenever riding anywhere in a vehicle.

The graph below shows the percentage of seat belt users in Pennsylvania since 1983. A sharp upward trend was experienced in the year following the passage of the seat belt law. The recent trend shows that the usage rate is still on the rise in crashes.

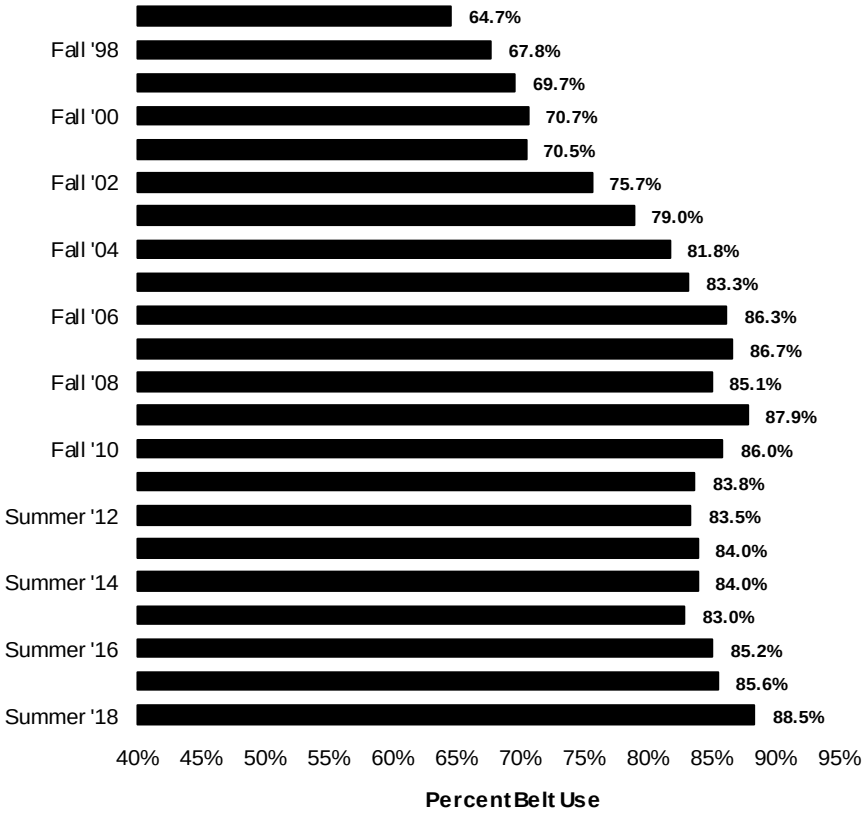





***Note:*** Data shown for passenger cars only.

## *Seat Belt Observational Surveys—Historical Data*

Observed seat belt use (the percent of front seat vehicle occupants wearing seat belts) is based upon a statewide statistical sampling of front seat occupants in passenger cars and light trucks. The observed seat belt use in 2008 is slightly lower than the previous 2 years, most likely due to the redesign of the study methodology in 2008, that provided more detailed accounts.






## *Child Passenger Restraints in Crashes—Five Year Data*

Since August 21, 1993, all drivers traveling in Pennsylvania have been required to secure children up to age 4 in a child passenger restraint system while sitting anywhere in a vehicle. As shown in the table below (for 2014-2018 crashes involving children under age 4), the percentages of fatalities and injuries (within restraint type by row) were lower when restraints were used. From 2014-2018, 82% of the children under age 4 who were involved in crashes and restrained in a child seat sustained no injury.

| | | Injuries | | | | | Total |
|---|---|---|---|---|---|---|---|
| **Child Restraint** | **Fatalities** | *Susp Ser* | *Susp Min* | *Possible* | *Unknown* | *No Injury* | **Persons** |
| Child Seat In Use | 16 (0.1%) | 75 (0.4%) | 473 (2.3%) | 1,245 (6.0%) | 1,852 (8.9%) | 17,138 (82.4%) | **20,799** |
| No Restraint In Use | 6 (0.3%) | 15 (0.8%) | 74 (4.1%) | 180 (9.9%) | 460 (25.3%) | 1,087 (59.7%) | **1,822** |
| Other Restraint In Use | 5 (0.1%) | 10 (0.2%) | 315 (5.0%) | 377 (6.0%) | 433 (6.9%) | 5,137 (81.8%) | **6,277** |

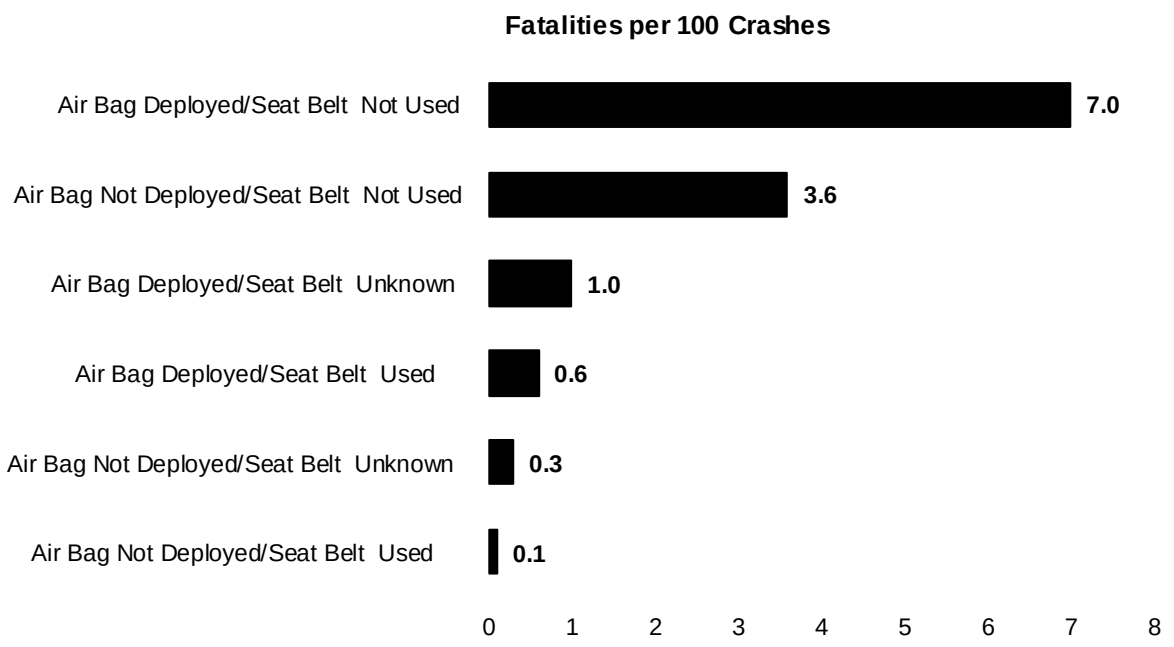
***Note***: "Child Seat Not In Use" and "Other Restraint Not In Use" have been combined into "No Restraint in Use".

## Air Bag Deployment in Crashes—Injuries and Fatalities

Air bags are becoming more prevalent for vehicles in crashes due to the manufacturing laws of the late 1990s, however some vehicles in crashes still do not have airbags as there are still older vehicles in use. Additionally, not all seats in a vehicle have an air bag. The table and graph below show the safety benefits of wearing a seat belt, both with and without air bag deployment. (Table percentages are listed within restraint type by row.)

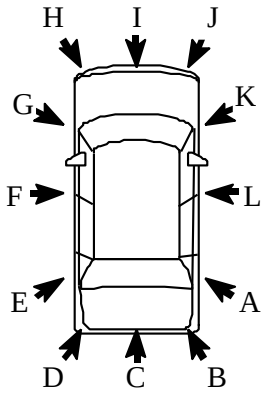
| Passive Restraint Status | Seat Belt Status | Fatalities | Injuries | | | | | Total Persons |
|---|---|---|---|---|---|---|---|---|
| | | | *Susp Ser* | *Susp Min* | *Possible* | *Unknown* | *No Injury* | |
| None | n/a | 178 (0.2%) | 747 (0.7%) | 8,293 (7.8%) | 5,896 (5.5%) | 8,908 (8.4%) | 82,351 (77.4%) | **106,373** |
| Air Bag Deployed | Used | 184 (0.3%) | 1,168 (2.1%) | 10,934 (19.8%) | 4,153 (7.5%) | 6,854 (12.4%) | 31,933 (57.8%) | **55,226** |
| Air Bag Deployed | Not Used | 237 (4.8%) | 547 (11.0%) | 1,376 (27.7%) | 348 (7.0%) | 1,025 (20.6%) | 1,433 (28.9%) | **4,966** |
| Air Bag Deployed | Unknown | 38 (0.6%) | 247 (4.2%) | 863 (14.5%) | 670 (11.3%) | 1,445 (24.3%) | 2,684 (45.1%) | **5,947** |
| Air Bag Not Deployed | Used | 30 (0.0%) | 225 (0.3%) | 6,668 (8.5%) | 3,462 (4.4%) | 4,056 (5.2%) | 63,660 (81.5%) | **78,101** |
| Air Bag Not Deployed | Not Used | 62 (2.1%) | 160 (5.5%) | 696 (23.9%) | 181 (6.2%) | 471 (16.2%) | 1,340 (46.1%) | **2,910** |
| Air Bag Not Deployed | Unknown | 7 (0.2%) | 51 (1.3%) | 304 (7.8%) | 219 (5.6%) | 545 (14.0%) | 2,765 (71.1%) | **3,891** |
| Unknown If Deployed | n/a | 23 (0.9%) | 29 (1.2%) | 268 (11.0%) | 169 (6.9%) | 312 (12.8%) | 1,639 (67.2%) | **2,440** |

In crashes that are severe enough to deploy an airbag (for vehicles and seats so equipped), the data below shows that you are 12 times more likely to die if you are not wearing a seat belt (7.0 fatalities vs. 0.6 fatalities per 100 crashes).



## *Air Bag Deployment by Initial Vehicle Impact Point*

Most air bags are designed to deploy in frontal impacts, but side impact air bags are also common for newer model year vehicles. The table below shows the initial vehicle impact points for all 2018 crashes. It is probable that a vehicle which is initially impacted in the rear may be pushed into the vehicle in front (secondary impact), thus deploying the air bag (such as the 1530 occasions in which air bags deployed in center rear impacts).




| Impact Point | Vehicles | Air Bag Not Present | Air Bag Present Deployed | Air Bag Present, Not Deployed | Unknown/ Other |
|---|---|---|---|---|---|
| Right Side Rear (A) | 2,541 | 844 | 623 (42.1%) | 858 (57.9%) | 216 |
| Right Rear (B) | 5,544 | 2,001 | 767 (24.7%) | 2,339 (75.3%) | 437 |
| Center Rear (C) | 29,547 | 11,488 | 1,530 (9.6%) | 14,357 (90.4%) | 2,172 |
| Left Rear (D) | 5,203 | 1,878 | 613 (21.1%) | 2,289 (78.9%) | 423 |
| Left Side Rear (E) | 2,595 | 809 | 598 (39.5%) | 915 (60.5%) | 273 |
| Left Side Center (F) | 6,766 | 2,001 | 2,095 (52.5%) | 1,898 (47.5%) | 772 |
| Left Side Forward (G) | 6,940 | 2,299 | 1,698 (42.7%) | 2,277 (57.3%) | 666 |
| Left Front (H) | 26,749 | 7,961 | 7,933 (47.9%) | 8,639 (52.1%) | 2,216 |
| Center Front (I) | 67,018 | 17,363 | 25,852 (59.1%) | 17,899 (40.9%) | 5,904 |
| Right Front (J) | 24,209 | 7,053 | 7,417 (49.8%) | 7,465 (50.2%) | 2,274 |
| Right Side Forward (K) | 10,755 | 3,466 | 2,762 (44.4%) | 3,454 (55.6%) | 1,073 |
| Right Side Center (L) | 8,289 | 2,567 | 2,549 (52.5%) | 2,311 (47.6%) | 862 |
| Other | 3,987 | 1,120 | 764 (40.9%) | 1,104 (59.1%) | 999 |
| None | 3,537 | 1,206 | 420 (21.0%) | 1,582 (79.0%) | 329 |
| **TOTAL** | **203,680** | **62,056** | **55,621 (45.2%)** | **67,387 (54.8%)** | **18,616** |



## *Air Bag Deployment by Age Group*

While air bags are an important safety feature, they must be used with a seat belt for maximum effectiveness. Air bag deployment without seat belts can be dangerous. As the table below shows (from a percentage perspective), people using seat belts were less likely to suffer suspected serious and minor injuries, and even fatal injury, during crashes involving air bag deployment. (Percentages listed in the table are by age group.)

**Seat Belts Used**

| Age Group | Fatalities | Injuries: *Susp Ser* | *Susp Min* | *Possible* | *Unknown* | *No Injury* | Total Persons |
|---|---|---|---|---|---|---|---|
| 0-4 | 0 (0.0%) | 1 (1.3%) | 17 (22.4%) | 4 (5.3%) | 9 (11.8%) | 45 (59.2%) | 76 |
| 5-8 | 1 (0.4%) | 3 (1.2%) | 54 (20.8%) | 32 (12.3%) | 31 (11.9%) | 139 (53.5%) | 260 |
| 9-12 | 1 (0.2%) | 11 (2.1%) | 107 (20.2%) | 55 (10.4%) | 58 (10.9%) | 298 (56.2%) | 530 |
| 13-64 | 105 (0.2%) | 912 (1.9%) | 9,130 (19.1%) | 3,480 (7.3%) | 5,555 (11.6%) | 28,616 (59.9%) | 47,798 |
| 65-74 | 32 (0.9%) | 118 (3.1%) | 898 (23.7%) | 320 (8.5%) | 678 (17.9%) | 1,736 (45.9%) | 3,782 |
| 75+ | 45 (1.6%) | 121 (4.4%) | 726 (26.3%) | 258 (9.3%) | 520 (18.8%) | 1,094 (39.6%) | 2,764 |
| **Total** | **184 (0.3%)** | **1,166 (2.1%)** | **10,932 (19.8%)** | **4,149 (7.5%)** | **6,851 (12.4%)** | **31,928 (57.8%)** | **55,210** |

**Seat Belts Not Used**

| Age Group | Fatalities | Injuries: *Susp Ser* | *Susp Min* | *Possible* | *Unknown* | *No Injury* | Total Persons |
|---|---|---|---|---|---|---|---|
| 0-4 | 0 (0.0%) | 1 (3.6%) | 4 (14.3%) | 5 (17.9%) | 6 (21.4%) | 12 (42.9%) | 28 |
| 5-8 | 0 (0.0%) | 2 (7.7%) | 9 (34.6%) | 1 (3.9%) | 5 (19.2%) | 9 (34.6%) | 26 |
| 9-12 | 0 (0.0%) | 3 (13.0%) | 10 (43.5%) | 3 (13.0%) | 4 (17.4%) | 3 (13.0%) | 23 |
| 13-64 | 186 (4.1%) | 491 (10.8%) | 1,268 (27.9%) | 323 (7.1%) | 937 (20.6%) | 1,342 (29.5%) | 4,547 |
| 65-74 | 16 (8.0%) | 33 (16.5%) | 47 (23.5%) | 10 (5.0%) | 48 (24.0%) | 46 (23.0%) | 200 |
| 75+ | 35 (22.2%) | 19 (12.0%) | 40 (25.3%) | 10 (6.3%) | 28 (17.7%) | 26 (16.5%) | 158 |
| **Total** | **237 (4.8%)** | **549 (11.0%)** | **1,378 (27.7%)** | **352 (7.1%)** | **1,028 (20.6%)** | **1,438 (28.9%)** | **4,982** |

# Pedestrian and Bicycle Crashes

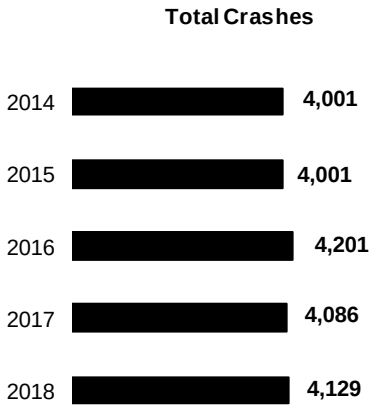
## Pedestrian and Bicycles Overview

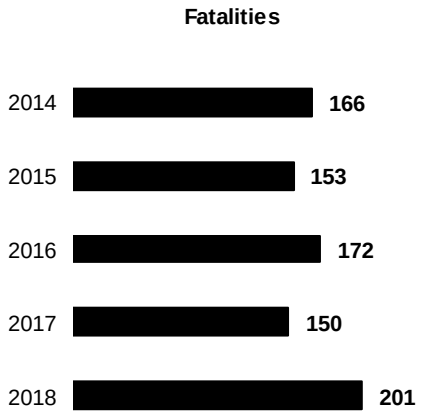
- Pedestrian-related crashes represent 3.2% of the total reported traffic crashes; however, they account for 16.9% of all traffic crash fatalities. (See also ***Pennsylvania County Crashes***, pages 62, 63, and 68.)

- Bicycle crashes represent 0.8% of the total reported crashes and 1.5% of all traffic fatalities. Although these percentages are small, they still represent 18 bicyclist fatalities and 962 injuries in 2018.

## Pedestrian Crashes—Five-Year Trends

Reported crashes involving pedestrians have increased in the last year. Pedestrian fatalities have fluctuated over the same period, and have increased in the past year.



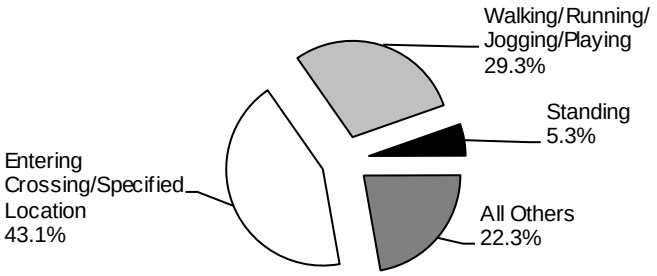




| Year | Total Crashes | Fatalities |
|---|---|---|
| 2014 | 4,001 | 166 |
| 2015 | 4,001 | 153 |
| 2016 | 4,201 | 172 |
| 2017 | 4,086 | 150 |
| 2018 | 4,129 | 201 |

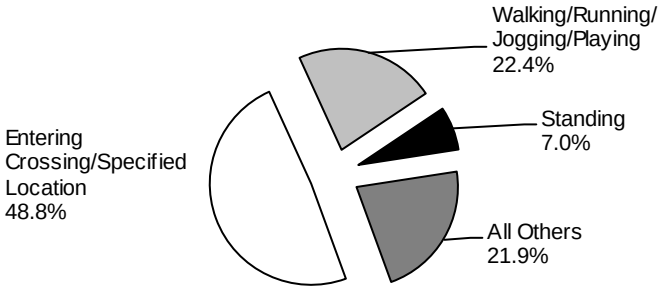
## *Pedestrian-Related Crashes*

Referring to the table and pie charts below, many pedestrian crashes and fatalities occurred while pedestrians were "entering crossing/specified location". This means that a pedestrian was most likely crossing the street at an intersection, mid-block crossing, or driveway entrance.

**Top Crash-Related Pedestrian Actions**




**Top Fatal Pedestrian Actions**

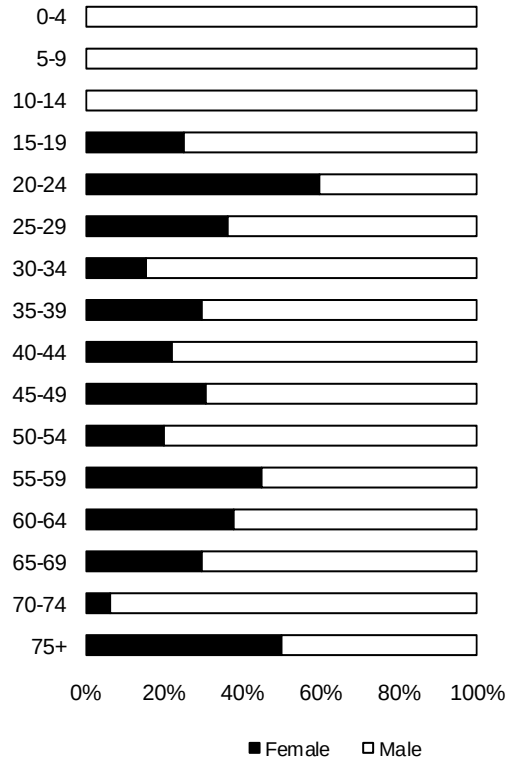





| Pedestrian Action | Fatalities | Pedestrians Involved |
|---|---|---|
| Entering Crossing/Specified Location | 98 | 1,875 |
| Walking/Running/Jogging/Playing | 45 | 1,275 |
| Working | 5 | 68 |
| Pushing a Vehicle | 0 | 3 |
| Working on Vehicle | 3 | 25 |
| Standing | 14 | 232 |
| Approaching/Leaving a Vehicle | 5 | 116 |
| Other/Unknown | 31 | 757 |
| **Total** | **201** | **4,351** |

## Pedestrian Fatalities by Age and Sex

Pedestrians ages 75 and over represent a sizable portion of pedestrian fatalities as displayed in the chart below. Overall, male pedestrian fatalities consisted of 67% of all pedestrian fatalities, and were less than in 2017 (70%). ***Note:*** Pedestrians of unknown sex are not included in the numbers below.




| Age Group | Female | Male | Total |
|---|---|---|---|
| 0-4 | 0 | 2 | 2 |
| 5-9 | 0 | 2 | 2 |
| 10-14 | 0 | 2 | 2 |
| 15-19 | 1 | 3 | 4 |
| 20-24 | 6 | 4 | 10 |
| 25-29 | 4 | 7 | 11 |
| 30-34 | 2 | 11 | 13 |
| 35-39 | 3 | 7 | 10 |
| 40-44 | 2 | 7 | 9 |
| 45-49 | 4 | 9 | 13 |
| 50-54 | 3 | 12 | 15 |
| 55-59 | 9 | 11 | 20 |
| 60-64 | 8 | 13 | 21 |
| 65-69 | 3 | 7 | 10 |
| 70-74 | 1 | 15 | 16 |
| 75 and over | 20 | 20 | 40 |
| Unknown | 0 | 3 | 3 |
| **TOTAL** | **66** | **135** | **201** |



## Pedestrian Injury Severity by Municipality Type

The majority of pedestrian injuries occurred in cities; however, the percentage of pedestrian fatalities in townships was higher, perhaps due to higher vehicle speeds on rural roads.

| Municipality Type | Fatalities | Injuries | Non-Injury | Total |
|---|---|---|---|---|
| City | 72 (35.8%) | 2,596 (63.5%) | 36 (60.0%) | **2,704 (62.2%)** |
| Borough/Town | 42 (20.9%) | 668 (16.3%) | 12 (20.0%) | **722 (16.6%)** |
| Township | 87 (43.3%) | 826 (20.2%) | 12 (20.0%) | **925 (21.3%)** |
| Other | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | **0 (0.0%)** |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** | **60 (100.0%)** | **4,351 (100.0%)** |

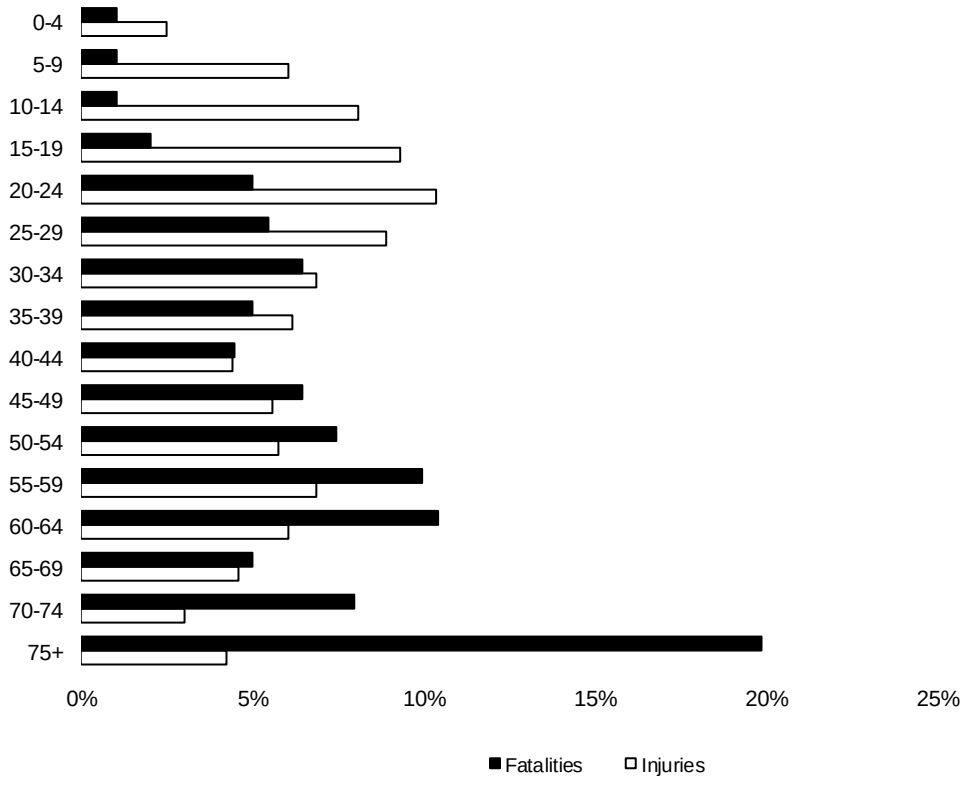
***Note:*** "Other" includes colleges/universities, parks, etc.

## *Pedestrian Fatalities and Injuries by Age*

Elderly pedestrians, although involved in fewer pedestrian crashes, are more likely to be fatally injured if struck by a moving vehicle. Younger pedestrians (age 19 and under) account for 26% of the pedestrian injuries.

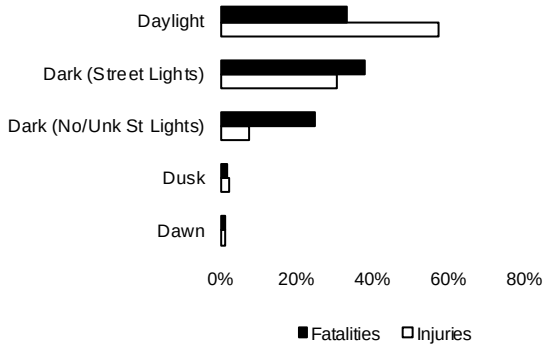
***Note:*** The totals in the table do not include an additional 60 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

| Pedestrian Age | Fatalities | Injuries |
|---|---|---|
| 0-4 | 2 (1.0%) | 101 (2.5%) |
| 5-9 | 2 (1.0%) | 248 (6.1%) |
| 10-14 | 2 (1.0%) | 330 (8.1%) |
| 15-19 | 4 (2.0%) | 381 (9.3%) |
| 20-24 | 10 (5.0%) | 424 (10.4%) |
| 25-29 | 11 (5.5%) | 364 (8.9%) |
| 30-34 | 13 (6.5%) | 280 (6.9%) |
| 35-39 | 10 (5.0%) | 251 (6.1%) |
| 40-44 | 9 (4.5%) | 180 (4.4%) |
| 45-49 | 13 (6.5%) | 228 (5.6%) |
| 50-54 | 15 (7.5%) | 236 (5.8%) |
| 55-59 | 20 (10.0%) | 280 (6.9%) |
| 60-64 | 21 (10.5%) | 248 (6.1%) |
| 65-69 | 10 (5.0%) | 188 (4.6%) |
| 70-74 | 16 (8.0%) | 123 (3.0%) |
| 75 and over | 40 (19.9%) | 174 (4.3%) |
| Unknown | 3 (1.5%) | 54 (1.3%) |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** |



## Pedestrian Fatalities and Injuries by Light Level

The majority of pedestrians were injured in daylight (57.8%), but more pedestrian fatalities occurred during non-daylight hours (66.7%). As shown in the bar chart, pedestrians were more likely to be fatally injured if struck in a non-daylight crash as compared to a day crash.



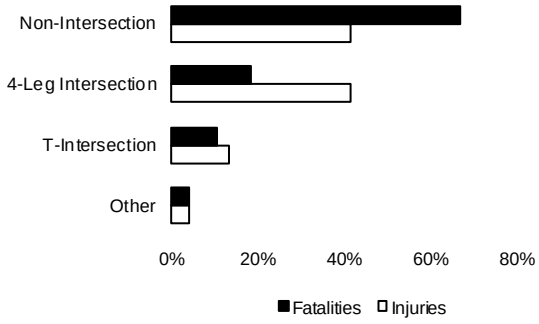

| Light Level | Fatalities | Injuries |
|---|---|---|
| Dawn | 3 (1.5%) | 61 (1.5%) |
| Daylight | 67 (33.3%) | 2,363 (57.8%) |
| Dark (Street Lights) | 77 (38.3%) | 1,249 (30.5%) |
| Dark (No/Unk St Lights) | 50 (24.9%) | 303 (7.4%) |
| Dusk | 4 (2.0%) | 102 (2.5%) |
| Other/Unknown | 0 (0.0%) | 12 (0.3%) |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** |

***Note:*** The totals in the table do not include an additional 60 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

## Pedestrian Fatalities and Injuries by Intersection Type

67.2% of pedestrian fatalities and 41.3% of pedestrian injuries occurred in areas other than intersections. "Non-intersections" as used below includes mid-block crossings, driveway crossings, etc.



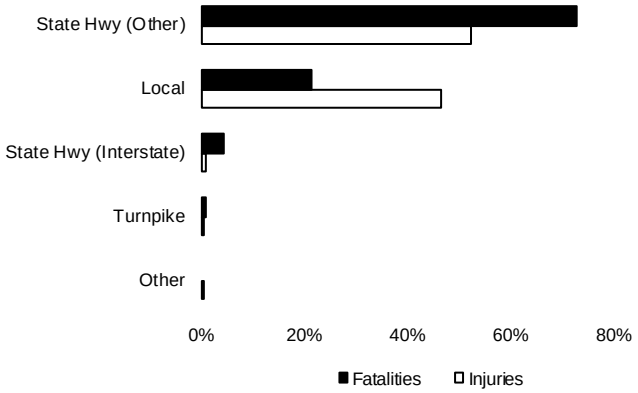



| Intersection | Fatalities | Injuries |
|---|---|---|
| Non-Intersection | 135 (67.2%) | 1,691 (41.3%) |
| 4-Leg Intersection | 37 (18.4%) | 1,698 (41.5%) |
| T-Intersection | 21 (10.5%) | 546 (13.4%) |
| Other | 8 (4.0%) | 155 (3.8%) |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** |

***Note:*** The totals in the table do not include an additional 60 pedestrians who were not fatally injured or injured or where their injury severity was

## *Pedestrian Fatalities and Injuries by Road Type**

As the graph shows, under half of pedestrians were injured on local roads, whereas the majority of pedestrian fatalities occurred on non-interstate state roadways.




***Note:*** The totals in the table do not include an additional 60 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

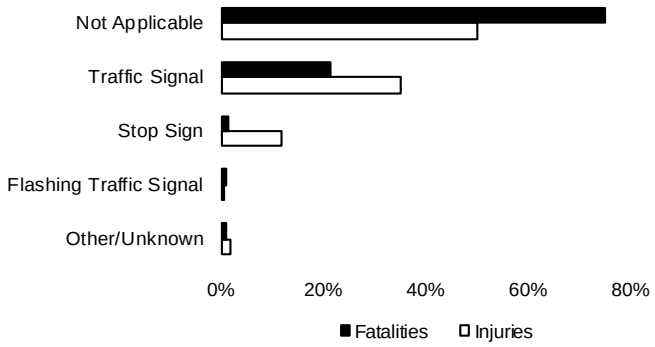
| Road Type | Fatalities | Injuries |
|---|---|---|
| State Hwy (Other) | 147 (73.1%) | 2,144 (52.4%) |
| Local | 43 (21.4%) | 1,900 (46.5%) |
| State Hwy (Interstate) | 9 (4.5%) | 40 (1.0%) |
| Turnpike | 2 (1.0%) | 5 (0.1%) |
| Other | 0 (0.0%) | 1 (0.0%) |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** |

*Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Peds & Bikes

## *Pedestrian Fatalities and Injuries*

As the graph shows, most pedestrian fatalities and injuries occurred in areas without traffic control devices (TCDs). These areas accounted for 151 pedestrian fatalities and 2,059 injuries.



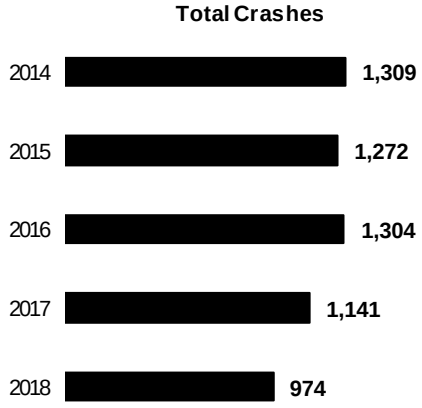

***Note:*** The totals in the table do not include an additional 60 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

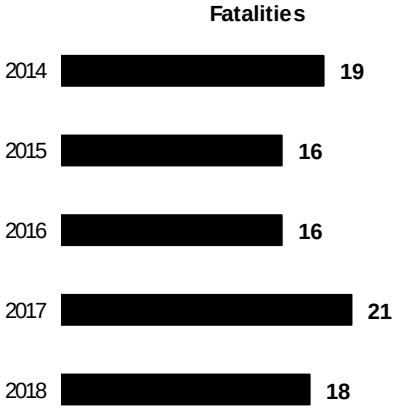
| Traffic Control Device | Fatalities | Injuries |
|---|---|---|
| Not Applicable | 151 (75.1%) | 2,059 (50.3%) |
| Traffic Signal | 43 (21.4%) | 1,443 (35.3%) |
| Stop Sign | 3 (1.5%) | 487 (11.9%) |
| Flashing Traffic Signal | 2 (1.0%) | 19 (0.5%) |
| Other/Unknown | 2 (1.0%) | 82 (2.0%) |
| **TOTAL** | **201 (100.0%)** | **4,090 (100.0%)** |

## Bicycle Crashes—Five-Year Trends

The total number of bicycle crashes decreased in 2018, but remained very consistent over the last 5 years; bicycle fatalities have fluctuated over the same time period, however, and in 2015 and 2016 were the lowest.

| Year | Total Crashes | Fatalities |
|---|---|---|
| 2014 | 1,309 | 19 |
| 2015 | 1,272 | 16 |
| 2016 | 1,304 | 16 |
| 2017 | 1,141 | 21 |
| 2018 | 974 | 18 |




## Bicycle Fatalities and Injuries by Age

Children ages 5 to 14 were the most vulnerable to fatal injury and injury while riding a bicycle. Over a sixth of the injuries involving bicycles were suffered by this age group. 2 of the 18 bicyclist fatalities were in this age group. Another vulnerable group, persons ages 15 to 19, suffered no fatalities and accounted for 15.3% of the total injuries.



| Victim's Age | Fatalities | Injuries |
|---|---|---|
| 0-4 | 0 (0.0%) | 2 (0.2%) |
| 5-9 | 0 (0.0%) | 47 (4.9%) |
| 10-14 | 2 (11.1%) | 123 (12.8%) |
| 15-19 | 0 (0.0%) | 147 (15.3%) |
| 20-34 | 7 (38.9%) | 297 (30.9%) |
| 35-44 | 1 (5.6%) | 100 (10.4%) |
| 45-54 | 4 (22.2%) | 98 (10.2%) |
| 55-64 | 2 (11.1%) | 106 (11.0%) |
| 65-74 | 1 (5.6%) | 25 (2.6%) |
| 75+ | 1 (5.6%) | 5 (0.5%) |
| Unknown | 0 (0.0%) | 12 (1.3%) |
| **TOTAL** | **18 (100.0%)** | **962 (100.0%)** |

The totals in the table do not include an additional 11 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

## *Bicycle Fatalities and Injuries by Light Level*

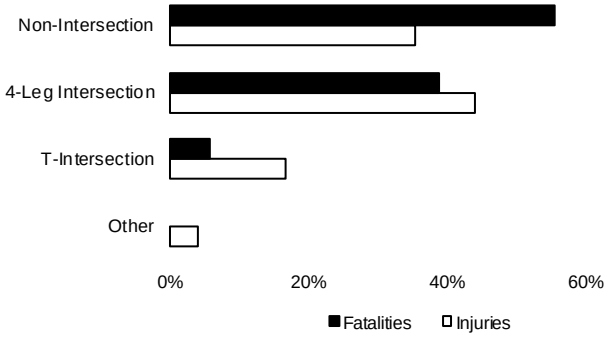
The majority of bicyclists' injuries occurred during daylight hours. However, several of the fatalities occurred during non-daylight conditions. These fatalities totaled 44% of total bicyclists' fatalities in 2018 compared to 48% in 2017.

| Light Level | Fatalities | Injuries |
|---|---|---|
| Dawn | 0 (0.0%) | 11 (1.1%) |
| Daylight | 10 (55.6%) | 686 (71.3%) |
| Dark (Street Lights) | 3 (16.7%) | 194 (20.2%) |
| Dark (No/Unk St Lights) | 5 (27.8%) | 38 (4.0%) |
| Dusk | 0 (0.0%) | 32 (3.3%) |
| Other/Unknown | 0 (0.0%) | 1 (0.1%) |
| **TOTAL** | **18 (100.0%)** | **962 (100.0%)** |

***Note:*** The totals in the table do not include an additional 11 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

## *Bicycle Fatalities and Injuries by Intersection*

In 2018, the majority of bicyclists were injured at intersections and fatally injured at non-intersections.





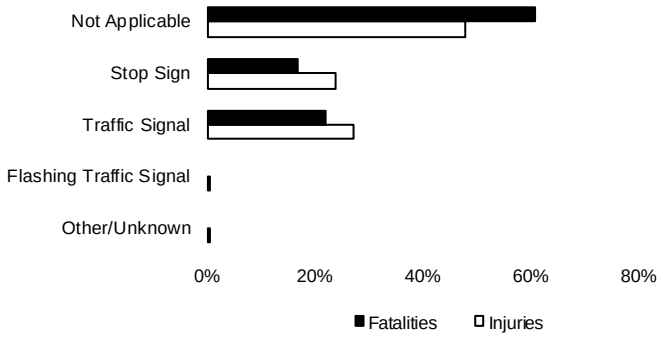

| Intersection | Fatalities | Injuries |
|---|---|---|
| Non-Intersection | 10 (55.6%) | 340 (35.3%) |
| 4-Leg Intersection | 7 (38.9%) | 424 (44.1%) |
| T-Intersection | 1 (5.6%) | 161 (16.7%) |
| Other | 0 (0.0%) | 37 (3.9%) |
| **TOTAL** | **18 (100.0%)** | **962 (100.0%)** |

***Note:*** The totals in the table do not include an additional 11 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

## Bicycle Fatalities and Injuries by Traffic Control Device

In 2018, injuries occurred more often at traffic control devices (TCD) than where there were no controls, but 61% of fatalities occurred where there were no controls.

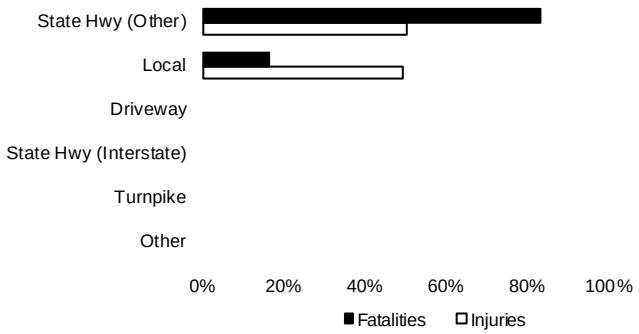
| Traffic Control Device | Fatalities | Injuries |
|---|---|---|
| Not Applicable | 11 (61.1%) | 463 (48.1%) |
| Stop Sign | 3 (16.7%) | 231 (24.0%) |
| Traffic Signal | 4 (22.2%) | 261 (27.1%) |
| Flashing Traffic Signal | 0 (0.0%) | 2 (0.2%) |
| Other/Unknown | 0 (0.0%) | 5 (0.5%) |
| **TOTAL** | **18 (100.0%)** | **962 (100.0%)** |




***Note:*** The totals in the table do not include an additional 11 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

## Bicycle Fatalities and Injuries by Road Type*

83% of the fatalities of bicyclists occurred on state roads in 2018, while 50% of the injuries occurred on non-state roads.




Peds & Bikes

* Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

***Note:*** The totals in the table do not include an additional 11 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

| Road Type | Fatalities | Injuries |
|---|---|---|
| State Hwy (Other) | 15 (83.3%) | 484 (50.3%) |
| Local | 3 (16.7%) | 478 (49.7%) |
| Driveway | 0 (0.0%) | 0 (0.0%) |
| State Hwy (Interstate) | 0 (0.0%) | 0 (0.0%) |
| Turnpike | 0 (0.0%) | 0 (0.0%) |
| Other | 0 (0.0%) | 0 (0.0%) |
| **TOTAL** | **18 (100.0%)** | **962 (100.0%)** |

# *Crashes by Motor Vehicle Type*

## *Vehicle Crashes by Vehicle Types*

| | Fatal Crashes | Injury Crashes | PDO Crashes | Total Crashes |
|---|---|---|---|---|
| **Passenger Car** | 54.7%<br>603 crashes | 69.3%<br>39,319 crashes | 69.7%<br>49,194 crashes | 69.4%<br>89,116 crashes |
| **Lt Trk/Van/SUV** | 46.3%<br>511 crashes | 52.0%<br>29,535 crashes | 49.8%<br>35,111 crashes | 50.7%<br>65,157 crashes |
| **Heavy Truck** | 10.7%<br>118 crashes | 5.5%<br>3,110 crashes | 5.8%<br>4,108 crashes | 5.7%<br>7,336 crashes |
| **Bicycle** | 1.6%<br>18 crashes | 1.7%<br>955 crashes | 0.0%<br>0 crashes | 0.8%<br>974 crashes |
| **Motorcycle** | 14.4%<br>159 crashes | 4.2%<br>2,394 crashes | 0.2%<br>161 crashes | 2.1%<br>2,714 crashes |
| **School Bus** | 0.1%<br>1 crashes | 0.3%<br>157 crashes | 0.2%<br>151 crashes | 0.2%<br>309 crashes |
| **Commercial Bus** | 1.5%<br>16 crashes | 0.7%<br>413 crashes | 0.3%<br>193 crashes | 0.5%<br>622 crashes |
| **Other** | 4.6%<br>51 crashes | 1.7%<br>988 crashes | 0.9%<br>638 crashes | 1.3%<br>1,677 crashes |

The percentages in the table above compare the number of crashes with the total number of crashes in the crash severity category (for example, passenger cars were involved in 54.7% of all fatal injury crashes). Percentage totals exceed 100% due to multiple vehicle crashes.

## *Vehicle Crashes—Single Vehicle Hitting Fixed Objects*

**Crashes in Which a Single Vehicle Hit a Fixed Object: 38,356**

| | | |
|---|---|---|
| Passenger Car | 22,593 | 58.9% |
| Lt Trk/Van/SUV | 14,021 | 36.6% |
| Heavy Truck | 1,147 | 3.0% |
| Motorcycle | 457 | 1.2% |
| School Bus | 25 | 0.1% |
| Commercial Bus | 20 | 0.1% |
| Other | 93 | 0.2% |

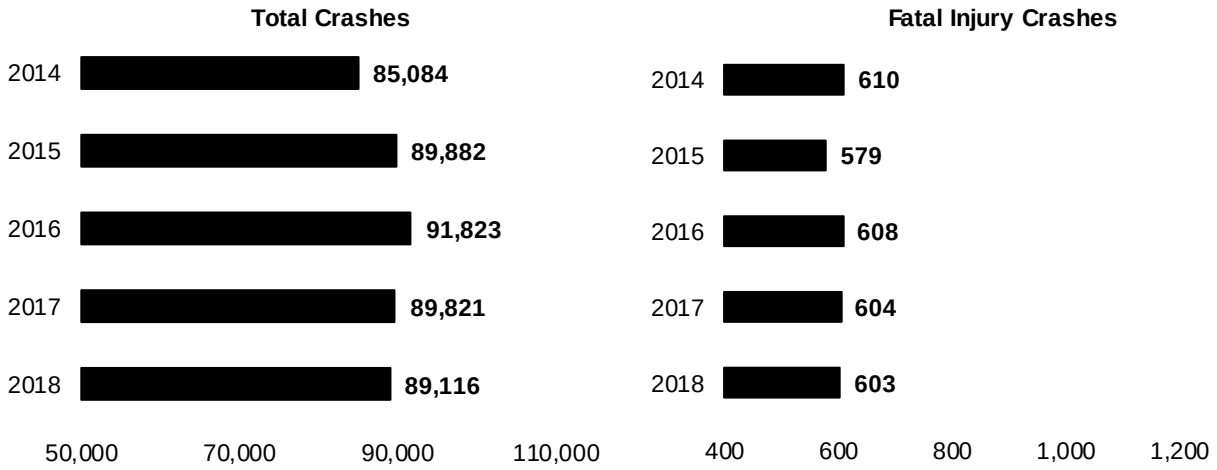


## *Vehicle Crashes—Two-Vehicle Collisions*

| | *Vehicle Struck* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Striking Vehicle*** | **Passenger Car** | **Heavy Truck** | **Lt Trk/ Vn/Sv** | **Motor-cycle** | **Bicycle** | **School Bus** | **Commer-cial Bus** | **Other/ Unknown** | **Total** |
| Passenger Car | 19,401 | 1,372 | 13,466 | 237 | 334 | 86 | 159 | 194 | **35,249** |
| Lt Trk/Van/SUV | 10,033 | 841 | 9,834 | 154 | 242 | 55 | 107 | 133 | **21,399** |
| Heavy Truck | 1,162 | 317 | 681 | 9 | 9 | 5 | 13 | 13 | **2,209** |
| Motorcycle | 363 | 20 | 289 | 35 | 4 | 0 | 3 | 7 | **721** |
| Bicycle | 153 | 2 | 143 | 4 | 1 | 0 | 5 | 3 | **311** |
| School Bus | 37 | 2 | 36 | 1 | 3 | 2 | 1 | 0 | **82** |
| Commercial Bus | 90 | 5 | 66 | 2 | 6 | 0 | 3 | 2 | **174** |
| Other/Unknown | 350 | 11 | 165 | 9 | 27 | 0 | 2 | 15 | **579** |

## Passenger Car Crashes—Five-Year Trends

Total passenger car crashes in 2014 and fatal crashes in 2015 were the lowest in the last five years.

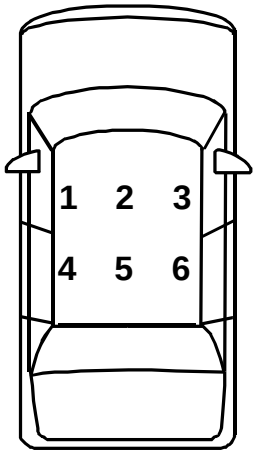



## Passenger Car Fatalities by Seating Position

In 2018, 40% of crash fatalities involved passenger car occupants. The table below depicts the passenger car fatalities in 2018 by seating position.

**Total Fatalities**
**473**

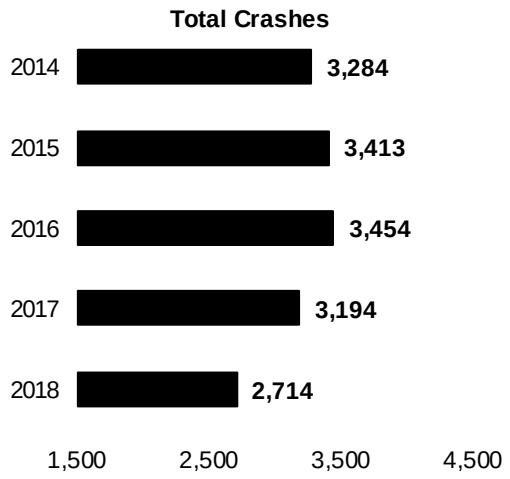
| | | | |
|---|---|---|---|
| Drivers **366 (77.4%)** | | | 1 → |
| Total Passengers **102 (21.6%)** | *Center Front* **0 (0.0%)** | | 2 → |
| | *Right Front* **70 (14.8%)** | | 3 → |
| | *Left Rear* **12 (2.5%)** | | 4 → |
| | *Center Rear* **2 (0.4%)** | | 5 → |
| | *Right Rear* **18 (3.8%)** | | 6 → |
| Others **5 (1.1%)** | | | |

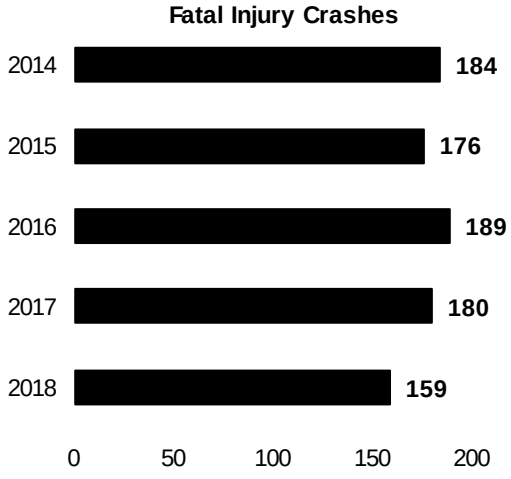



"Others" might be passengers in the rearmost seat of a station wagon; persons in a towed unit; or any person on or attached to the outside of the car.

## *Motorcycle Crashes—Five-Year Trends*

In 2018, total motorcycle crashes decreased 15.0% from 2017 while motorcycle fatal injury crashes decreased 11.7% from 2017.




| Year | Fatalities |
|---|---|
| 2014 | 186 |
| 2015 | 179 |
| 2016 | 192 |
| 2017 | 185 |
| 2018 | 164 |
| **TOTAL** | **906** |

## *Motorcycle Fatalities—Five-Year Trends*

Of the 164 fatalities in 2018 involving motorcycle drivers or passengers:

- 153 (93.3%) were drivers
- 11 (6.7%) were passengers

Crashes by Vehicle

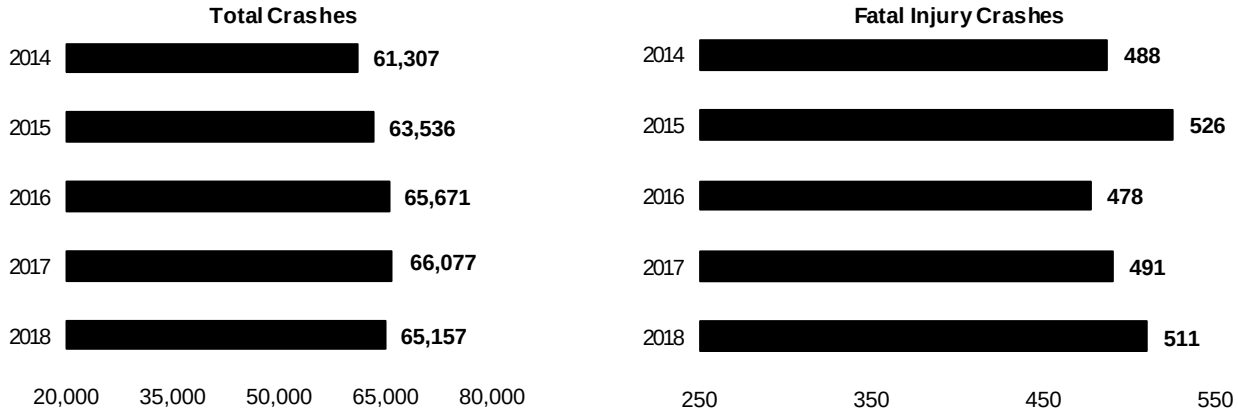
## *Motorcycle Helmet Use in Crashes*

The table below shows the injury severity of motorcycle riders (driver or passenger) by helmet usage.

| | Fatalities | Injuries | Not Injured | Total Motorcyclists |
|---|---|---|---|---|
| Helmets | 66 (40.2%) | 1,455 (55.7%) | 155 (53.3%) | 1,676 (54.7%) |
| No Helmets | 92 (56.1%) | 1,009 (38.6%) | 96 (33.0%) | 1,197 (39.0%) |
| Unknown | 6 (3.7%) | 147 (5.6%) | 40 (13.8%) | 193 (6.3%) |
| **TOTAL** | **164 (100.0%)** | **2,611 (100.0%)** | **291 (100.0%)** | **3,066 (100.0%)** |

## Light Truck / SUV / Van Crashes—Five-Year Trends

Pickups, minivans, and sport utility vehicles have become more popular over the last 10 years. Crashes involving these vehicles decreased 1.4% in 2018 from 2017 and remain high in comparison to other years.




## Light Truck / SUV / Van Rollovers Compared to Passenger Cars

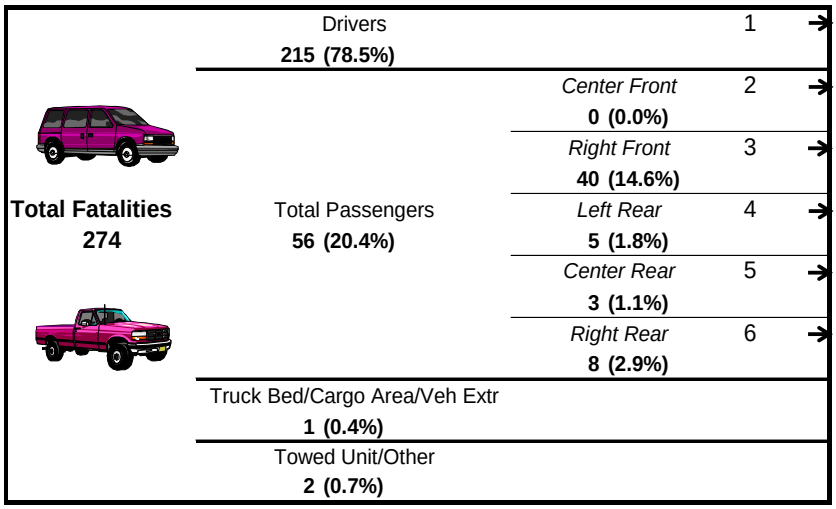
- The percentage of 2018 light truck / SUV / van crashes were higher than passenger cars in crashes involving rollovers (5.2% of all light truck / SUV / van crashes compared to 3.3% of all passenger car crashes).

| | Rollover Crashes | Rollover Fatalities |
|---|---|---|
| Lt Trk/Van/SUV | 3,399 (5.2%) | 73 (26.6%) |
| Passenger Cars | 2,903 (3.3%) | 69 (14.6%) |

- In 2018 rollover crashes, the percentage of light truck / SUV / van occupant fatalities were 83% higher than passenger car occupant fatalities (26.6% of fatalities compared to 14.6%).

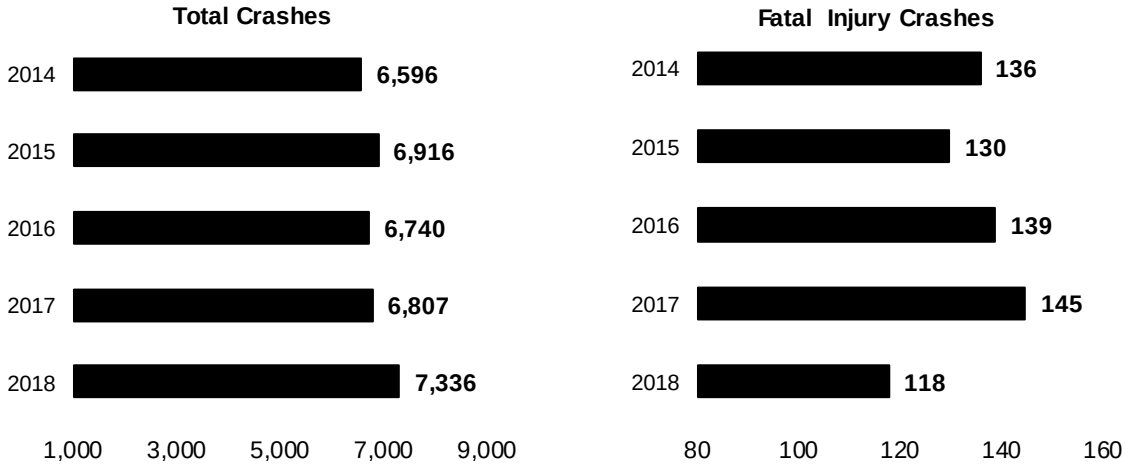
## Light Truck / SUV / Van Fatalities by Seating Position

In 2018, 23.0% of crash fatalities involved occupants in light trucks, vans, and sport utility vehicles. The table below depicts these fatalities in 2018 by seating position.



## *Heavy Truck Crashes—Five Year Trends*

Total crashes involving heavy trucks in 2018 were the highest since 2014. Fatal injury crashes in 2018 were the lowest over the last 5 years. The totals for fatal injury crashes have stayed somewhat consistent over a number of years.




## *Heavy Truck Crashes Involving Vehicle Failures*

The vast majority of primary factors in heavy truck vehicle failure crashes were related to tires and wheels, brakes, power train failure and unsecure trailer/overloaded.

| Vehicle Defect | Crashes |
|---|---|
| Tire/Wheel-Related | 114 |
| Brake-Related | 85 |
| Unsecure Trailer/Overloaded | 36 |
| Power Train Failure | 25 |
| Total Steering System Failure | 12 |
| Suspension | 11 |
| Other Failure | 7 |
| Trailer Hitch/Improper Towing | 6 |
| Vehicle Lighting Related | 1 |
| Exhaust System Failure | 0 |



## *Heavy Truck Crashes by Road Type**

| Road Type | Crashes | Occupant Fatalities |
|---|---|---|
| State Hwy (Interstate) | 2,028 (27.6%) | 2 (9.5%) |
| State Hwy (Other) | 4,066 (55.4%) | 12 (57.1%) |
| Turnpike | 542 (7.4%) | 2 (9.5%) |
| Local Road | 700 (9.5%) | 5 (23.8%) |
| Other | 0 (0.0%) | 0 (0.0%) |
| **TOTAL** | **7,336 (100.0%)** | **21 (100.0%)** |

***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## Hazardous Material Crashes by Road Type

| Road Type | Crashes | HazMat Released |
|---|---|---|
| State Hwy (Interstate) | 37 (23.1%) | 4 (20.0%) |
| State Hwy (Other) | 102 (63.8%) | 12 (60.0%) |
| Turnpike | 9 (5.6%) | 1 (5.0%) |
| Local Road | 12 (7.5%) | 3 (15.0%) |
| Other | 0 (0.0%) | 0 (0.0%) |
| **TOTAL** | **160 (100.0%)** | **20 (100.0%)** |

***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

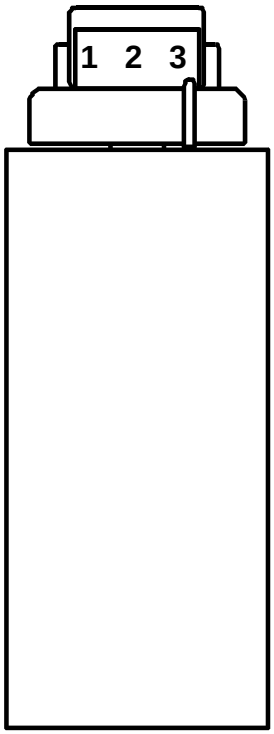
*Crashes on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## Heavy Truck Fatalities by Seating Position

In 2018, only 1.8% of crash fatalities involved heavy truck occupants. The table below depicts the heavy truck fatalities in 2018 by seating position.

**Total Fatalities**
**21**

| | | |
|---|---|---|
| Drivers **14 (66.7%)** | | 1 → |
| Total Passengers **3 (14.3%)** | *Center Front* **0 (0.0%)** | 2 → |
| | *Right Front* **3 (14.3%)** | 3 → |
| Others **4 (19.1%)** | | |

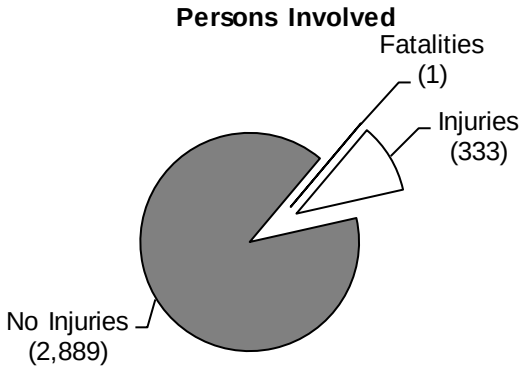



"Others" might be persons in the sleeping compartment; persons in the cargo trailer; or someone on, or attached to, the outside of the truck.

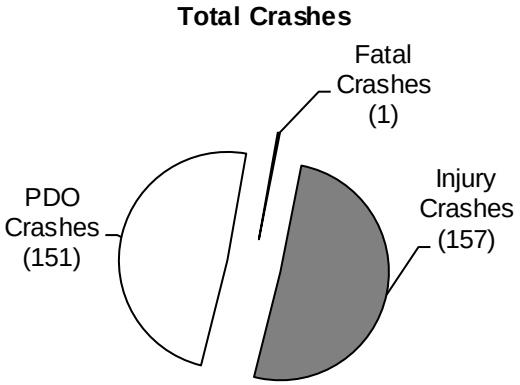
## *School Bus Crashes*

Of the over 3,200 persons involved in school bus crashes in 2018, one was fatally injured, and 90% suffered no injury at all. See the tables at the bottom of page 57 for a breakdown of the persons involved. As shown, no fatalities were school bus passengers.

Total persons involved: **3,223**




Over one half (50.8%) of school bus crashes in 2018 were injury crashes. However, as the pie chart above shows, most persons involved in school bus crashes suffer no injuries at all.




## *School Bus Crashes by Road Type**

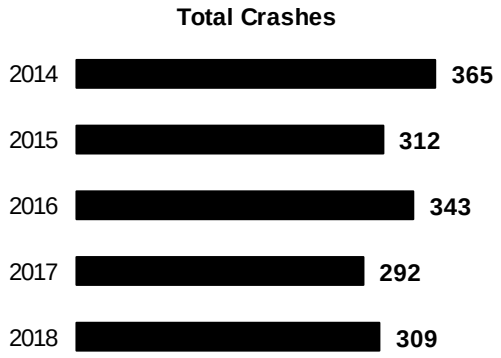
| Road Type | Crashes | |
|---|---|---|
| State Hwy (Interstate) | 8 | 2.6% |
| State Hwy (Other) | 216 | 69.9% |
| Turnpike | 0 | 0.0% |
| Local Road | 85 | 27.5% |
| Other | 0 | 0.0% |
| **TOTAL** | **309** | **100.0%** |

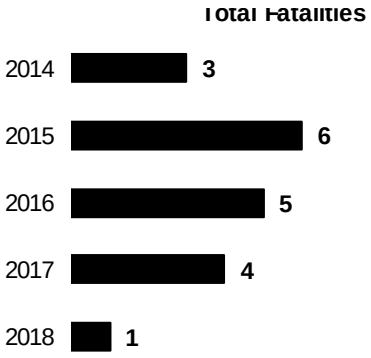
***Note:*** "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

## School Bus Crashes—Five-Year Trends

The total number of school bus crashes increased and the involved fatalities decreased in 2018. School bus related fatalities were 0.1% of total fatalities in 2018. None of the persons fatally injured were school bus passengers at the time of the crash. The only fatality was a non-school age pedestrian.




| Year | Crash Severity | | | | Fatalities | Injuries |
|---|---|---|---|---|---|---|
| | *Fatal* | *Injury* | *PDO* | ***Total*** | | |
| 2014 | 3 | 206 | 156 | 365 | 3 | 485 |
| 2015 | 6 | 156 | 150 | 312 | 6 | 296 |
| 2016 | 4 | 187 | 152 | 343 | 5 | 449 |
| 2017 | 4 | 156 | 132 | 292 | 4 | 371 |
| 2018 | 1 | 157 | 151 | 309 | 1 | 333 |
| **TOTAL** | **18** | **862** | **741** | **1,621** | **19** | **1,934** |

## School Bus Fatalities/Injuries by Persons Involved—Five-Year Trends

The tables below show the breakdown of persons fatally injured and injured in school bus crashes. None of the persons who were fatally injured in these crashes were school bus passengers.

| FATALITIES Year | School Bus Drivers | School Bus Passengers | School-Age Pedestrians | Other Pedestrians | Driver/ Passenger of Other Vehicle | Other/ Unknown | Total Fatalities |
|---|---|---|---|---|---|---|---|
| 2014 | 0 | 0 | 0 | 1 | 2 | 0 | **3** |
| 2015 | 0 | 0 | 1 | 0 | 5 | 0 | **6** |
| 2016 | 0 | 0 | 0 | 1 | 4 | 0 | **5** |
| 2017 | 1 | 0 | 0 | 0 | 3 | 0 | **4** |
| 2018 | 0 | 0 | 0 | 1 | 0 | 0 | **1** |
| **TOTAL** | **1** | **0** | **1** | **3** | **14** | **0** | **19** |

| INJURIES Year | School Bus Drivers | School Bus Passengers | School-Age Pedestrians | Other Pedestrians | Driver/ Passenger of Other Vehicle | Other/ Unknown | Total Injuries |
|---|---|---|---|---|---|---|---|
| 2014 | 36 | 266 | 3 | 5 | 170 | 5 | **485** |
| 2015 | 29 | 128 | 0 | 3 | 126 | 10 | **296** |
| 2016 | 44 | 204 | 8 | 5 | 156 | 32 | **449** |
| 2017 | 35 | 212 | 3 | 5 | 113 | 3 | **371** |
| 2018 | 34 | 168 | 2 | 5 | 115 | 9 | **333** |
| **TOTAL** | **178** | **978** | **16** | **23** | **680** | **59** | **1,934** |

# *Pennsylvania County Crashes*

## *County Overview*

The Commonwealth of Pennsylvania consists of 67 counties. Each county includes local municipalities, a combination of cities, boroughs, first class townships, and/or second class townships. In total, there are approximately 2,500 municipalities throughout the 67 counties. In 2018, Pennsylvania's total population was 12,807,060 people.

The ten most populated counties were:

| | | |
|---|---|---|
| Philadelphia (12.4%) | Allegheny (9.5%) | Montgomery (6.5%) |
| Bucks (4.9%) | Delaware (4.4%) | Lancaster (4.2%) |
| Chester (4.1%) | York (3.5%) | Berks (3.3%) |
| Lehigh (2.9%) | *See page 59.* | |

The ten least populated counties were:

| | | |
|---|---|---|
| Cameron (0.04%) | Sullivan (0.05%) | Forest (0.06%) |
| Fulton (0.11%) | Potter (0.13%) | Montour (0.14%) |
| Juniata (0.19%) | Wyoming (0.21%) | Elk (0.24%) |
| Greene (0.29%) | *See page 59.* | |

The ten counties with the most miles of state highways (maintained by PENNDOT) were:*

| | | |
|---|---|---|
| Westmoreland (2.98%) | Allegheny (2.96%) | York (2.85%) |
| Washington (2.74%) | Lancaster (2.62%) | Chester (2.56%) |
| Bucks (2.43%) | Crawford (2.29%) | Bradford (2.25%) |
| Somerset (2.22%) | | |

The ten counties with the most miles of local roads and streets (maintained by local municipalities) were:*

| | | |
|---|---|---|
| Allegheny (5.85%) | Montgomery (3.66%) | Lancaster (3.61%) |
| York (3.43%) | Chester (3.34%) | Bucks (3.24%) |
| Westmoreland (3.08%) | Berks (3.07%) | Philadelphia (2.84%) |
| Erie (2.29%) | | |

The ten counties with the most reported traffic crashes were:

| | | |
|---|---|---|
| Allegheny (9.6%) | Philadelphia (8.6%) | Montgomery (7.2%) |
| Bucks (4.8%) | Lancaster (4.7%) | Berks (4.0%) |
| Chester (3.8%) | Delaware (3.8%) | Lehigh (3.7%) |
| York (3.7%) | *See page 59.* | |

The ten counties with the most traffic-related fatalities were:

| | | |
|---|---|---|
| Philadelphia (8.7%) | Allegheny (5.7%) | Bucks (4.5%) |
| Montgomery (4.2%) | York (4.1%) | Chester (3.9%) |
| Lancaster (3.8%) | Dauphin (3.5%) | Berks (3.4%) |
| Westmoreland (2.9%) | *See page 61.* | |

*Information provided by PENNDOT's Bureau of Planning and Research, Performance Monitoring Division. For consistency purposes, the prior year's data is used at the time of publication because of timing issues. For this Crash Facts & Statistics book, 2017 information was used.

## Pennsylvania Crashes by County

The percentages compare the number to the statewide total at the bottom of the columns.

| County | Population | Fatal InjuryCrashes | Injury Crashes | PDO Crashes | Total Crashes |
|---|---|---|---|---|---|
| Adams | 102,811 (0.8%) | 15 (1.4%) | 424 (0.8%) | 605 (0.9%) | **1,044 (0.8%)** |
| Allegheny | 1,218,452 (9.5%) | 67 (6.1%) | 5,012 (8.8%) | 7,290 (10.3%) | **12,369 (9.6%)** |
| Armstrong | 65,263 (0.5%) | 8 (0.7%) | 181 (0.3%) | 306 (0.4%) | **495 (0.4%)** |
| Beaver | 164,742 (1.3%) | 14 (1.3%) | 503 (0.9%) | 844 (1.2%) | **1,361 (1.1%)** |
| Bedford | 48,176 (0.4%) | 8 (0.7%) | 315 (0.6%) | 536 (0.8%) | **859 (0.7%)** |
| Berks | 420,152 (3.3%) | 38 (3.5%) | 2,149 (3.8%) | 2,931 (4.2%) | **5,118 (4.0%)** |
| Blair | 122,492 (1.0%) | 10 (0.9%) | 632 (1.1%) | 836 (1.2%) | **1,478 (1.2%)** |
| Bradford | 60,833 (0.5%) | 12 (1.1%) | 232 (0.4%) | 353 (0.5%) | **597 (0.5%)** |
| Bucks | 628,195 (4.9%) | 53 (4.8%) | 2,797 (4.9%) | 3,343 (4.7%) | **6,193 (4.8%)** |
| Butler | 187,888 (1.5%) | 16 (1.5%) | 722 (1.3%) | 1,136 (1.6%) | **1,874 (1.5%)** |
| Cambria | 131,730 (1.0%) | 9 (0.8%) | 488 (0.9%) | 708 (1.0%) | **1,205 (0.9%)** |
| Cameron | 4,492 (0.0%) | 0 (0.0%) | 21 (0.0%) | 32 (0.1%) | **53 (0.0%)** |
| Carbon | 64,227 (0.5%) | 12 (1.1%) | 274 (0.5%) | 463 (0.7%) | **749 (0.6%)** |
| Centre | 162,805 (1.3%) | 12 (1.1%) | 526 (0.9%) | 678 (1.0%) | **1,216 (1.0%)** |
| Chester | 522,046 (4.1%) | 42 (3.8%) | 1,854 (3.3%) | 3,028 (4.3%) | **4,924 (3.8%)** |
| Clarion | 38,779 (0.3%) | 5 (0.5%) | 165 (0.3%) | 253 (0.4%) | **423 (0.3%)** |
| Clearfield | 79,388 (0.6%) | 16 (1.5%) | 316 (0.6%) | 502 (0.7%) | **834 (0.7%)** |
| Clinton | 38,684 (0.3%) | 3 (0.3%) | 160 (0.3%) | 206 (0.3%) | **369 (0.3%)** |
| Columbia | 65,456 (0.5%) | 8 (0.7%) | 306 (0.5%) | 451 (0.6%) | **765 (0.6%)** |
| Crawford | 85,063 (0.7%) | 12 (1.1%) | 376 (0.7%) | 558 (0.8%) | **946 (0.7%)** |
| Cumberland | 251,423 (2.0%) | 22 (2.0%) | 1,047 (1.9%) | 1,536 (2.2%) | **2,605 (2.0%)** |
| Dauphin | 277,097 (2.2%) | 39 (3.5%) | 1,437 (2.5%) | 1,972 (2.8%) | **3,448 (2.7%)** |
| Delaware | 564,751 (4.4%) | 18 (1.6%) | 2,306 (4.1%) | 2,620 (3.7%) | **4,944 (3.9%)** |
| Elk | 30,169 (0.2%) | 7 (0.6%) | 129 (0.2%) | 162 (0.2%) | **298 (0.2%)** |
| Erie | 272,061 (2.1%) | 20 (1.8%) | 1,131 (2.0%) | 1,321 (1.9%) | **2,472 (1.9%)** |
| Fayette | 130,441 (1.0%) | 18 (1.6%) | 547 (1.0%) | 681 (1.0%) | **1,246 (1.0%)** |
| Forest | 7,279 (0.1%) | 1 (0.1%) | 42 (0.1%) | 29 (0.0%) | **72 (0.1%)** |
| Franklin | 154,835 (1.2%) | 20 (1.8%) | 632 (1.1%) | 894 (1.3%) | **1,546 (1.2%)** |
| Fulton | 14,523 (0.1%) | 5 (0.5%) | 120 (0.2%) | 153 (0.2%) | **278 (0.2%)** |
| Greene | 36,506 (0.3%) | 8 (0.7%) | 178 (0.3%) | 254 (0.4%) | **440 (0.3%)** |
| Huntingdon | 45,168 (0.4%) | 3 (0.3%) | 140 (0.3%) | 215 (0.3%) | **358 (0.3%)** |
| Indiana | 84,501 (0.7%) | 10 (0.9%) | 288 (0.5%) | 444 (0.6%) | **742 (0.6%)** |
| Jefferson | 43,641 (0.3%) | 4 (0.4%) | 172 (0.3%) | 237 (0.3%) | **413 (0.3%)** |
| Juniata | 24,704 (0.2%) | 1 (0.1%) | 103 (0.2%) | 161 (0.2%) | **265 (0.2%)** |
| Lackawanna | 210,793 (1.7%) | 28 (2.5%) | 1,197 (2.1%) | 1,462 (2.1%) | **2,687 (2.1%)** |
| Lancaster | 543,557 (4.2%) | 40 (3.6%) | 2,573 (4.5%) | 3,425 (4.9%) | **6,038 (4.7%)** |
| Lawrence | 86,184 (0.7%) | 16 (1.5%) | 297 (0.5%) | 457 (0.7%) | **770 (0.6%)** |
| Lebanon | 141,314 (1.1%) | 15 (1.4%) | 663 (1.2%) | 931 (1.3%) | **1,609 (1.3%)** |
| Lehigh | 368,100 (2.9%) | 24 (2.2%) | 2,093 (3.7%) | 2,596 (3.7%) | **4,713 (3.7%)** |
| Luzerne | 317,646 (2.5%) | 18 (1.6%) | 1,560 (2.8%) | 2,034 (2.9%) | **3,612 (2.8%)** |
| Lycoming | 113,664 (0.9%) | 9 (0.8%) | 475 (0.8%) | 631 (0.9%) | **1,115 (0.9%)** |
| McKean | 40,968 (0.3%) | 4 (0.4%) | 132 (0.2%) | 180 (0.3%) | **316 (0.3%)** |
| Mercer | 110,683 (0.9%) | 11 (1.0%) | 486 (0.9%) | 726 (1.0%) | **1,223 (1.0%)** |
| Mifflin | 46,222 (0.4%) | 2 (0.2%) | 163 (0.3%) | 304 (0.4%) | **469 (0.4%)** |
| Monroe | 169,507 (1.3%) | 18 (1.6%) | 1,044 (1.8%) | 1,399 (2.0%) | **2,461 (1.9%)** |
| Montgomery | 828,604 (6.5%) | 49 (4.4%) | 4,164 (7.3%) | 5,022 (7.1%) | **9,235 (7.2%)** |
| Montour | 18,240 (0.1%) | 2 (0.2%) | 86 (0.2%) | 130 (0.2%) | **218 (0.2%)** |
| Northampton | 304,807 (2.4%) | 19 (1.7%) | 1,327 (2.3%) | 1,629 (2.3%) | **2,975 (2.3%)** |
| Northumberland | 91,083 (0.7%) | 11 (1.0%) | 315 (0.6%) | 413 (0.6%) | **739 (0.6%)** |
| Perry | 46,139 (0.4%) | 9 (0.8%) | 202 (0.4%) | 327 (0.5%) | **538 (0.4%)** |
| Philadelphia | 1,584,138 (12.4%) | 100 (9.1%) | 7,599 (13.4%) | 3,304 (4.7%) | **11,003 (8.6%)** |
| Pike | 55,933 (0.4%) | 10 (0.9%) | 236 (0.4%) | 328 (0.5%) | **574 (0.5%)** |
| Potter | 16,622 (0.1%) | 6 (0.5%) | 68 (0.1%) | 67 (0.1%) | **141 (0.1%)** |
| Schuylkill | 142,067 (1.1%) | 19 (1.7%) | 556 (1.0%) | 783 (1.1%) | **1,358 (1.1%)** |
| Snyder | 40,540 (0.3%) | 5 (0.5%) | 170 (0.3%) | 217 (0.3%) | **392 (0.3%)** |
| Somerset | 73,952 (0.6%) | 12 (1.1%) | 337 (0.6%) | 473 (0.7%) | **822 (0.6%)** |
| Sullivan | 6,071 (0.1%) | 1 (0.1%) | 31 (0.1%) | 57 (0.1%) | **89 (0.1%)** |
| Susquehanna | 40,589 (0.3%) | 7 (0.6%) | 184 (0.3%) | 303 (0.4%) | **494 (0.4%)** |
| Tioga | 40,763 (0.3%) | 4 (0.4%) | 171 (0.3%) | 280 (0.4%) | **455 (0.4%)** |
| Union | 44,785 (0.4%) | 8 (0.7%) | 177 (0.3%) | 238 (0.3%) | **423 (0.3%)** |
| Venango | 51,266 (0.4%) | 5 (0.5%) | 192 (0.3%) | 305 (0.4%) | **502 (0.4%)** |
| Warren | 39,498 (0.3%) | 5 (0.5%) | 142 (0.3%) | 200 (0.3%) | **347 (0.3%)** |
| Washington | 207,346 (1.6%) | 27 (2.5%) | 804 (1.4%) | 1,207 (1.7%) | **2,038 (1.6%)** |
| Wayne | 51,276 (0.4%) | 6 (0.5%) | 235 (0.4%) | 300 (0.4%) | **541 (0.4%)** |
| Westmoreland | 350,611 (2.7%) | 34 (3.1%) | 1,347 (2.4%) | 1,944 (2.8%) | **3,325 (2.6%)** |
| Wyoming | 27,046 (0.2%) | 2 (0.2%) | 125 (0.2%) | 190 (0.3%) | **317 (0.3%)** |
| York | 448,273 (3.5%) | 41 (3.7%) | 1,869 (3.3%) | 2,883 (4.1%) | **4,793 (3.7%)** |
| **TOTAL** | **12,807,060 (100.0%)** | **1,103 (100.0%)** | **56,745 (100.0%)** | **70,572 (99.9%)** | **128,420 (99.9%)** |

## *Crashes by County—Five-Year Trends*

The percentages compare the number to the statewide total at the bottom of the columns.

| County | 2014 Crashes | 2015 Crashes | 2016 Crashes | 2017 Crashes | 2018 Crashes |
|---|---|---|---|---|---|
| Adams | 1,026 (0.9%) | 990 (0.8%) | 1,018 (0.8%) | 1,002 (0.8%) | **1,044 (0.8%)** |
| Allegheny | 12,154 (10.0%) | 12,665 (10.0%) | 12,858 (9.9%) | 12,470 (9.7%) | **12,369 (9.6%)** |
| Armstrong | 526 (0.4%) | 517 (0.4%) | 511 (0.4%) | 546 (0.4%) | **495 (0.4%)** |
| Beaver | 1,404 (1.2%) | 1,445 (1.1%) | 1,301 (1.0%) | 1,265 (1.0%) | **1,361 (1.1%)** |
| Bedford | 650 (0.5%) | 749 (0.6%) | 718 (0.6%) | 765 (0.6%) | **859 (0.7%)** |
| Berks | 4,593 (3.8%) | 4,831 (3.8%) | 4,902 (3.8%) | 5,034 (3.9%) | **5,118 (4.0%)** |
| Blair | 1,277 (1.1%) | 1,453 (1.1%) | 1,437 (1.1%) | 1,545 (1.2%) | **1,478 (1.2%)** |
| Bradford | 650 (0.5%) | 605 (0.5%) | 552 (0.4%) | 571 (0.5%) | **597 (0.5%)** |
| Bucks | 5,779 (4.8%) | 5,932 (4.7%) | 6,159 (4.8%) | 6,175 (4.8%) | **6,193 (4.8%)** |
| Butler | 1,951 (1.6%) | 1,847 (1.5%) | 1,832 (1.4%) | 1,871 (1.5%) | **1,874 (1.5%)** |
| Cambria | 1,218 (1.0%) | 1,197 (0.9%) | 1,227 (1.0%) | 1,218 (1.0%) | **1,205 (0.9%)** |
| Cameron | 56 (0.1%) | 42 (0.0%) | 40 (0.0%) | 65 (0.1%) | **53 (0.0%)** |
| Carbon | 690 (0.6%) | 735 (0.6%) | 705 (0.5%) | 745 (0.6%) | **749 (0.6%)** |
| Centre | 1,210 (1.0%) | 1,300 (1.0%) | 1,311 (1.0%) | 1,246 (1.0%) | **1,216 (1.0%)** |
| Chester | 4,676 (3.9%) | 4,938 (3.9%) | 4,889 (3.8%) | 4,777 (3.7%) | **4,924 (3.8%)** |
| Clarion | 451 (0.4%) | 432 (0.3%) | 417 (0.3%) | 392 (0.3%) | **423 (0.3%)** |
| Clearfield | 840 (0.7%) | 801 (0.6%) | 838 (0.7%) | 821 (0.6%) | **834 (0.7%)** |
| Clinton | 440 (0.4%) | 406 (0.3%) | 396 (0.3%) | 365 (0.3%) | **369 (0.3%)** |
| Columbia | 727 (0.6%) | 734 (0.6%) | 789 (0.6%) | 779 (0.6%) | **765 (0.6%)** |
| Crawford | 857 (0.7%) | 872 (0.7%) | 944 (0.7%) | 911 (0.7%) | **946 (0.7%)** |
| Cumberland | 2,393 (2.0%) | 2,633 (2.1%) | 2,644 (2.0%) | 2,520 (2.0%) | **2,605 (2.0%)** |
| Dauphin | 2,969 (2.5%) | 3,163 (2.5%) | 3,269 (2.5%) | 3,457 (2.7%) | **3,448 (2.7%)** |
| Delaware | 4,546 (3.8%) | 4,865 (3.8%) | 5,001 (3.9%) | 5,022 (3.9%) | **4,944 (3.9%)** |
| Elk | 327 (0.3%) | 293 (0.2%) | 322 (0.3%) | 307 (0.2%) | **298 (0.2%)** |
| Erie | 2,736 (2.3%) | 2,759 (2.2%) | 2,716 (2.1%) | 2,619 (2.0%) | **2,472 (1.9%)** |
| Fayette | 1,184 (1.0%) | 1,237 (1.0%) | 1,134 (0.9%) | 1,247 (1.0%) | **1,246 (1.0%)** |
| Forest | 68 (0.1%) | 55 (0.0%) | 70 (0.1%) | 59 (0.1%) | **72 (0.1%)** |
| Franklin | 1,441 (1.2%) | 1,504 (1.2%) | 1,535 (1.2%) | 1,485 (1.2%) | **1,546 (1.2%)** |
| Fulton | 246 (0.2%) | 264 (0.2%) | 228 (0.2%) | 246 (0.2%) | **278 (0.2%)** |
| Greene | 382 (0.3%) | 387 (0.3%) | 370 (0.3%) | 344 (0.3%) | **440 (0.3%)** |
| Huntingdon | 358 (0.3%) | 401 (0.3%) | 415 (0.3%) | 434 (0.3%) | **358 (0.3%)** |
| Indiana | 779 (0.6%) | 750 (0.6%) | 723 (0.6%) | 709 (0.6%) | **742 (0.6%)** |
| Jefferson | 431 (0.4%) | 456 (0.4%) | 458 (0.4%) | 437 (0.3%) | **413 (0.3%)** |
| Juniata | 260 (0.2%) | 285 (0.2%) | 287 (0.2%) | 275 (0.2%) | **265 (0.2%)** |
| Lackawanna | 2,580 (2.1%) | 2,587 (2.0%) | 2,690 (2.1%) | 2,712 (2.1%) | **2,687 (2.1%)** |
| Lancaster | 5,339 (4.4%) | 5,605 (4.4%) | 5,931 (4.6%) | 5,822 (4.5%) | **6,038 (4.7%)** |
| Lawrence | 741 (0.6%) | 740 (0.6%) | 780 (0.6%) | 728 (0.6%) | **770 (0.6%)** |
| Lebanon | 1,356 (1.1%) | 1,493 (1.2%) | 1,452 (1.1%) | 1,579 (1.2%) | **1,609 (1.3%)** |
| Lehigh | 4,501 (3.7%) | 4,738 (3.7%) | 4,970 (3.8%) | 5,138 (4.0%) | **4,713 (3.7%)** |
| Luzerne | 3,297 (2.7%) | 3,690 (2.9%) | 3,680 (2.8%) | 3,604 (2.8%) | **3,612 (2.8%)** |
| Lycoming | 1,091 (0.9%) | 1,161 (0.9%) | 1,101 (0.9%) | 1,089 (0.9%) | **1,115 (0.9%)** |
| McKean | 398 (0.3%) | 371 (0.3%) | 389 (0.3%) | 347 (0.3%) | **316 (0.3%)** |
| Mercer | 1,216 (1.0%) | 1,260 (1.0%) | 1,300 (1.0%) | 1,291 (1.0%) | **1,223 (1.0%)** |
| Mifflin | 366 (0.3%) | 459 (0.4%) | 451 (0.4%) | 453 (0.4%) | **469 (0.4%)** |
| Monroe | 2,163 (1.8%) | 2,504 (2.0%) | 2,621 (2.0%) | 2,456 (1.9%) | **2,461 (1.9%)** |
| Montgomery | 8,104 (6.7%) | 8,499 (6.7%) | 8,799 (6.8%) | 8,982 (7.0%) | **9,235 (7.2%)** |
| Montour | 221 (0.2%) | 251 (0.2%) | 217 (0.2%) | 218 (0.2%) | **218 (0.2%)** |
| Northampton | 2,927 (2.4%) | 3,077 (2.4%) | 3,119 (2.4%) | 3,088 (2.4%) | **2,975 (2.3%)** |
| Northumberland | 749 (0.6%) | 679 (0.5%) | 722 (0.6%) | 703 (0.6%) | **739 (0.6%)** |
| Perry | 498 (0.4%) | 463 (0.4%) | 463 (0.4%) | 486 (0.4%) | **538 (0.4%)** |
| Philadelphia | 10,627 (8.8%) | 11,544 (9.1%) | 12,190 (9.4%) | 11,160 (8.7%) | **11,003 (8.6%)** |
| Pike | 591 (0.5%) | 604 (0.5%) | 582 (0.5%) | 621 (0.5%) | **574 (0.5%)** |
| Potter | 98 (0.1%) | 105 (0.1%) | 136 (0.1%) | 151 (0.1%) | **141 (0.1%)** |
| Schuylkill | 1,373 (1.1%) | 1,381 (1.1%) | 1,349 (1.0%) | 1,367 (1.1%) | **1,358 (1.1%)** |
| Snyder | 333 (0.3%) | 398 (0.3%) | 384 (0.3%) | 393 (0.3%) | **392 (0.3%)** |
| Somerset | 710 (0.6%) | 776 (0.6%) | 776 (0.6%) | 774 (0.6%) | **822 (0.6%)** |
| Sullivan | 70 (0.1%) | 60 (0.1%) | 76 (0.1%) | 73 (0.1%) | **89 (0.1%)** |
| Susquehanna | 523 (0.4%) | 467 (0.4%) | 493 (0.4%) | 477 (0.4%) | **494 (0.4%)** |
| Tioga | 407 (0.3%) | 370 (0.3%) | 427 (0.3%) | 429 (0.3%) | **455 (0.4%)** |
| Union | 350 (0.3%) | 411 (0.3%) | 392 (0.3%) | 386 (0.3%) | **423 (0.3%)** |
| Venango | 547 (0.5%) | 541 (0.4%) | 542 (0.4%) | 554 (0.4%) | **502 (0.4%)** |
| Warren | 382 (0.3%) | 379 (0.3%) | 411 (0.3%) | 412 (0.3%) | **347 (0.3%)** |
| Washington | 1,956 (1.6%) | 1,925 (1.5%) | 2,036 (1.6%) | 1,926 (1.5%) | **2,038 (1.6%)** |
| Wayne | 428 (0.4%) | 503 (0.4%) | 518 (0.4%) | 546 (0.4%) | **541 (0.4%)** |
| Westmoreland | 3,272 (2.7%) | 3,318 (2.6%) | 3,288 (2.5%) | 3,254 (2.5%) | **3,325 (2.6%)** |
| Wyoming | 322 (0.3%) | 330 (0.3%) | 288 (0.2%) | 304 (0.2%) | **317 (0.3%)** |
| York | 4,412 (3.6%) | 4,747 (3.7%) | 4,696 (3.6%) | 4,794 (3.7%) | **4,793 (3.7%)** |
| **TOTAL** | **121,317 (99.9%)** | **127,127 (99.9%)** | **129,395 (99.9%)** | **128,188 (99.9%)** | **128,420 (99.9%)** |

## Traffic Fatalities by County—Five-Year Trends

The percentages compare the number to the statewide totals at the bottom of the columns.

| County | 2014 Fatalities | 2015 Fatalities | 2016 Fatalities | 2017 Fatalities | 2018 Fatalities |
|---|---|---|---|---|---|
| Adams | 6 (0.5%) | 14 (1.2%) | 15 (1.3%) | 5 (0.4%) | **16 (1.3%)** |
| Allegheny | 59 (4.9%) | 54 (4.5%) | 72 (6.1%) | 67 (5.9%) | **68 (5.7%)** |
| Armstrong | 14 (1.2%) | 14 (1.2%) | 6 (0.5%) | 9 (0.8%) | **9 (0.8%)** |
| Beaver | 10 (0.8%) | 12 (1.0%) | 5 (0.4%) | 17 (1.5%) | **15 (1.3%)** |
| Bedford | 13 (1.1%) | 7 (0.6%) | 11 (0.9%) | 12 (1.1%) | **8 (0.7%)** |
| Berks | 33 (2.8%) | 39 (3.3%) | 35 (3.0%) | 50 (4.4%) | **41 (3.5%)** |
| Blair | 13 (1.1%) | 23 (1.9%) | 22 (1.9%) | 9 (0.8%) | **12 (1.0%)** |
| Bradford | 8 (0.7%) | 16 (1.3%) | 10 (0.8%) | 9 (0.8%) | **13 (1.1%)** |
| Bucks | 44 (3.7%) | 55 (4.6%) | 52 (4.4%) | 50 (4.4%) | **54 (4.5%)** |
| Butler | 25 (2.1%) | 16 (1.3%) | 30 (2.5%) | 17 (1.5%) | **18 (1.5%)** |
| Cambria | 13 (1.1%) | 9 (0.8%) | 12 (1.0%) | 12 (1.1%) | **9 (0.8%)** |
| Cameron | 1 (0.1%) | 2 (0.2%) | 0 (0.0%) | 0 (0.0%) | **0 (0.0%)** |
| Carbon | 10 (0.8%) | 11 (0.9%) | 12 (1.0%) | 9 (0.8%) | **13 (1.1%)** |
| Centre | 12 (1.0%) | 15 (1.3%) | 20 (1.7%) | 16 (1.4%) | **13 (1.1%)** |
| Chester | 34 (2.9%) | 35 (2.9%) | 24 (2.0%) | 35 (3.1%) | **46 (3.9%)** |
| Clarion | 5 (0.4%) | 4 (0.3%) | 4 (0.3%) | 7 (0.6%) | **8 (0.7%)** |
| Clearfield | 14 (1.2%) | 20 (1.7%) | 9 (0.8%) | 16 (1.4%) | **18 (1.5%)** |
| Clinton | 9 (0.8%) | 10 (0.8%) | 6 (0.5%) | 8 (0.7%) | **4 (0.3%)** |
| Columbia | 11 (0.9%) | 14 (1.2%) | 7 (0.6%) | 6 (0.5%) | **9 (0.8%)** |
| Crawford | 14 (1.2%) | 8 (0.7%) | 12 (1.0%) | 10 (0.9%) | **14 (1.2%)** |
| Cumberland | 25 (2.1%) | 13 (1.1%) | 28 (2.4%) | 26 (2.3%) | **22 (1.9%)** |
| Dauphin | 17 (1.4%) | 19 (1.6%) | 30 (2.5%) | 36 (3.2%) | **42 (3.5%)** |
| Delaware | 26 (2.2%) | 21 (1.8%) | 29 (2.4%) | 25 (2.2%) | **19 (1.6%)** |
| Elk | 7 (0.6%) | 4 (0.3%) | 11 (0.9%) | 3 (0.3%) | **7 (0.6%)** |
| Erie | 30 (2.5%) | 31 (2.6%) | 27 (2.3%) | 27 (2.4%) | **21 (1.8%)** |
| Fayette | 18 (1.5%) | 28 (2.3%) | 22 (1.9%) | 23 (2.0%) | **19 (1.6%)** |
| Forest | 0 (0.0%) | 0 (0.0%) | 4 (0.3%) | 2 (0.2%) | **2 (0.2%)** |
| Franklin | 26 (2.2%) | 25 (2.1%) | 20 (1.7%) | 20 (1.8%) | **23 (1.9%)** |
| Fulton | 9 (0.8%) | 5 (0.4%) | 2 (0.2%) | 7 (0.6%) | **5 (0.4%)** |
| Greene | 12 (1.0%) | 6 (0.5%) | 5 (0.4%) | 9 (0.8%) | **9 (0.8%)** |
| Huntingdon | 11 (0.9%) | 7 (0.6%) | 4 (0.3%) | 5 (0.4%) | **3 (0.3%)** |
| Indiana | 9 (0.8%) | 17 (1.4%) | 21 (1.8%) | 7 (0.6%) | **10 (0.8%)** |
| Jefferson | 5 (0.4%) | 7 (0.6%) | 11 (0.9%) | 3 (0.3%) | **5 (0.4%)** |
| Juniata | 5 (0.4%) | 12 (1.0%) | 6 (0.5%) | 2 (0.2%) | **2 (0.2%)** |
| Lackawanna | 17 (1.4%) | 19 (1.6%) | 20 (1.7%) | 20 (1.8%) | **30 (2.5%)** |
| Lancaster | 62 (5.2%) | 48 (4.0%) | 44 (3.7%) | 43 (3.8%) | **45 (3.8%)** |
| Lawrence | 10 (0.8%) | 11 (0.9%) | 10 (0.8%) | 9 (0.8%) | **17 (1.4%)** |
| Lebanon | 8 (0.7%) | 19 (1.6%) | 21 (1.8%) | 22 (1.9%) | **15 (1.3%)** |
| Lehigh | 37 (3.1%) | 38 (3.2%) | 28 (2.4%) | 28 (2.5%) | **26 (2.2%)** |
| Luzerne | 38 (3.2%) | 39 (3.3%) | 32 (2.7%) | 27 (2.4%) | **20 (1.7%)** |
| Lycoming | 18 (1.5%) | 23 (1.9%) | 15 (1.3%) | 9 (0.8%) | **10 (0.8%)** |
| McKean | 8 (0.7%) | 7 (0.6%) | 7 (0.6%) | 3 (0.3%) | **4 (0.3%)** |
| Mercer | 14 (1.2%) | 13 (1.1%) | 15 (1.3%) | 10 (0.9%) | **12 (1.0%)** |
| Mifflin | 5 (0.4%) | 4 (0.3%) | 3 (0.3%) | 7 (0.6%) | **2 (0.2%)** |
| Monroe | 23 (1.9%) | 34 (2.8%) | 29 (2.4%) | 18 (1.6%) | **21 (1.8%)** |
| Montgomery | 38 (3.2%) | 35 (2.9%) | 32 (2.7%) | 41 (3.6%) | **50 (4.2%)** |
| Montour | 2 (0.2%) | 5 (0.4%) | 3 (0.3%) | 5 (0.4%) | **3 (0.3%)** |
| Northampton | 29 (2.4%) | 27 (2.3%) | 29 (2.4%) | 26 (2.3%) | **21 (1.8%)** |
| Northumberland | 6 (0.5%) | 9 (0.8%) | 16 (1.4%) | 9 (0.8%) | **12 (1.0%)** |
| Perry | 7 (0.6%) | 11 (0.9%) | 11 (0.9%) | 8 (0.7%) | **9 (0.8%)** |
| Philadelphia | 97 (8.1%) | 94 (7.8%) | 101 (8.5%) | 94 (8.3%) | **103 (8.7%)** |
| Pike | 9 (0.8%) | 7 (0.6%) | 6 (0.5%) | 4 (0.4%) | **10 (0.8%)** |
| Potter | 0 (0.0%) | 4 (0.3%) | 2 (0.2%) | 2 (0.2%) | **6 (0.5%)** |
| Schuylkill | 29 (2.4%) | 15 (1.3%) | 14 (1.2%) | 23 (2.0%) | **23 (1.9%)** |
| Snyder | 7 (0.6%) | 9 (0.8%) | 4 (0.3%) | 4 (0.4%) | **5 (0.4%)** |
| Somerset | 16 (1.3%) | 12 (1.0%) | 8 (0.7%) | 11 (1.0%) | **14 (1.2%)** |
| Sullivan | 1 (0.1%) | 2 (0.2%) | 1 (0.1%) | 4 (0.4%) | **1 (0.1%)** |
| Susquehanna | 10 (0.8%) | 10 (0.8%) | 15 (1.3%) | 9 (0.8%) | **7 (0.6%)** |
| Tioga | 10 (0.8%) | 5 (0.4%) | 13 (1.1%) | 11 (1.0%) | **5 (0.4%)** |
| Union | 7 (0.6%) | 3 (0.3%) | 2 (0.2%) | 4 (0.4%) | **9 (0.8%)** |
| Venango | 8 (0.7%) | 2 (0.2%) | 11 (0.9%) | 6 (0.5%) | **6 (0.5%)** |
| Warren | 3 (0.3%) | 6 (0.5%) | 4 (0.3%) | 7 (0.6%) | **6 (0.5%)** |
| Washington | 29 (2.4%) | 23 (1.9%) | 22 (1.9%) | 27 (2.4%) | **29 (2.4%)** |
| Wayne | 11 (0.9%) | 8 (0.7%) | 12 (1.0%) | 6 (0.5%) | **6 (0.5%)** |
| Westmoreland | 35 (2.9%) | 41 (3.4%) | 33 (2.8%) | 36 (3.2%) | **35 (2.9%)** |
| Wyoming | 8 (0.7%) | 4 (0.3%) | 2 (0.2%) | 7 (0.6%) | **2 (0.2%)** |
| York | 45 (3.8%) | 40 (3.3%) | 39 (3.3%) | 38 (3.3%) | **49 (4.1%)** |
| **TOTAL** | **1,195 (100.0%)** | **1,200 (100.0%)** | **1,188 (100.0%)** | **1,137 (100.0%)** | **1,190 (100.0%)** |

# *Pedestrian Fatalities by County—Five-Year Trends*

| County | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Adams | 1 | 0 | 1 | 0 | 5 |
| Allegheny | 11 | 15 | 15 | 16 | 14 |
| Armstrong | 1 | 2 | 1 | 0 | 0 |
| Beaver | 0 | 1 | 1 | 0 | 1 |
| Bedford | 2 | 0 | 2 | 0 | 0 |
| Berks | 5 | 3 | 6 | 3 | 4 |
| Blair | 0 | 3 | 1 | 0 | 1 |
| Bradford | 0 | 4 | 0 | 0 | 0 |
| Bucks | 8 | 8 | 8 | 11 | 12 |
| Butler | 3 | 0 | 1 | 0 | 1 |
| Cambria | 0 | 3 | 1 | 1 | 0 |
| Cameron | 1 | 0 | 0 | 0 | 0 |
| Carbon | 1 | 1 | 0 | 2 | 1 |
| Centre | 2 | 1 | 3 | 1 | 0 |
| Chester | 5 | 3 | 4 | 2 | 5 |
| Clarion | 0 | 2 | 0 | 0 | 0 |
| Clearfield | 0 | 3 | 1 | 2 | 0 |
| Clinton | 2 | 0 | 0 | 1 | 1 |
| Columbia | 0 | 0 | 0 | 0 | 1 |
| Crawford | 0 | 2 | 0 | 0 | 2 |
| Cumberland | 1 | 2 | 3 | 1 | 5 |
| Dauphin | 0 | 4 | 6 | 4 | 10 |
| Delaware | 8 | 2 | 7 | 7 | 6 |
| Elk | 0 | 1 | 0 | 0 | 0 |
| Erie | 3 | 5 | 3 | 3 | 4 |
| Fayette | 0 | 2 | 2 | 0 | 2 |
| Forest | 0 | 0 | 0 | 0 | 0 |
| Franklin | 2 | 0 | 1 | 3 | 4 |
| Fulton | 0 | 1 | 0 | 1 | 0 |
| Greene | 0 | 0 | 0 | 0 | 0 |
| Huntingdon | 2 | 0 | 0 | 0 | 0 |
| Indiana | 0 | 2 | 1 | 0 | 2 |
| Jefferson | 0 | 0 | 0 | 0 | 0 |
| Juniata | 1 | 1 | 0 | 0 | 0 |
| Lackawanna | 3 | 4 | 5 | 4 | 4 |
| Lancaster | 11 | 7 | 8 | 5 | 8 |
| Lawrence | 3 | 1 | 2 | 1 | 2 |
| Lebanon | 1 | 1 | 1 | 4 | 4 |
| Lehigh | 9 | 4 | 1 | 5 | 3 |
| Luzerne | 3 | 6 | 4 | 2 | 5 |
| Lycoming | 2 | 1 | 3 | 4 | 1 |
| McKean | 0 | 0 | 0 | 0 | 0 |
| Mercer | 2 | 0 | 1 | 0 | 2 |
| Mifflin | 1 | 0 | 2 | 1 | 0 |
| Monroe | 1 | 4 | 1 | 4 | 3 |
| Montgomery | 4 | 9 | 5 | 6 | 18 |
| Montour | 0 | 0 | 0 | 0 | 0 |
| Northampton | 6 | 4 | 5 | 4 | 2 |
| Northumberland | 2 | 0 | 1 | 0 | 3 |
| Perry | 0 | 1 | 2 | 1 | 3 |
| Philadelphia | 38 | 26 | 44 | 37 | 42 |
| Pike | 0 | 0 | 0 | 0 | 0 |
| Potter | 0 | 0 | 0 | 0 | 1 |
| Schuylkill | 5 | 2 | 3 | 1 | 2 |
| Snyder | 0 | 1 | 0 | 0 | 0 |
| Somerset | 0 | 0 | 1 | 0 | 2 |
| Sullivan | 1 | 0 | 0 | 0 | 0 |
| Susquehanna | 2 | 1 | 0 | 0 | 1 |
| Tioga | 0 | 0 | 0 | 0 | 1 |
| Union | 0 | 0 | 0 | 0 | 0 |
| Venango | 2 | 0 | 1 | 1 | 0 |
| Warren | 0 | 0 | 0 | 1 | 0 |
| Washington | 4 | 3 | 2 | 0 | 5 |
| Wayne | 1 | 0 | 0 | 1 | 1 |
| Westmoreland | 3 | 4 | 5 | 0 | 2 |
| Wyoming | 0 | 0 | 0 | 1 | 0 |
| York | 3 | 3 | 7 | 9 | 5 |
| **TOTAL** | **166** | **153** | **172** | **150** | **201** |

# *Pedestrian Fatalities and Injuries by Age Group by County*

| | Age 0-4 | | Age 5-9 | | Age 10-14 | | Age 15-59 | | Age 60+ | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Fatality** | **Injury** | **Fatality** | **Injury** | **Fatality** | **Injury** | **Fatality** | **Injury** | **Fatality** | **Injury** | **Fatality** | **Injury** |
| Adams | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 4 | 4 | 5 | 11 |
| Allegheny | 0 | 6 | 0 | 9 | 0 | 18 | 4 | 280 | 10 | 88 | 14 | 401 |
| Armstrong | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 14 | 1 | 2 | 1 | 19 |
| Bedford | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Berks | 1 | 5 | 0 | 10 | 0 | 14 | 3 | 75 | 0 | 20 | 4 | 124 |
| Blair | 0 | 0 | 0 | 1 | 0 | 4 | 1 | 18 | 0 | 4 | 1 | 27 |
| Bradford | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 0 | 7 |
| Bucks | 0 | 1 | 0 | 5 | 0 | 9 | 7 | 71 | 5 | 25 | 12 | 111 |
| Butler | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | 1 | 2 | 1 | 10 |
| Cambria | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 11 | 0 | 4 | 0 | 21 |
| Cameron | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carbon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 2 |
| Centre | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 42 | 0 | 4 | 0 | 48 |
| Chester | 0 | 2 | 0 | 6 | 0 | 7 | 4 | 44 | 1 | 11 | 5 | 70 |
| Clarion | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 6 |
| Clearfield | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 5 |
| Clinton | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 6 | 0 | 1 | 1 | 11 |
| Columbia | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 3 | 1 | 14 |
| Crawford | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 1 | 3 | 2 | 9 |
| Cumberland | 0 | 0 | 0 | 3 | 0 | 5 | 3 | 30 | 2 | 9 | 5 | 47 |
| Dauphin | 0 | 2 | 0 | 12 | 0 | 2 | 4 | 44 | 6 | 9 | 10 | 69 |
| Delaware | 0 | 5 | 0 | 13 | 0 | 23 | 2 | 101 | 4 | 40 | 6 | 182 |
| Elk | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 5 |
| Erie | 0 | 1 | 0 | 7 | 0 | 6 | 2 | 48 | 2 | 13 | 4 | 75 |
| Fayette | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 11 | 0 | 2 | 1 | 16 |
| Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Franklin | 0 | 1 | 0 | 0 | 0 | 3 | 3 | 20 | 1 | 4 | 4 | 28 |
| Fulton | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| Greene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Huntingdon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Indiana | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 6 | 1 | 2 | 2 | 11 |
| Jefferson | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 3 | 0 | 7 |
| Juniata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Lackawanna | 0 | 3 | 0 | 5 | 0 | 7 | 1 | 65 | 3 | 23 | 4 | 103 |
| Lancaster | 0 | 4 | 0 | 8 | 0 | 16 | 4 | 100 | 4 | 24 | 8 | 152 |
| Lawrence | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 7 | 1 | 2 | 2 | 10 |
| Lebanon | 0 | 0 | 0 | 1 | 1 | 3 | 1 | 17 | 2 | 6 | 4 | 27 |
| Lehigh | 0 | 2 | 0 | 7 | 0 | 13 | 3 | 87 | 0 | 13 | 3 | 122 |
| Luzerne | 0 | 6 | 0 | 5 | 0 | 9 | 2 | 70 | 3 | 14 | 5 | 104 |
| Lycoming | 0 | 1 | 0 | 2 | 0 | 3 | 1 | 13 | 0 | 4 | 1 | 23 |
| McKean | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 2 | 0 | 9 |
| Mercer | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 6 | 1 | 3 | 2 | 13 |
| Mifflin | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 2 | 0 | 7 |
| Monroe | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 30 | 0 | 3 | 3 | 36 |
| Montgomery | 0 | 3 | 0 | 9 | 0 | 27 | 9 | 152 | 9 | 50 | 18 | 241 |
| Montour | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 |
| Northampton | 0 | 2 | 0 | 5 | 0 | 7 | 2 | 53 | 0 | 13 | 2 | 80 |
| Northumberland | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 9 | 3 | 1 | 3 | 16 |
| Perry | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 1 |
| Philadelphia | 1 | 40 | 1 | 114 | 1 | 110 | 25 | 998 | 12 | 262 | 40 | 1,524 |
| Pike | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| Potter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 3 |
| Schuylkill | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 11 | 1 | 3 | 2 | 19 |
| Snyder | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 7 |
| Somerset | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 1 | 1 | 2 | 6 |
| Sullivan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Susquehanna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 1 | 1 | 6 |
| Tioga | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 4 |
| Union | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 7 |
| Venango | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 7 |
| Warren | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Washington | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 18 | 0 | 2 | 5 | 20 |
| Wayne | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 5 | 1 | 1 | 1 | 8 |
| Westmoreland | 0 | 2 | 0 | 3 | 0 | 4 | 1 | 20 | 1 | 11 | 2 | 40 |
| Wyoming | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| York | 0 | 2 | 0 | 7 | 0 | 10 | 3 | 54 | 2 | 13 | 5 | 86 |
| **TOTAL** | **2** | **101** | **2** | **248** | **2** | **330** | **105** | **2,624** | **87** | **733** | **198** | **4,036** |

***Note:*** The above totals do not include any additional pedestrians of unknown age.

## *Percent Seat Belt Use in Crashes by County—Five-Year Trends*

| County | 2014 Belt Use | 2015 Belt Use | 2016 Belt Use | 2017 Belt Use | 2018 Belt Use |
|---|---|---|---|---|---|
| Adams | 86 | 86 | 88 | 88 | 87 |
| Allegheny | 78 | 80 | 80 | 80 | 80 |
| Armstrong | 80 | 87 | 82 | 81 | 85 |
| Beaver | 69 | 72 | 70 | 71 | 75 |
| Bedford | 88 | 86 | 90 | 89 | 88 |
| Berks | 80 | 80 | 79 | 80 | 79 |
| Blair | 86 | 86 | 84 | 86 | 87 |
| Bradford | 89 | 88 | 87 | 87 | 87 |
| Bucks | 83 | 85 | 84 | 84 | 86 |
| Butler | 88 | 89 | 89 | 90 | 90 |
| Cambria | 78 | 77 | 76 | 78 | 76 |
| Cameron | 94 | 95 | 84 | 86 | 93 |
| Carbon | 80 | 80 | 82 | 78 | 82 |
| Centre | 87 | 89 | 89 | 91 | 89 |
| Chester | 87 | 87 | 89 | 88 | 87 |
| Clarion | 89 | 89 | 88 | 90 | 85 |
| Clearfield | 80 | 82 | 85 | 82 | 82 |
| Clinton | 91 | 89 | 89 | 87 | 87 |
| Columbia | 87 | 88 | 89 | 90 | 89 |
| Crawford | 85 | 87 | 88 | 87 | 87 |
| Cumberland | 89 | 89 | 90 | 89 | 90 |
| Dauphin | 85 | 86 | 86 | 85 | 84 |
| Delaware | 77 | 79 | 79 | 78 | 78 |
| Elk | 78 | 79 | 77 | 75 | 82 |
| Erie | 81 | 83 | 83 | 83 | 84 |
| Fayette | 81 | 81 | 81 | 81 | 82 |
| Forest | 82 | 83 | 82 | 83 | 85 |
| Franklin | 84 | 83 | 87 | 85 | 86 |
| Fulton | 88 | 88 | 87 | 86 | 89 |
| Greene | 77 | 82 | 81 | 87 | 84 |
| Huntingdon | 84 | 83 | 82 | 85 | 85 |
| Indiana | 84 | 82 | 85 | 87 | 88 |
| Jefferson | 85 | 87 | 84 | 87 | 86 |
| Juniata | 81 | 85 | 79 | 86 | 90 |
| Lackawanna | 78 | 77 | 81 | 82 | 84 |
| Lancaster | 86 | 88 | 88 | 89 | 89 |
| Lawrence | 75 | 76 | 80 | 77 | 77 |
| Lebanon | 88 | 87 | 86 | 87 | 88 |
| Lehigh | 79 | 78 | 80 | 85 | 78 |
| Luzerne | 79 | 79 | 81 | 80 | 82 |
| Lycoming | 81 | 80 | 80 | 77 | 78 |
| McKean | 76 | 81 | 78 | 81 | 81 |
| Mercer | 80 | 78 | 81 | 83 | 78 |
| Mifflin | 82 | 82 | 80 | 86 | 83 |
| Monroe | 87 | 91 | 91 | 91 | 90 |
| Montgomery | 87 | 87 | 87 | 88 | 86 |
| Montour | 91 | 92 | 92 | 92 | 91 |
| Northampton | 85 | 87 | 85 | 86 | 87 |
| Northumberland | 77 | 80 | 81 | 80 | 77 |
| Perry | 84 | 87 | 86 | 89 | 89 |
| Philadelphia | 40 | 41 | 40 | 41 | 43 |
| Pike | 92 | 92 | 92 | 92 | 92 |
| Potter | 80 | 83 | 81 | 88 | 83 |
| Schuylkill | 84 | 85 | 83 | 84 | 82 |
| Snyder | 89 | 90 | 90 | 92 | 91 |
| Somerset | 86 | 85 | 84 | 84 | 85 |
| Sullivan | 92 | 90 | 90 | 83 | 91 |
| Susquehanna | 84 | 86 | 83 | 84 | 87 |
| Tioga | 86 | 90 | 91 | 88 | 89 |
| Union | 86 | 89 | 89 | 91 | 92 |
| Venango | 80 | 86 | 80 | 83 | 88 |
| Warren | 91 | 88 | 90 | 91 | 91 |
| Washington | 81 | 82 | 82 | 81 | 81 |
| Wayne | 86 | 83 | 88 | 87 | 89 |
| Westmoreland | 85 | 85 | 87 | 85 | 86 |
| Wyoming | 85 | 87 | 88 | 89 | 91 |
| York | 87 | 86 | 87 | 86 | 86 |
| **STATEWIDE** | **79** | **80** | **80** | **80** | **80** |

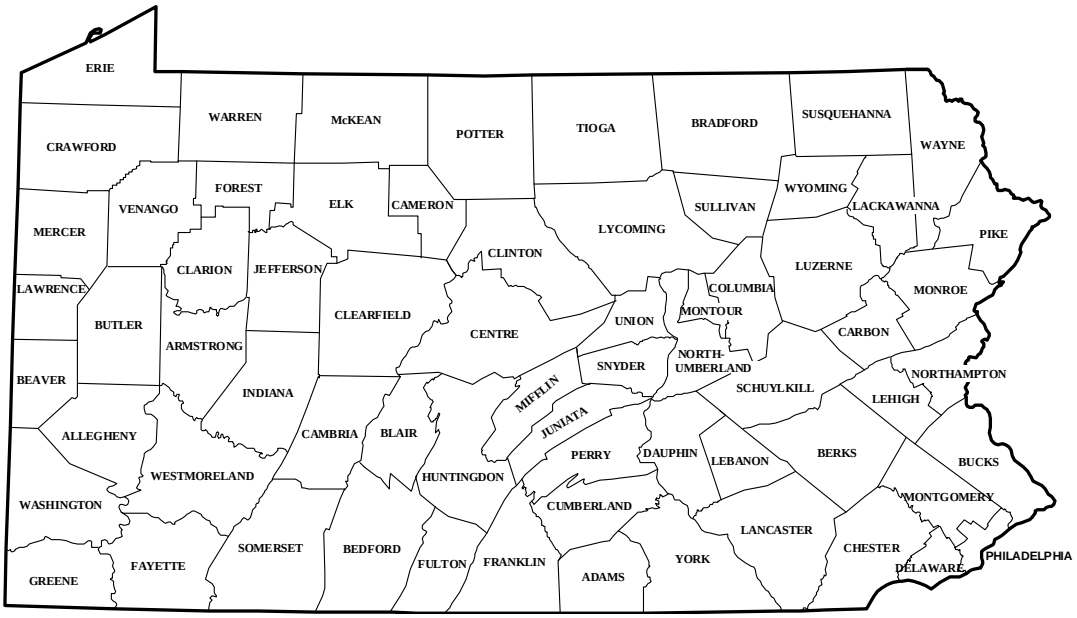
***Note:*** Applicable Motor Vehicle Occupants who were properly restrained compared to those who were not properly restrained or where restraint usage was not reported or was not known.

# Alcohol-Related Fatalities by County—Five-Year Trends

| County | 2014 Fatalities | 2015 Fatalities | 2016 Fatalities | 2017 Fatalities | 2018 Fatalities |
|---|---|---|---|---|---|
| Adams | 1 | 2 | 4 | 3 | 4 |
| Allegheny | 19 | 11 | 19 | 22 | 15 |
| Armstrong | 7 | 4 | 1 | 4 | 4 |
| Beaver | 3 | 0 | 2 | 2 | 6 |
| Bedford | 2 | 2 | 2 | 1 | 2 |
| Berks | 6 | 14 | 11 | 10 | 6 |
| Blair | 1 | 8 | 5 | 1 | 1 |
| Bradford | 4 | 7 | 1 | 2 | 3 |
| Bucks | 14 | 13 | 16 | 14 | 21 |
| Butler | 9 | 3 | 6 | 6 | 2 |
| Cambria | 6 | 2 | 2 | 5 | 2 |
| Cameron | 1 | 0 | 0 | 0 | 0 |
| Carbon | 4 | 2 | 1 | 1 | 3 |
| Centre | 2 | 6 | 3 | 2 | 7 |
| Chester | 11 | 15 | 5 | 15 | 12 |
| Clarion | 2 | 1 | 0 | 0 | 2 |
| Clearfield | 2 | 9 | 1 | 3 | 4 |
| Clinton | 4 | 3 | 0 | 2 | 0 |
| Columbia | 3 | 4 | 1 | 0 | 3 |
| Crawford | 5 | 2 | 6 | 4 | 3 |
| Cumberland | 8 | 2 | 6 | 8 | 8 |
| Dauphin | 3 | 6 | 7 | 9 | 12 |
| Delaware | 6 | 7 | 6 | 7 | 9 |
| Elk | 4 | 0 | 1 | 2 | 2 |
| Erie | 9 | 6 | 4 | 8 | 8 |
| Fayette | 5 | 5 | 7 | 7 | 5 |
| Forest | 0 | 0 | 0 | 0 | 2 |
| Franklin | 3 | 2 | 2 | 4 | 5 |
| Fulton | 1 | 1 | 0 | 1 | 0 |
| Greene | 3 | 2 | 0 | 1 | 4 |
| Huntingdon | 6 | 2 | 2 | 2 | 2 |
| Indiana | 3 | 9 | 14 | 1 | 2 |
| Jefferson | 2 | 4 | 1 | 0 | 0 |
| Juniata | 2 | 3 | 1 | 1 | 2 |
| Lackawanna | 5 | 5 | 9 | 4 | 6 |
| Lancaster | 16 | 16 | 13 | 7 | 8 |
| Lawrence | 2 | 2 | 2 | 2 | 5 |
| Lebanon | 1 | 1 | 1 | 9 | 2 |
| Lehigh | 7 | 14 | 8 | 6 | 3 |
| Luzerne | 17 | 18 | 8 | 5 | 4 |
| Lycoming | 9 | 5 | 3 | 6 | 2 |
| McKean | 4 | 2 | 2 | 1 | 0 |
| Mercer | 3 | 1 | 3 | 3 | 7 |
| Mifflin | 0 | 0 | 1 | 2 | 1 |
| Monroe | 8 | 6 | 11 | 5 | 7 |
| Montgomery | 11 | 6 | 9 | 12 | 10 |
| Montour | 1 | 1 | 0 | 1 | 0 |
| Northampton | 8 | 10 | 14 | 3 | 5 |
| Northumberland | 0 | 1 | 4 | 2 | 3 |
| Perry | 0 | 1 | 0 | 5 | 5 |
| Philadelphia | 18 | 31 | 16 | 17 | 28 |
| Pike | 4 | 4 | 0 | 1 | 3 |
| Potter | 0 | 0 | 0 | 1 | 3 |
| Schuylkill | 6 | 4 | 3 | 3 | 10 |
| Snyder | 0 | 4 | 2 | 1 | 2 |
| Somerset | 4 | 3 | 0 | 4 | 6 |
| Sullivan | 0 | 1 | 0 | 0 | 0 |
| Susquehanna | 6 | 2 | 6 | 3 | 3 |
| Tioga | 3 | 1 | 4 | 1 | 0 |
| Union | 2 | 2 | 0 | 1 | 4 |
| Venango | 4 | 0 | 2 | 2 | 3 |
| Warren | 0 | 0 | 0 | 2 | 2 |
| Washington | 12 | 9 | 8 | 8 | 10 |
| Wayne | 1 | 4 | 7 | 1 | 0 |
| Westmoreland | 7 | 16 | 13 | 12 | 10 |
| Wyoming | 2 | 1 | 0 | 2 | 0 |
| York | 11 | 17 | 11 | 13 | 18 |
| **TOTAL** | **333** | **345** | **297** | **293** | **331** |

## Pennsylvania Counties

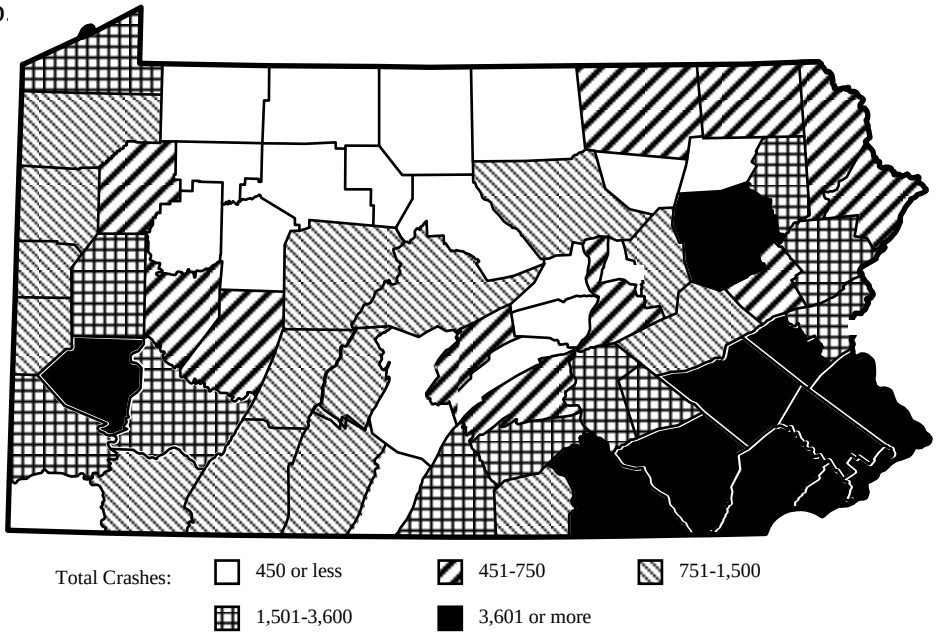
Use the map below as a key to county names for other maps.




The following county-by-county maps have their data broken into five groups, with roughly the same number of counties in each group.

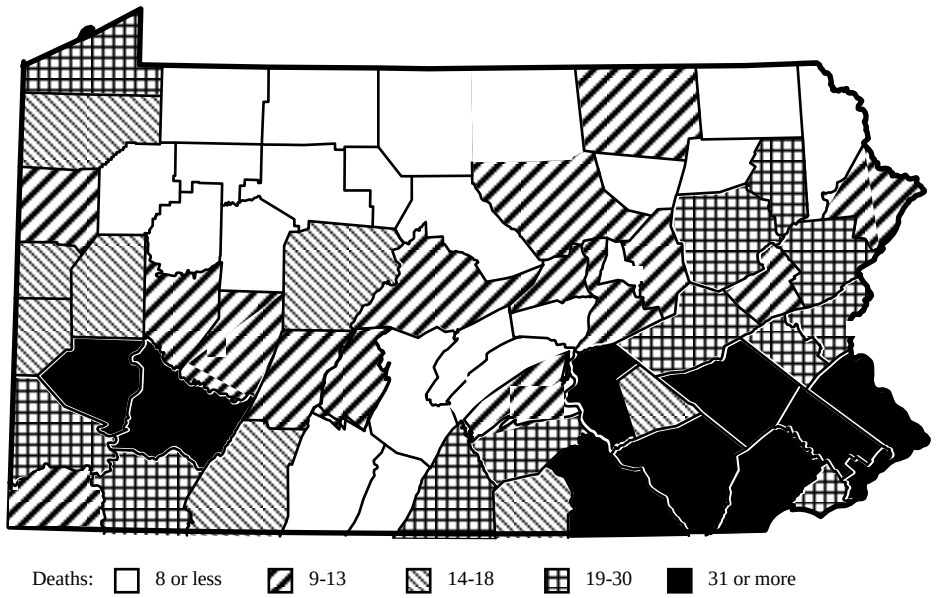
## Total Crashes by County

Urban counties, with their higher populations, number of vehicles, and vehicle-miles of travel, lend themselves to a higher number of crashes. Referring to the map below, 57% of the total traffic crashes occurred in only 11 of Pennsylvania's 67 counties. These 11 counties appear in black on the map.



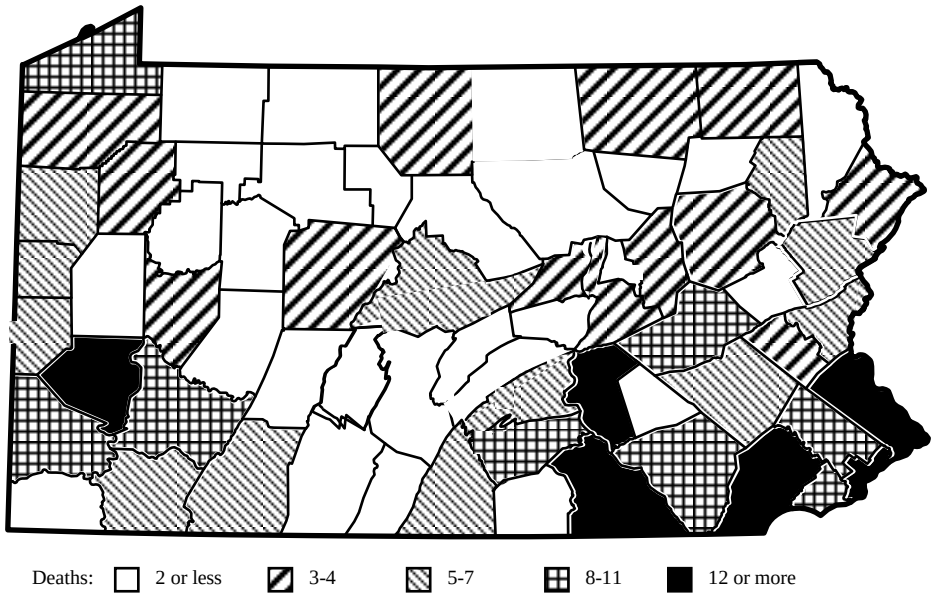
## *Traffic Fatalities by County*

Referring to the map below, 45% of the total traffic fatalities occurred in only 10 of Pennsylvania's 67 counties. These 10 counties appear in black on the map.



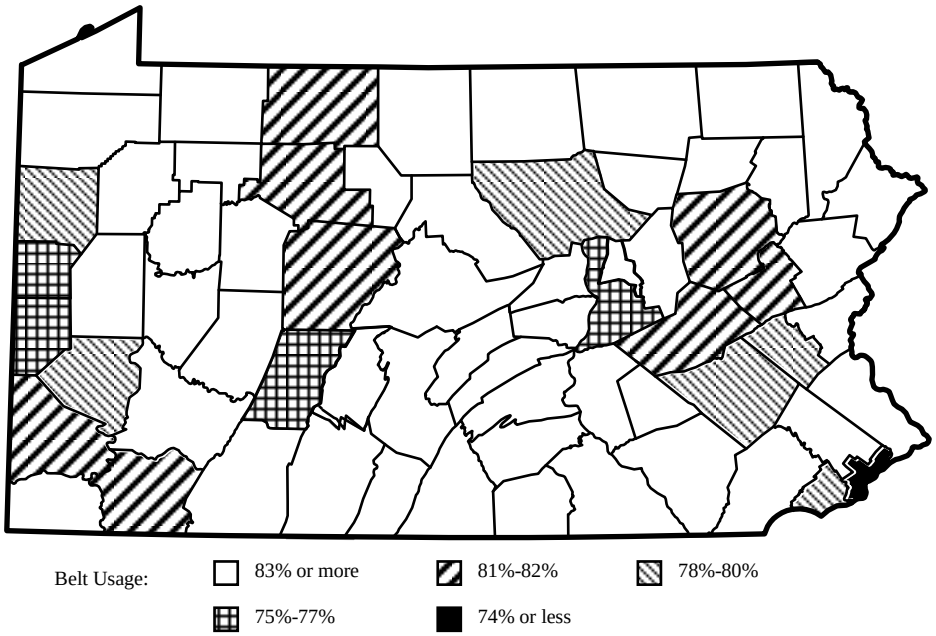

## *Alcohol-Related Fatalities by County*

Referring to the map below, 32% of the total alcohol-related fatalities occurred in only 6 of Pennsylvania's 67 counties. These 6 counties appear in black on the map.



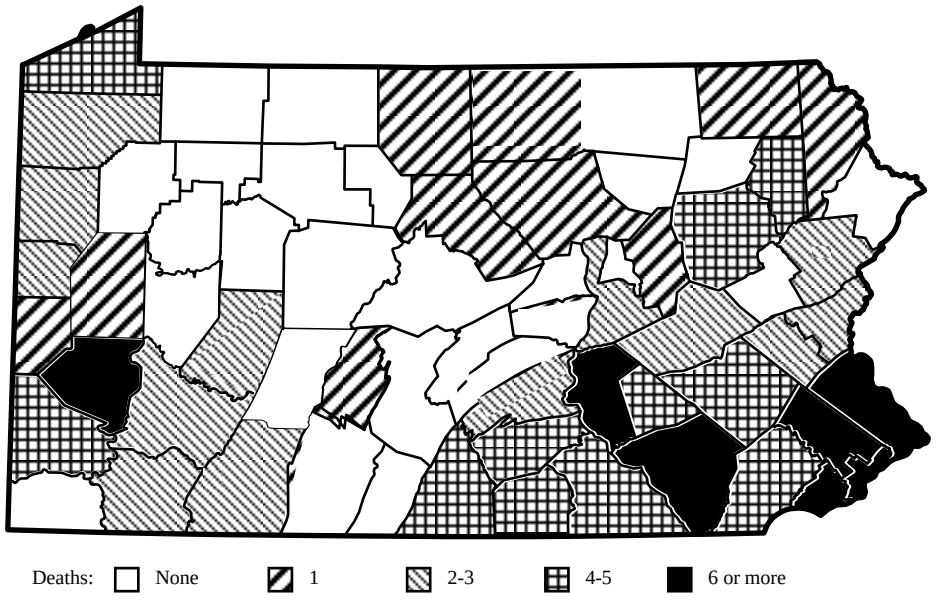
## *Percent Seat Belt Use in Crashes by County*

The percentage of seat belt use in crashes tended to be lower in counties with major urban areas; even some rural areas also had lower seat belt use in crashes. Below the one county having 74% or less seat belt use in crashes is shown in black on the map.




## *Pedestrian Fatalities by County*

Referring to the map below, 55% of the total pedestrian fatalities occurred in only 7 of Pennsylvania's 67 counties. These 7 counties appear in black on the map.



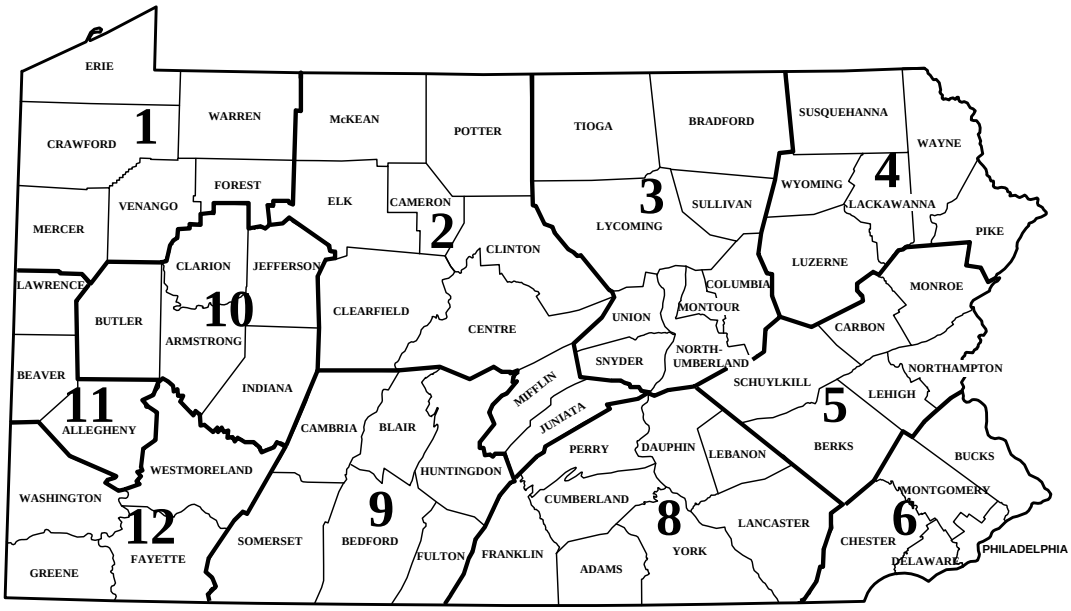



Counties

## Crashes by Engineering District

The map below illustrates the 11 PENNDOT engineering districts in Pennsylvania. The table below lists a breakdown of the number of crashes, fatalities, and injuries in 2018 by engineering district.

| District | Crashes | Fatalities | Injuries |
|---|---|---|---|
| 01 | 5,562 | 61 | 3,307 |
| 02 | 3,961 | 56 | 2,231 |
| 03 | 4,793 | 67 | 2,668 |
| 04 | 8,225 | 75 | 4,849 |
| 05 | 17,374 | 145 | 10,175 |
| 06 | 36,299 | 272 | 26,127 |
| 08 | 21,621 | 221 | 12,142 |
| 09 | 5,000 | 51 | 2,732 |
| 10 | 3,947 | 50 | 2,080 |
| 11 | 14,500 | 100 | 7,944 |
| 12 | 7,049 | 92 | 3,964 |
| **Total** | **128,420** | **1,190** | **78,219** |




Counties

# Index

## *NEW 2018 Pennsylvania Crash Facts & Statistics Feedback Survey*

The 2018 edition of the *Pennsylvania Crash Facts and Statistics* booklet continues to use the format that began with the 1996 edition. In our continuing effort to make this booklet as useful as possible, we would appreciate your taking the time to fill out this survey. Your opinions will help shape future editions including a planned major revision in the next few years.

Does this booklet provide information which is useful to you? (check one) ❑ Yes ❑ No

What information would you like to see included in a new version? _____

_____

_____

Is the format easy to follow? (check one) ❑ Yes ❑ No Keeping in mind a new version may be electronic and possibly interactive, what suggestions do you have to make the format better and easier for you?

_____

_____

_____

Please rate the following sections of the booklet as to whether you find them Useful, Somewhat Useful, or Not Useful.

| | Useful | Somewhat | Not Useful |
|---|---|---|---|
| How to Use This Booklet | ❑ | ❑ | ❑ |
| Definitions | ❑ | ❑ | ❑ |
| Overview | ❑ | ❑ | ❑ |
| All Crashes and Fatalities | ❑ | ❑ | ❑ |
| Drivers | ❑ | ❑ | ❑ |
| Alcohol-Related Crashes | ❑ | ❑ | ❑ |
| Seat Belt, Child Safety Seats, etc. | ❑ | ❑ | ❑ |
| Pedestrians and Bicycle Crashes | ❑ | ❑ | ❑ |
| Crashes by Motor Vehicle Type | ❑ | ❑ | ❑ |
| Pennsylvania County Crashes | ❑ | ❑ | ❑ |
| Index | ❑ | ❑ | ❑ |

If you had only one suggestion for a new electronic version what would that suggestion be?

_____

Your name and organization (optional): _____

Thank you for your involvement and response.

1. Cut this page out of the booklet.
2. Fold along the dotted lines and tape shut.
3. Place a stamp where indicated.
4. Drop into the nearest mailbox.

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**Pennsylvania Department and Transportation**
**Bureau of Maintenance And Operations**
**P.O. Box 2047**
**Harrisburg, PA 17105-2047**

***2018 Pennsylvania Crash Facts & Statistics Survey Form***

# *Dedication*

*The Commonwealth of Pennsylvania would like to extend its deepest sympathy to the families and friends of the victims of fatal injury motor vehicle crashes here in Pennsylvania.*

*We look to the day when publications such as this will no longer be necessary. Until that time, however, the Commonwealth of Pennsylvania will continue to strive to make our roads safer.*

**Pennsylvania Department of Transportation**
**Bureau of Maintenance And Operations**
**P.O. Box 2047**
**Harrisburg, PA 17105-2047**

**ADDRESS SERVICE REQUESTED**