

# **PENNSYLVANIA CRASH FACTS & STATISTICS**



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## ***Introduction***

The **2009 Pennsylvania Crash Facts and Statistics** booklet is a report published by the Bureau of Highway Safety and Traffic Engineering, 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.dot.state.pa.us>**. Click on the following set of links to get to the booklet: *PennDOT Organizations, Bureaus & Offices, Bureau of Highway Safety and Traffic Engineering, Crash Information Systems and Analysis, Crash Facts and Statistics Books*, and finally click on the year in which you are interested.

This publication is a statistical review of reportable motor vehicle crashes in the Commonwealth of Pennsylvania for calendar year 2009. 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).

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## ***Special Thanks***

Quality information is important for creating a highly accurate publication. Our analysts and the police officers that report the crashes that make it to 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 more 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 two-vehicle crash between a light truck and a passenger vehicle due to heavy rain conditions and wet roadways. The growing popularity of light trucks over the last ten years has made this type of collision a special concern to the Pennsylvania Department of Transportation. In 2009, light trucks coupled with passenger vehicles were involved in more crashes than all other vehicle types combined. Additional information on crashes involving light trucks can be found on pages 50 and 53.

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## 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.

**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 workweek 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 deaths/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 death 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 death(s) are attributable to the crash.

**Injury Crash:** A crash in which none of the involved persons were killed, but at least one was injured.

**Property Damage Only (PDO):** A reportable crash where no one was killed or injured, but damage occurred to a vehicle requiring towing.

### *Injury Severity*

**Death:** As used in this booklet, any injury which causes death within 30 days of a crash and that death is attributable to the crash.

**Major Injury:** Any injury, other than fatal, which by its severity requires immediate emergency transport, such as an ambulance, to a hospital or clinic for medical treatment and /or hospitalization. Major injuries would include amputation of limb(s), severe burns, etc.

**Moderate Injury:** Any injury which may require some form of medical treatment, but is not life-threatening or incapacitating. These injuries should be visible. Moderate injuries would include a cut which requires several stitches, or a broken finger or toe.

**Minor Injury:** Any injury which can be treated by first aid application, whether at the scene of the crash or in a medical facility. Complaints of injuries which are not visible, and do not appear to be of any major or moderate nature, should be considered as minor injuries.

### *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 is comprised of 67 counties. Each county is made up of 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 121,000 miles\* of roads and highways; 33% (39,861 miles\*) are state highways maintained by the Pennsylvania Department of Transportation (PennDOT), and the remaining 67% (81,909 miles\*) are maintained by local municipalities and other entities.

Motor-vehicle traffic crashes which occur on Pennsylvania roads and highways are investigated and reported on 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 2009, there were 121,242 reportable traffic crashes in Pennsylvania. These crashes claimed the lives of 1,256 people and injured another 87,126 people. To add some perspective, the 2009 total of reportable traffic crashes is the lowest total since 1951 when 123,088 crashes were reported.

Last year, there were approximately 107.0 billion vehicle-miles\* of travel on Pennsylvania’s roads and highways. The 2009 fatality rate of 1.17 deaths per hundred million vehicle-miles of travel\* was again the lowest ever recorded in Pennsylvania since the department started keeping records of this in 1935.

### 2009 Briefs

#### *On Average in Pennsylvania:*

- Each day 332 reportable traffic crashes occurred (about 14 crashes every hour).
- Each day 3 persons were killed in reportable traffic crashes (one death every 7 hours).
- Each day 239 persons were injured in reportable crashes (about 10 injuries every hour).

#### *Based on Pennsylvania’s 2009 population (12,604,767 people):*

- 1 out of every 44 people was involved in a reportable traffic crash.
- 1 out of every 10,036 people was killed in a reportable traffic crash.
- 1 out of every 145 people was injured in a reportable traffic crash.

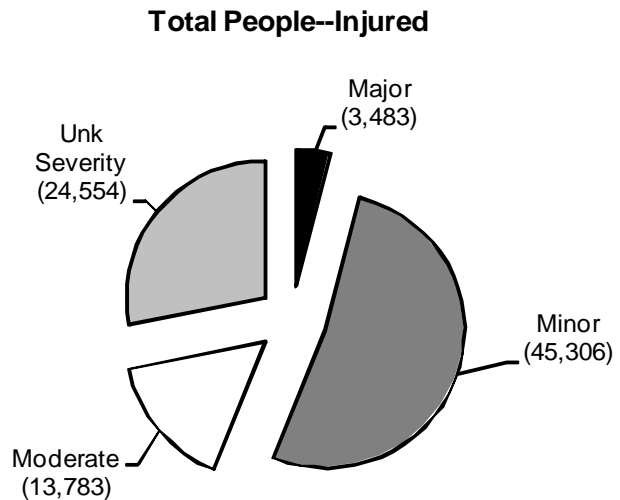
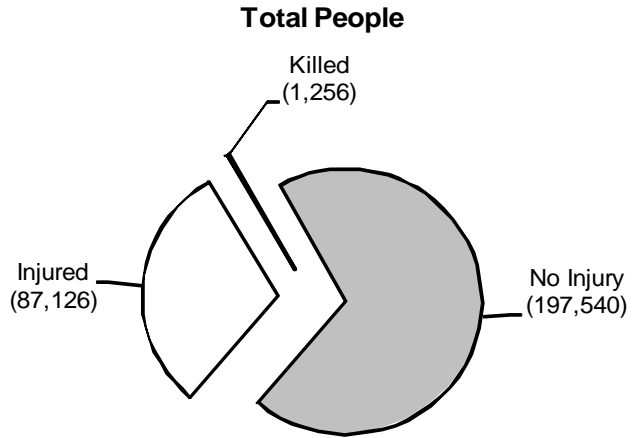
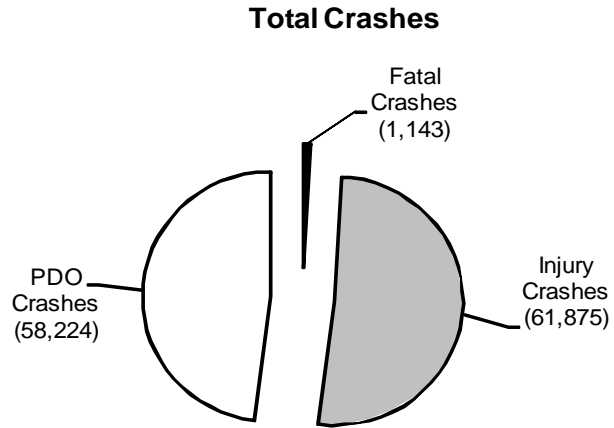
\* For consistency purposes, the prior year’s data is used at the time of publication because of timing issues. For this Crash Facts & Statistics book, 2008 information was used.



## All Crashes and Deaths —WHO WAS INVOLVED—

### Crashes by Injury Severity

Crashes involving deaths 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 2009, most were not injured, and those who were injured suffered only minor injuries. The 1,256 deaths in 2009 represent the lowest number of fatalities in Pennsylvania motor vehicle crashes over the last sixty-four years.



## Deaths and Injuries—Five-Year Trends

Total reported crashes in 2009 decreased 3.3% compared to 2008; deaths decreased by 14.4% while total injuries decreased by 1.8%.

	2005	2006	2007	2008	2009
Reported Crashes	132,829	128,342	130,675	125,327	121,242
Total Deaths	1,616	1,525	1,491	1,468	1,256
Total Injuries	100,381	96,597	94,633	88,709	87,126
Major Injury	4,324	4,200	4,087	3,831	3,483
Moderate Injury	17,470	16,514	16,004	14,306	13,783
Minor Injury	56,975	52,740	50,535	46,704	45,306
Unknown Injury Severity	21,612	23,143	24,007	23,868	24,554
Pedestrian Deaths	162	170	155	142	136
Pedestrian Injuries	4,663	4,569	4,618	4,389	4,249
Motorcyclist Deaths	205	187	225	237	204
Motorcyclist Injuries	3,953	3,751	4,067	4,077	3,677
Bicyclist Deaths	18	13	20	8	16
Bicyclist Injuries	1,313	1,310	1,426	1,419	1,380
Heavy-Truck-Related Deaths	186	192	194	184	136
Alcohol-Related Deaths	580	545	535	534	449
Speed-Related Deaths	505	474	497	474	355
Billions of Vehicle-Miles*	107.2	107.9	108.1	108.4	107.0
Deaths per 100 Million Vehicle-Miles*	1.51	1.41	1.38	1.35	1.17

*Note:* Speed-Related Deaths 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

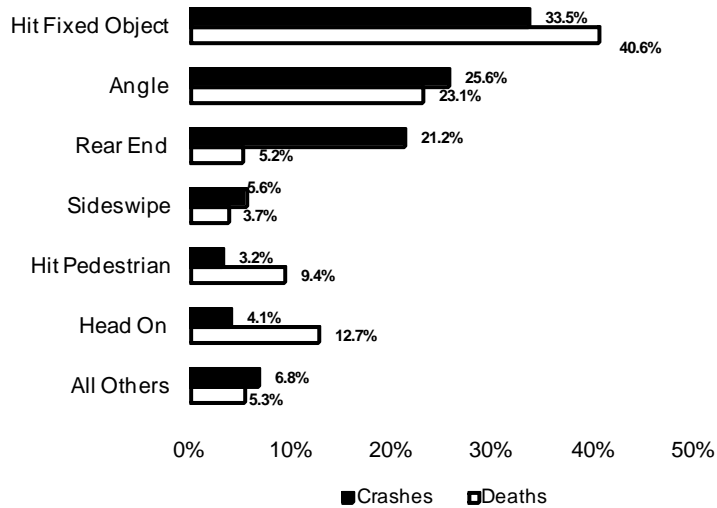
Severity	Number	Average Cost	Estimated Total Costs
Deaths (persons)	1,256	\$5,816,848	\$7,305,961,088
Major Injuries (persons)	3,483	\$1,303,332	\$4,539,505,356
Moderate Injuries (persons)	13,783	\$87,107	\$1,200,595,781
Minor Injuries (persons)	45,306	\$6,905	\$312,837,930
Property Damage Only (crashes)	58,221	\$2,762	\$160,806,402
Unknown Injuries (persons)	24,554	\$6,905	\$169,545,370
	<b>TOTAL</b>		<b>\$13,689,251,927</b>

**In 2009, the economic loss due to traffic crashes was  
\$1,086  
to every man, woman, and child in Pennsylvania.**

Figures are based on the latest PennDOT estimates (in 2008 dollars). 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 fatality in 2008.

### 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. Head-on collisions, though they occur much less frequently, cause the third highest number of deaths.



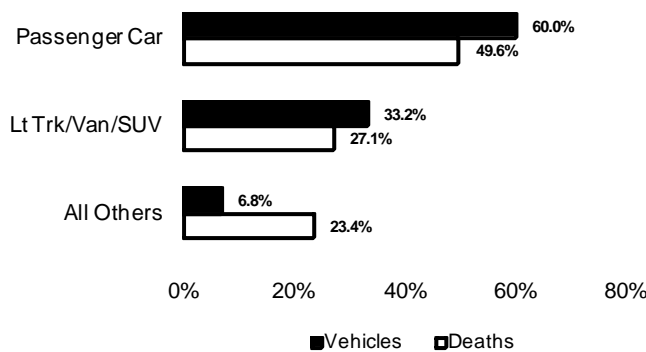
All Crashes

Crash Type	Crashes	Deaths
Angle	31,020	290
Backing Up	169	1
Head On	4,956	159
Hit Fixed Object	40,661	510
Hit Pedestrian	3,897	118
Non-Collision	4,382	57
Rear End	25,680	65
Sideswipe	6,731	47
Other	3,746	9
<b>TOTAL</b>	<b>121,242</b>	<b>1,256</b>

\*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 deaths. Compared with previous years, light truck, van, and SUV vehicles in 2009 were involved in a higher percent of crashes. Occupant fatalities of motorcycles declined from 237 in 2008 to 204 in 2009.



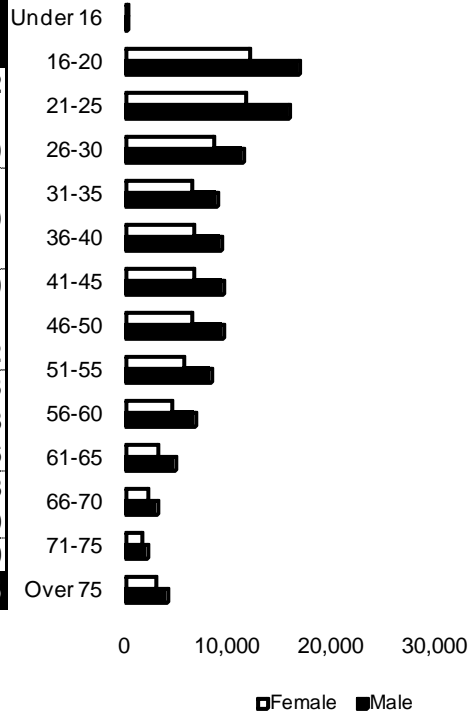
	Vehicles	Occupant Deaths
Passenger Car	118,616	555
Lt Trk/Van/SUV	65,685	303
Heavy Truck	5,648	16
Motorcycle	3,838	204
Bicycle	1,394	16
Commercial Bus	632	0
School Bus	418	0
Other	1,545	26

### Driver Involvement in Crashes by Age and Sex

In every age group, male drivers are involved in more crashes than female drivers. Male drivers ages 16-20 were involved in more crashes than drivers in any other age group (male or female).

All Crashes

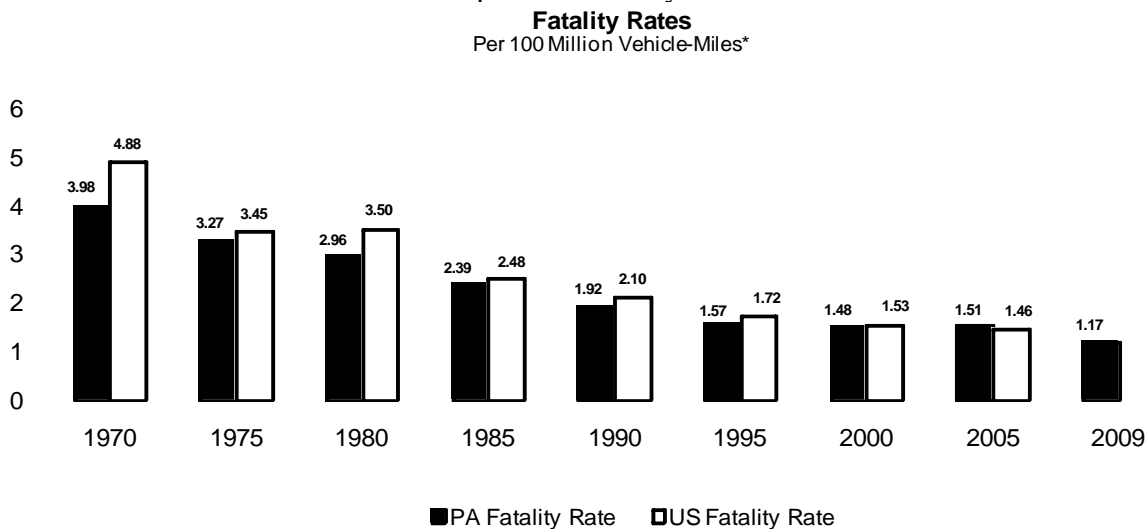
Driver	Male	Female	Total Drivers
Under 16	151 (0.1%)	61 (0.1%)	212
16-20	17,014 (15.1%)	12,077 (15.2%)	29,091
21-25	15,932 (14.1%)	11,757 (14.8%)	27,689
26-30	11,552 (10.2%)	8,519 (10.7%)	20,071
31-35	8,930 (7.9%)	6,539 (8.2%)	15,469
36-40	9,379 (8.3%)	6,662 (8.4%)	16,041
41-45	9,484 (8.4%)	6,636 (8.3%)	16,120
46-50	9,551 (8.5%)	6,550 (8.2%)	16,101
51-55	8,501 (7.5%)	5,691 (7.2%)	14,192
56-60	6,831 (6.1%)	4,487 (5.6%)	11,318
61-65	4,931 (4.4%)	3,207 (4.0%)	8,138
66-70	3,269 (2.9%)	2,167 (2.7%)	5,436
71-75	2,249 (2.0%)	1,629 (2.1%)	3,878
Over 75	4,075 (3.6%)	3,034 (3.8%)	7,109
Unknown	1,149 (1.0%)	521 (0.7%)	1,670
<b>DRIVERS</b>	<b>112,998 (100.0%)</b>	<b>79,537 (100.0%)</b>	<b>192,535</b>



*Note:* Does not include 2,703 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 2009 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 Killed	Total Injured	Registered Vehicles	Motor Vehicle Mileage*	PA Fatality Rate**	US Fatality Rate**
1942	59,280	1,745	41,122	2,267,301	17.6	9.90	10.60
1943	37,419	1,374	27,312	2,084,332	13.9	9.90	11.50
1944	42,699	1,328	29,928	2,010,163	14.4	9.20	11.50
1945	53,304	1,453	35,686	2,145,452	16.0	9.10	11.30
1946	70,065	1,794	45,889	2,387,542	22.1	8.10	9.80
1947	89,190	1,678	49,938	2,604,741	22.4	7.50	8.80
1948	103,478	1,671	52,709	2,804,056	23.9	7.00	8.10
1949	102,098	1,624	54,290	2,993,903	25.8	6.30	7.50
1950	113,748	1,624	62,103	3,262,243	27.1	6.00	7.60
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	87,126	11,324,357	107.0	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)

All Crashes

—WHAT CONDITIONS WERE—

**Crashes by Weather and Road Surface Conditions**

Adverse weather and road surface conditions negatively affected 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.

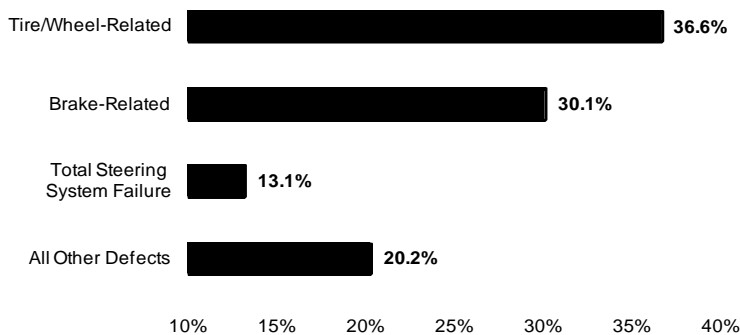
All Crashes

Weather Condition	Crashes	Deaths
No Adverse Conditions	91,305 (75.3%)	1,059 (84.3%)
Rain/Rain & Fog	18,471 (15.2%)	138 (11.0%)
Snow/Sleet/Freezing Rain	9,318 (7.7%)	41 (3.3%)
Fog/Smoke, Etc.	623 (0.5%)	6 (0.5%)
Other	1,525 (1.3%)	12 (1.0%)
<b>TOTAL</b>	<b>121,242 (100.0%)</b>	<b>1,256 (100.0%)</b>

Road Surface Condition	Crashes	Deaths
Dry	82,866 (68.4%)	983 (78.3%)
Wet	23,982 (19.8%)	207 (16.5%)
Snow/Slush	7,369 (6.1%)	37 (3.0%)
Ice/Ice Patches	6,211 (5.1%)	21 (1.7%)
Other	814 (0.7%)	8 (0.6%)
<b>TOTAL</b>	<b>121,242 (100.0%)</b>	<b>1,256 (100.0%)</b>

**Crashes Involving Vehicle Defects**

Improperly-maintained vehicles can lead to crashes. In 2009, 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.

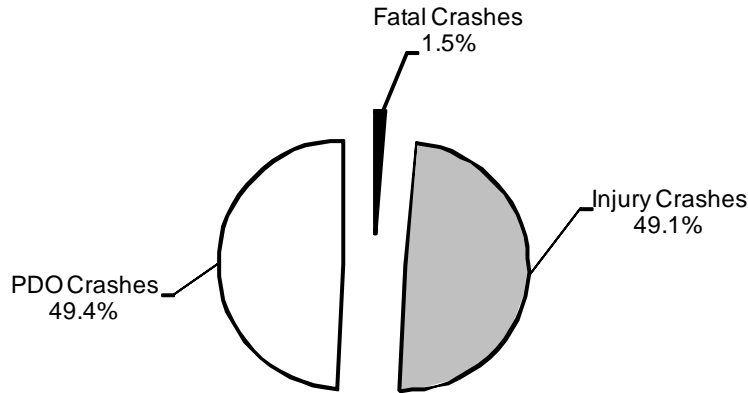


Vehicle Defect	Crashes
Tire/Wheel-Related	838
Brake-Related	689
Total Steering System Failure	301
Power Train Failure	238
Suspension	60
Unsecure/Shifted Trailer Load	53
Vehicle Lighting-Related	24
Body/Doors/Hood, Etc.	21
Other Known Defects	67

**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. Fifty-one percent of work zone crashes in 2009 contained fatalities or injuries.



Total Crashes: **1,513**

Total Killed: **23** (Workers Killed: 4)

Total Injured: **1,055**

### Work Zone Crashes—Vehicles Involved

Vehicle Type	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road
Passenger Car	338 (49.9%)	939 (54.8%)	107 (44.4%)	93 (63.7%)
Light Truck/SUV	203 (29.9%)	606 (35.3%)	79 (32.8%)	40 (27.4%)
Heavy Truck/Bus	113 (16.7%)	118 (6.9%)	50 (20.8%)	7 (4.8%)
Motorcycle	16 (2.4%)	36 (2.1%)	4 (1.7%)	1 (0.7%)
Other	8 (1.2%)	16 (0.9%)	1 (0.4%)	5 (3.4%)
<b>TOTAL</b>	<b>678 (100.0%)</b>	<b>1,715 (100.0%)</b>	<b>241 (100.0%)</b>	<b>146 (100.0%)</b>

**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		Deaths	
		Number	% Total	Number	% Total
2005	State Hwy (Interstate)	512	27.2%	8	26.7%
	State Hwy (Other)	1,077	57.1%	17	56.7%
	Turnpike	121	6.4%	3	10.0%
	Local Road	175	9.3%	2	6.7%
	Other/Unknown Road	0	0.0%	0	0.0%
	<b>TOTAL</b>	<b>1,885</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>
2006	State Hwy (Interstate)	313	17.6%	6	30.0%
	State Hwy (Other)	1,105	62.0%	9	45.0%
	Turnpike	195	11.0%	2	10.0%
	Local Road	166	9.3%	3	15.0%
	Other/Unknown Road	2	0.1%	0	0.0%
	<b>TOTAL</b>	<b>1,781</b>	<b>100.0%</b>	<b>20</b>	<b>100.0%</b>
2007	State Hwy (Interstate)	342	20.4%	10	38.5%
	State Hwy (Other)	970	57.8%	12	46.2%
	Turnpike	208	12.4%	2	7.7%
	Local Road	156	9.3%	2	7.7%
	Other/Unknown Road	1	0.1%	0	0.0%
	<b>TOTAL</b>	<b>1,677</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>
2008	State Hwy (Interstate)	307	21.7%	8	34.8%
	State Hwy (Other)	843	59.5%	14	60.9%
	Turnpike	173	12.2%	1	4.4%
	Local Road	94	6.6%	0	0.0%
	Other/Unknown Road	0	0.0%	0	0.0%
	<b>TOTAL</b>	<b>1,417</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>
2009	State Hwy (Interstate)	366	24.2%	3	13.0%
	State Hwy (Other)	900	59.5%	16	69.6%
	Turnpike	155	10.2%	2	8.7%
	Local Road	91	6.0%	2	8.7%
	Other/Unknown Road	1	0.1%	0	0.0%
	<b>TOTAL</b>	<b>1,513</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>

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



## 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	Deaths	% Total
Hit Bridge	719	0.6%	25	2.0%
Hit Building	1,371	1.1%	43	3.4%
Hit Culvert	854	0.7%	19	1.5%
Hit Curb	4,366	3.6%	57	4.5%
Hit Ditch	3,190	2.6%	45	3.6%
Hit Embankment	7,990	6.6%	155	12.3%
Hit Fence or Wall	3,026	2.5%	35	2.8%
Hit Fire Hydrant	464	0.4%	2	0.2%
Hit Guiderail	6,884	5.7%	150	11.9%
Hit Impact Attenuator	126	0.1%	0	0.0%
Hit Mailbox(es)	1,443	1.2%	24	1.9%
Hit Median Barrier	4,491	3.7%	28	2.2%
Hit Other Fixed Object	3,989	3.3%	69	5.5%
Hit Parked Vehicle	6,337	5.2%	41	3.3%
Hit Rock(s) or Obstacle on Roadway	517	0.4%	3	0.2%
Hit Signal/Sign Support	2,239	1.9%	44	3.5%
Hit Snow Bank	308	0.3%	4	0.3%
Hit Temporary Construction Barrier	62	0.1%	1	0.1%
Hit Traffic Island or Channelization	248	0.2%	2	0.2%
Hit Tree(s) or Shrubs/Hedges	9,769	8.1%	253	20.1%
Hit Utility Pole(s)	9,309	7.7%	117	9.3%
Hit Deer	2,923	2.4%	5	0.4%
Hit Other Animal	237	0.2%	0	0.0%

**Note:** “% Total” lists the percentage compared to *all* crashes or deaths, 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

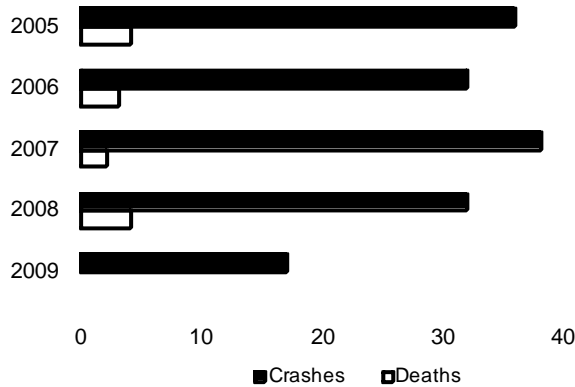
	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road	Other
Crashes	8,478	76,781	2,450	33,372	161
Persons Killed	78	969	12	197	0
Persons Injured	5,236	57,584	1,294	22,918	100
Miles of Maintained Road	1,320	39,436	535	81,363	---
100 MVM* Traveled	195.7	623.3	60.3	190.8	---
Crashes/MVM*	0.43	1.23	0.41	1.75	---
Persons Killed/100 MVM*	0.40	1.55	0.20	1.03	---
Persons Injured/MVM*	0.27	0.92	0.21	1.20	---

\* 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 2008 Highway Performance Monitoring System (HPMS) package and reflects 2008 length and travel activity data. Ramps are included as part of the roadway to which it is connected.

### 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 13 deaths have occurred in this type of crash. In 2009, no deaths occurred, a record in the last 5 years.

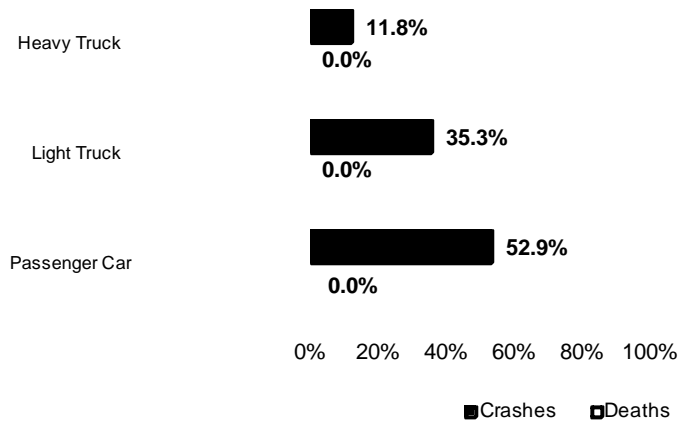


Year	Crashes	Deaths
2005	36	4
2006	32	3
2007	38	2
2008	32	4
2009	17	0

All Crashes

### Train/Vehicle Crashes by Vehicle Type

Passenger cars, light trucks, vans, and SUVs were the predominant vehicle types involved in crashes with trains in 2009. In 2009, heavy truck involvement with trains decreased to 2 crashes from 3 in 2008.



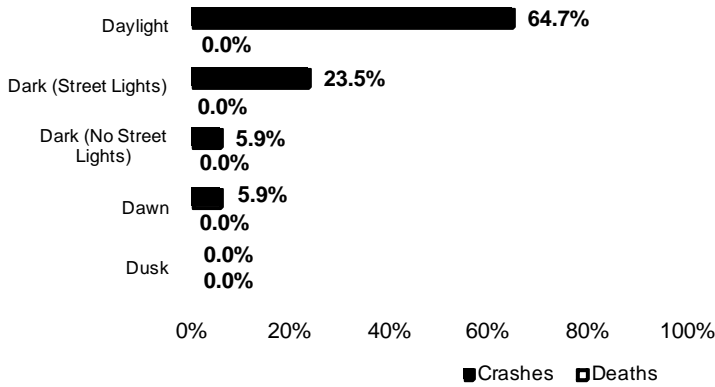
Vehicle Type	Crashes	Deaths
Passenger Car	9	0
Light Truck	6	0
Heavy Truck	2	0
Bicycle	0	0
Commercial Bus	0	0
Motorcycle	0	0
School Bus	0	0
Unknown	0	0
<b>TOTAL</b>	<b>17</b>	<b>0</b>

### Train/Vehicle Crashes by Road Type

Road Type	Crashes	Deaths
Local Road	10	0
State Hwy (Other)	7	0
<b>TOTAL</b>	<b>17</b>	<b>0</b>

All Crashes

### Train/Vehicle Crashes by Light Level



Light Level	Crashes	Deaths
Daylight	11	0
Dark (Street Lights)	4	0
Dark (No Street Lights)	1	0
Dawn	1	0
Dusk	0	0
<b>TOTAL</b>	<b>17</b>	<b>0</b>

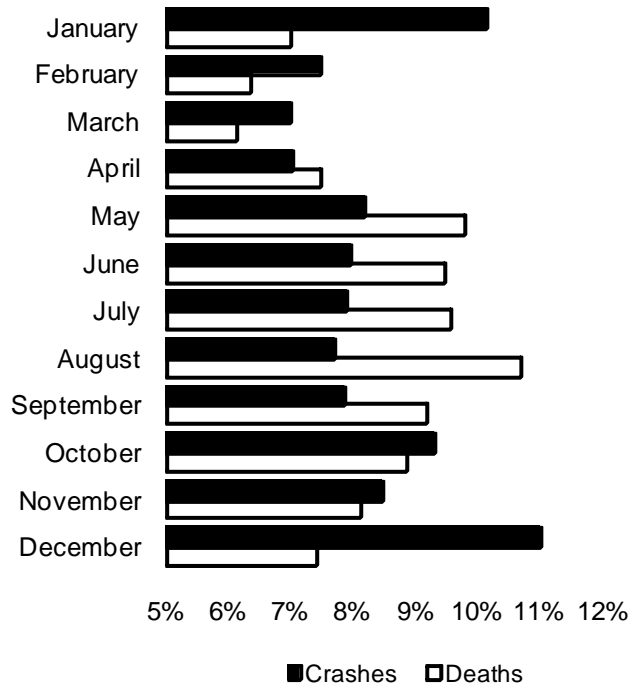
### Train/Vehicle Crashes by County

County	Crashes	Deaths
Berks	3	0
Butler	1	0
Chester	2	0
Clinton	1	0
Crawford	1	0
Delaware	1	0
Erie	2	0
Huntingdon	1	0
Lawrence	1	0

County	Crashes	Deaths
Lehigh	1	0
Montgomery	2	0
Washington	1	0
Cambria	0	0
Cameron	0	0
Carbon	0	0
Centre	0	0
Clarion	0	0
Clearfield	0	0
<b>TOTAL</b>	<b>17</b>	<b>0</b>

—WHEN THEY HAPPENED—

**Crashes by Month**

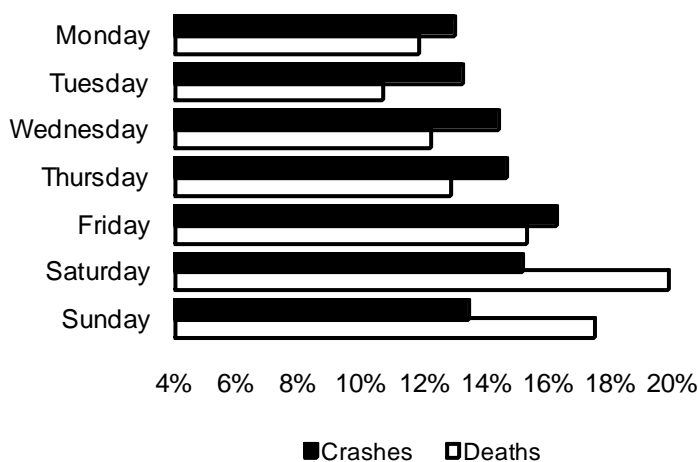


Month	Crashes	Deaths
January	12,300 (10.1%)	88 (7.0%)
February	9,070 (7.5%)	80 (6.4%)
March	8,498 (7.0%)	77 (6.1%)
April	8,527 (7.0%)	94 (7.5%)
May	9,925 (8.2%)	123 (9.8%)
June	9,646 (8.0%)	119 (9.5%)
July	9,569 (7.9%)	120 (9.6%)
August	9,319 (7.7%)	134 (10.7%)
September	9,526 (7.9%)	115 (9.2%)
October	11,270 (9.3%)	111 (8.8%)
November	10,279 (8.5%)	102 (8.1%)
December	13,313 (11.0%)	93 (7.4%)
<b>TOTAL</b>	<b>121,242 (100.0%)</b>	<b>1,256 (100.0%)</b>

All Crashes

**Crashes by Day of Week**

More crashes and deaths occurred on Friday and Saturday. The number of deaths 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	Deaths
Monday	15,704 (13.0%)	148 (11.8%)
Tuesday	16,032 (13.2%)	134 (10.7%)
Wednesday	17,463 (14.4%)	153 (12.2%)
Thursday	17,726 (14.6%)	161 (12.8%)
Friday	19,709 (16.3%)	192 (15.3%)
Saturday	18,351 (15.1%)	249 (19.8%)
Sunday	16,257 (13.4%)	219 (17.4%)
<b>TOTAL</b>	<b>121,242 (100.0%)</b>	<b>1,256 (100.0%)</b>

### Crashes by Hour of Day

Some hours of the day are more dangerous than others with regard to crashes and deaths. Not surprisingly, crashes and deaths 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 2.8% of all crashes in 2009 occurred in the 2:00 AM hour, but 5.3% of all deaths—the seventh highest percentage—occurred then. The higher volume of traffic itself is a factor during peak traffic hours, particularly the rush-hours.

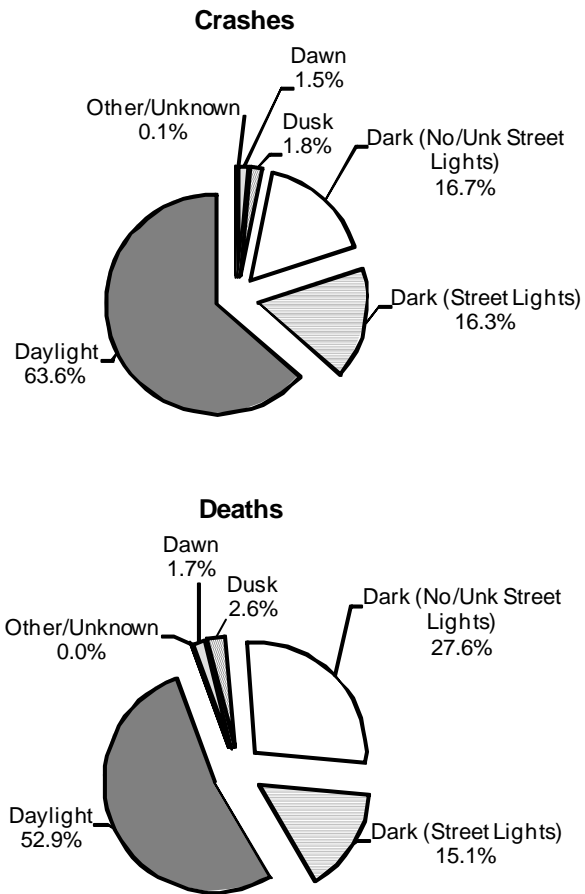
All Crashes



Hour	Crashes	Deaths
12:00AM	2,986	47
01:00AM	2,814	56
02:00AM	3,346	67
03:00AM	2,105	43
04:00AM	1,469	14
05:00AM	1,955	23
06:00AM	3,411	38
07:00AM	5,940	31
08:00AM	5,710	22
09:00AM	4,920	35
10:00AM	4,964	37
11:00AM	5,473	34
12:00PM	6,409	51
01:00PM	6,398	70
02:00PM	7,421	71
03:00PM	9,156	91
04:00PM	8,836	87
05:00PM	8,613	72
06:00PM	6,761	61
07:00PM	5,005	61
08:00PM	4,517	64
09:00PM	4,308	68
10:00PM	4,007	56
11:00PM	3,533	57

### Crashes by Light Level

In 2009, 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, deaths in 2009 occurred slightly more often during non-daylight hours (dark and dusk/dawn conditions). If 2009 deaths per 1000 crashes are compared (Daylight—8.6 deaths per 1000 crashes versus Non-Daylight—13.4 deaths per 1000 crashes), it is apparent that non-daylight crashes resulted in deaths more often than daylight crashes.



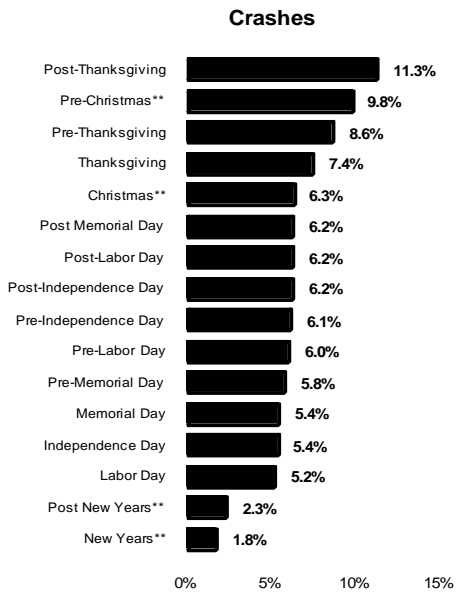
All Crashes

Light Level	Crashes	Deaths
Daylight	77,092	665
Dark (Street Lights)	19,753	190
Dark (No/Unk Street Lights)	20,287	347
Dusk	2,163	33
Dawn	1,788	21
Other/Unknown	159	0
<b>TOTAL</b>	<b>121,242</b>	<b>1,256</b>

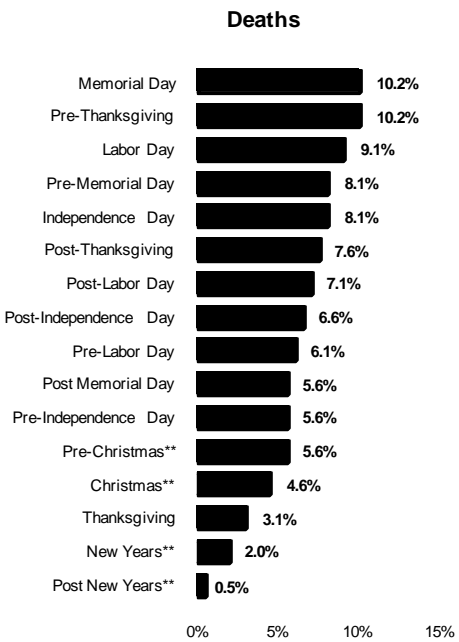
### Crashes by Holiday

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 deaths, respectively, for each holiday period. The table shows a breakdown of crashes and deaths for each holiday period in 2009.

All Crashes



Period*	Crashes	Deaths
New Years**	295	4
Post New Years**	382	1
Pre-Memorial Day	965	16
Memorial Day	897	20
Post Memorial Day	1,040	11
Pre-Independence Day	1,020	11
Independence Day	894	16
Post-Independence Day	1,037	13
Pre-Labor Day	1,007	12
Labor Day	859	18
Post-Labor Day	1,040	14
Pre-Thanksgiving	1,434	20
Thanksgiving	1,239	6
Post-Thanksgiving	1,879	15
Pre-Christmas**	1,630	11
Christmas**	1,055	9
<b>TOTAL</b>	<b>16,673</b>	<b>197</b>



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

\*\* Not part of a holiday weekend in 2009.



## 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 mature 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. Mature 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	32,669	538
Drinking Driver	10,871	215
Careless/Illegal Passing	3,733	70
Distracted Driver	12,390	57
Improper Turning-Related	11,766	52
Proceeded Without Clearance	7,517	44
Tailgating	4,746	21
Drowsy Drivers	2,181	13

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

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

As the table below shows, mature 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)	Mature Drivers (65-74)	Mature Drivers (75+)
<b>Single Vehicle Crash</b>	47.0% 56,894 crashes	41.6% 13,797 crashes	21.2% 2,027 crashes	20.9% 1,588 crashes
<b>Multiple Vehicle Crash</b>	53.0% 64,184 crashes	58.4% 19,364 crashes	78.8% 7,552 crashes	79.1% 6,005 crashes

Drivers

### Drivers in Crashes by Age Group

Looking at the 2009 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	2,116	68,469	3.1%
17	5,862	99,703	5.9%
18	7,011	124,941	5.6%
19	6,520	140,471	4.6%
20	5,853	143,337	4.1%
21	5,652	143,192	3.9%
22-24	14,982	427,610	3.5%
25-29	19,174	693,281	2.8%
30-39	29,035	1,359,929	2.1%
40-54	42,692	2,566,298	1.7%
55-59	10,826	811,928	1.3%
60-64	8,116	684,953	1.2%
65-69	5,361	501,389	1.1%
70-74	3,758	377,527	1.0%
75 and Over	7,466	710,016	1.1%
Unknown	427	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 Mature Drivers by Crash Type

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

Crash Type	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
<b>Non-Collision</b>	3.6%	2.9%	1.9%	1.0%
	4,380 crashes	947 crashes	177 crashes	75 crashes
<b>Rear-End</b>	21.2%	22.6%	28.5%	23.0%
	25,663 crashes	7,506 crashes	2,726 crashes	1,744 crashes
<b>Head-On</b>	4.1%	4.6%	5.0%	5.5%
	4,947 crashes	1,522 crashes	483 crashes	418 crashes
<b>Backing Up</b>	0.1%	0.1%	0.2%	0.3%
	167 crashes	39 crashes	17 crashes	21 crashes
<b>Angle</b>	25.6%	28.1%	39.7%	46.9%
	31,004 crashes	9,323 crashes	3,803 crashes	3,558 crashes
<b>Sideswipe</b>	5.5%	4.6%	6.2%	6.0%
	6,704 crashes	1,517 crashes	593 crashes	452 crashes
<b>Hit Fixed Object</b>	33.5%	34.6%	14.2%	14.2%
	40,604 crashes	11,470 crashes	1,361 crashes	1,075 crashes
<b>Hit Pedestrian</b>	3.2%	1.1%	2.4%	2.3%
	3,866 crashes	378 crashes	232 crashes	174 crashes
<b>Other</b>	3.1%	1.4%	2.0%	1.0%
	3,743 crashes	459 crashes	187 crashes	76 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 Mature Drivers

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

	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
<b>Intersection</b>	37.6%	38.7%	50.1%	53.9%
	45,511 crashes	12,839 crashes	4,796 crashes	4,096 crashes
<b>Non-Intersection</b>	62.4%	61.3%	49.9%	46.1%
	75,567 crashes	20,322 crashes	4,783 crashes	3,497 crashes

## Alcohol-Related Crashes

### Alcohol Overview

- ▶ In Pennsylvania, drinking and driving remains a top safety issue. In 2009, alcohol-related crashes decreased to 12,712 from 12,752 alcohol-related crashes in 2008. Alcohol-related deaths decreased to 449 from 534 in 2008.
- ▶ Of particular concern is the involvement of drinking drivers under the age of 21. 27% of the driver deaths in the 16-20 age group were drinking drivers, up from 22% in 2008. Improvement in this age group is a very important need.
- ▶ Of equal focus is the 21 to 25 age group, in which 44% of the driver deaths were drinking drivers. This age group had the fifth worst percentage of all groups, and was down from 55% in 2008. The 26 to 30 age group increased to 51% from 48% in 2008.
- ▶ In 2009, alcohol-related deaths were 36% of the total traffic deaths, the same as in 2007 and 2008.
- ▶ 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).

Alcohol-  
Related

### 2009 Briefs

- ▶ 449 people died in alcohol-related crashes.
- ▶ 88% of the alcohol-related occupant deaths (drivers and passengers) were in the vehicle driven by the drinking driver; 70% were the drinking drivers themselves.
- ▶ 73% of the drinking drivers in traffic crashes were male.
- ▶ 72% of the alcohol-related crashes were during the hours of darkness, usually on weekends.
- ▶ On average each day, 35 alcohol-related traffic crashes occurred.
- ▶ On average each day, 1.2 persons were killed in alcohol-related traffic crashes.
- ▶ On average each day, 26 persons were injured in alcohol-related traffic crashes.

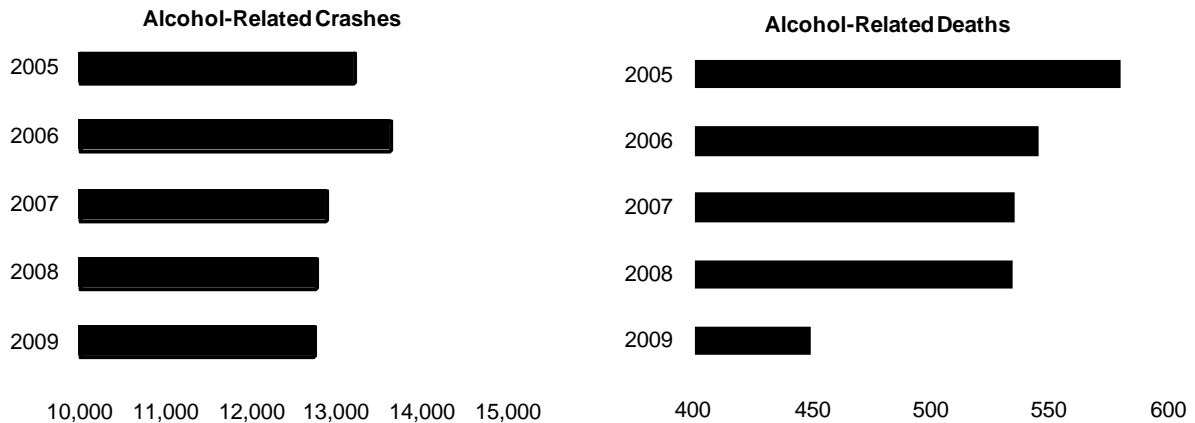
### Alcohol Involvement in Crashes

Although alcohol-related crashes accounted for approximately 10% of the total crashes in 2009, they resulted in 36% of all persons killed in crashes. Alcohol-related crashes were 4.5 times more likely to result in death than those not related to alcohol (3.1% of the alcohol-related crashes resulted in death, 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	Deaths	Injury Crashes	Injuries	PDO Crashes
Alcohol-Related	397 (34.7%)	449 (35.8%)	6,887 (11.1%)	9,536 (10.9%)	5,428 (9.3%)
Non-Alcohol-Related	746 (65.3%)	807 (64.3%)	54,991 (88.9%)	77,596 (89.1%)	52,791 (90.7%)
<b>TOTAL</b>	<b>1,143 (100.0%)</b>	<b>1,256 (100.0%)</b>	<b>61,878 (100.0%)</b>	<b>87,132 (100.0%)</b>	<b>58,219 (100.0%)</b>

### Alcohol-Related Crashes—Five-Year Trends

Alcohol-related crashes and fatalities both decreased in 2009, and were the lowest totals in the last five years. Both categories are trending in a good direction.



Alcohol-Related

	2005	2006	2007	2008	2009
Crashes	13,179	13,616	12,867	12,752	12,712
<i>Fatal Crashes</i>	537	510	497	498	397
<i>Injury Crashes</i>	7,390	7,580	7,015	6,911	6,887
<i>PDO Crashes</i>	5,252	5,526	5,355	5,343	5,428
Deaths	580	545	535	534	449
Injuries	10,423	10,529	9,825	9,565	9,536
Fatal Crashes per 100,000 Licensed Drivers	6.3	6.0	5.8	5.8	4.6
Deaths per 100,000 Licensed Drivers	6.8	6.4	6.2	6.2	5.2

### Victims of Alcohol-Related Fatal Crashes

There were 399 driver and passenger deaths in alcohol-related crashes in 2009, while 352 (88%) were the drinking drivers or their passengers.

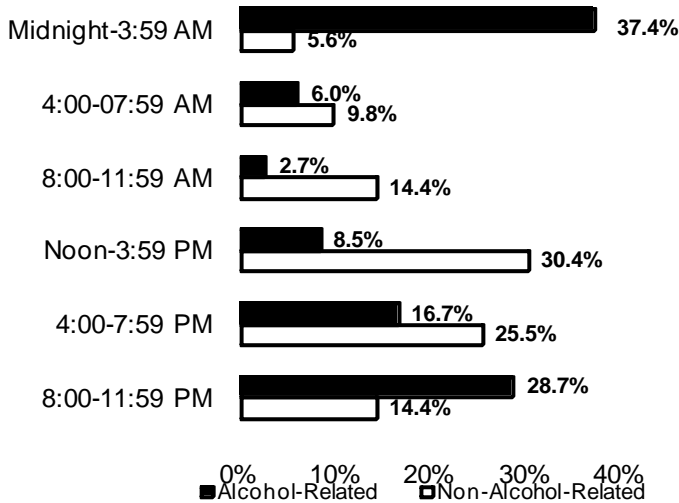
Persons Involved	Deaths
<b>Drivers</b>	<b>307</b>
<i>Drinking Drivers</i>	280 (91.2%)
<i>Non-Drinking Drivers</i>	27 (8.8%)
<b>Passengers</b>	<b>92</b>
<i>Passengers with Drinking Driver</i>	72 (78.3%)
<i>Passengers with Non-Drinking Driver</i>	20 (21.7%)
<b>Pedestrians</b>	<b>45</b>
<i>Drinking Pedestrian</i>	37 (82.2%)
<i>Non-Drinking Pedestrian</i>	8 (17.8%)
<b>TOTAL DEATHS*</b>	<b>449</b>

\*Includes 5 victims, status unknown

Alcohol-Related

### Victims of Fatal Crashes by Time of Day

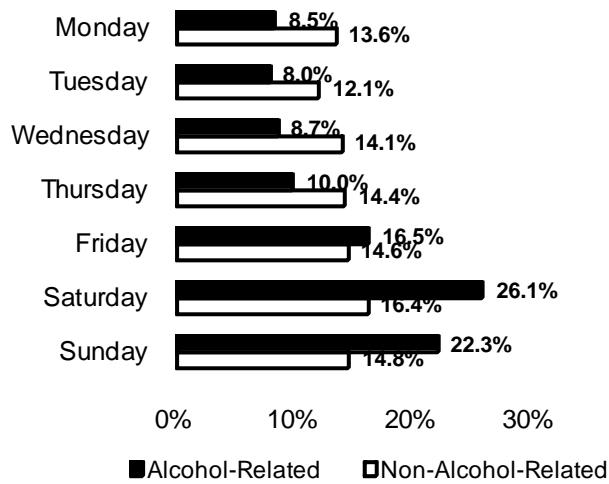
Alcohol-related crashes occurring between 8:00 PM and 4:00 AM produced the vast majority of deaths (66% of alcohol-related deaths). In contrast, over half of the deaths (56%) from non-alcohol-related crashes resulted from crashes occurring between noon and 8:00 PM.



Time of Occurrence	Non-Alcohol-Related	Alcohol-Related
Midnight-3:59 AM	45	168
4:00-07:59 AM	79	27
8:00-11:59 AM	116	12
Noon-3:59 PM	245	38
4:00-7:59 PM	206	75
8:00-11:59 PM	116	129
Time Unknown	0	0
<b>TOTAL DEATHS</b>	<b>807</b>	<b>449</b>

### Victims of Fatal Crashes by Day of Week

Just 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 Tuesday.

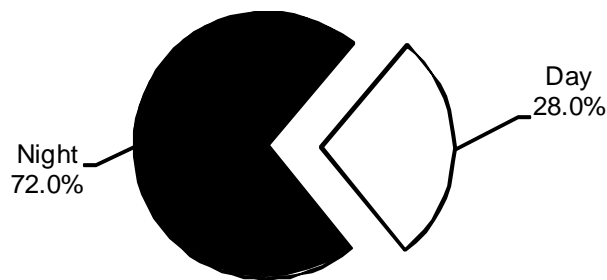


Day of Occurrence	Non-Alcohol-Related	Alcohol-Related
Monday	110	38
Tuesday	98	36
Wednesday	114	39
Thursday	116	45
Friday	118	74
Saturday	132	117
Sunday	119	100
<b>TOTAL DEATHS</b>	<b>807</b>	<b>449</b>

Alcohol-Related

### Alcohol-Related Crashes—Day vs. Night

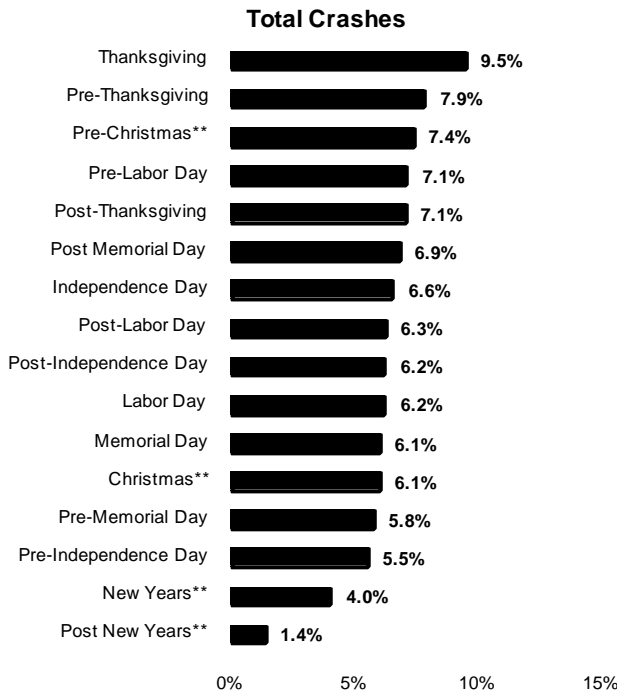
72% of alcohol-related crashes occurred at night. The graph below shows the breakdown of alcohol-related crashes by day and night.



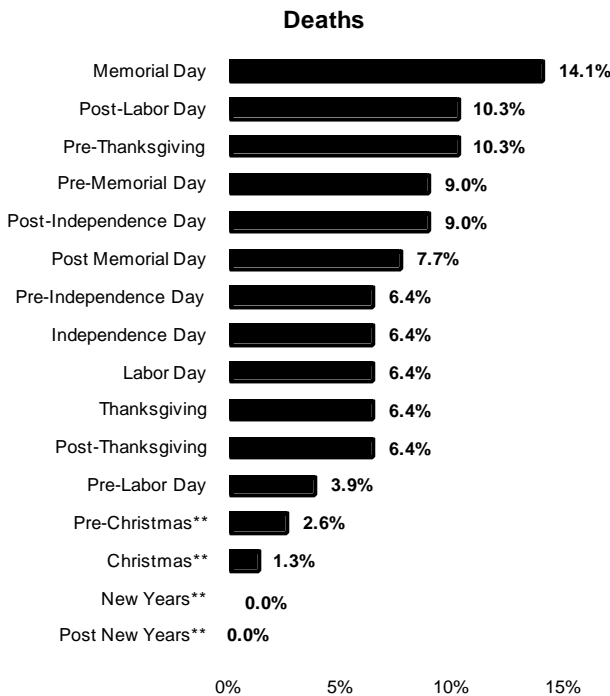
### Alcohol-Related Holiday Crashes

In 2009, 14% of all holiday crashes involved alcohol use; however, 40% of deaths which occurred during holiday weekends were related to alcohol use. (See *Crashes by Holiday*, page 22.)

Alcohol-Related



Period*	Crashes	Deaths
New Years**	94	0
Post New Years**	33	0
Pre-Memorial Day	135	7
Memorial Day	141	11
Post Memorial Day	160	6
Pre-Independence Day	129	5
Independence Day	153	5
Post-Independence Day	145	7
Pre-Labor Day	166	3
Labor Day	145	5
Post-Labor Day	146	8
Pre-Thanksgiving	183	8
Thanksgiving	222	5
Post-Thanksgiving	165	5
Pre-Christmas**	173	2
Christmas**	141	1
<b>TOTAL</b>	<b>2,331</b>	<b>78</b>



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

\*\* Not part of a holiday weekend in 2009.



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

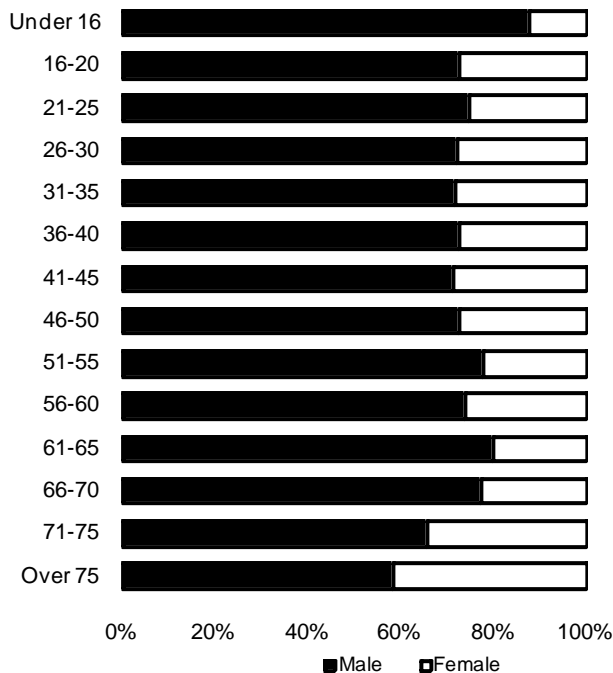
Motorcyclists had the largest percentage of drinking drivers to total drivers compared to the drivers of other types of vehicles. Drinking drivers of light trucks, vans, and sport utility vehicles were also above the average for drivers of all vehicle types. Bus and heavy truck drivers accounted for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

<b>Total Drivers in Crashes</b> 195,238	Passenger Car	118,042	
	Lt Trk/SUV/Van	65,371	
	Heavy Truck	5,585	
	Motorcycle	3,836	
	Bus	1,048	
	Other	1,356	
<b>Drinking Drivers in Crashes</b> 13,420 (6.9% of total)	Passenger Car	8,101	(6.9% of total)
	Lt Trk/SUV/Van	4,737	(7.2% of total)
	Heavy Truck	60	(1.1% of total)
	Motorcycle	427	(11.1% of total)
	Bus	19	(1.8% of total)
	Other	76	(5.6% of total)

Alcohol-Related

### Drinking Drivers in Crashes by Age and Sex

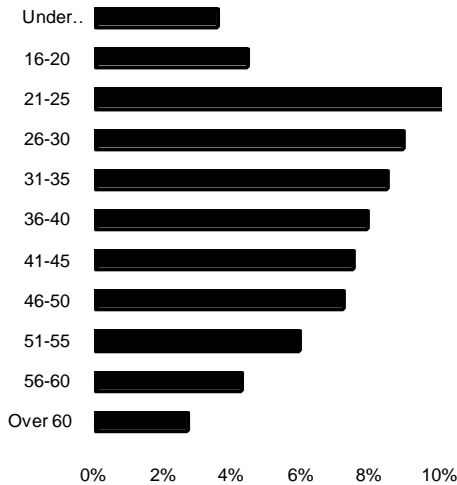
In 2009, roughly three out of four drinking drivers in crashes were male (across most age groups), with only slight variations among the age groups. The table below does not include an additional 418 drivers for whom age and/or sex were not known.



Age Group	Male	Female	Total
Under 16	7	1	8
16-20	934	350	1,284
21-25	2,231	760	2,991
26-30	1,287	501	1,788
31-35	941	368	1,309
36-40	924	347	1,271
41-45	858	347	1,205
46-50	842	319	1,161
51-55	657	186	843
56-60	355	125	480
61-65	246	61	307
66-70	112	33	145
71-75	57	30	87
Over 75	72	51	123
<b>Total</b>	<b>9,523</b>	<b>3,479</b>	<b>13,002</b>

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

In 2009, 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 35, 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 8 drinking drivers.

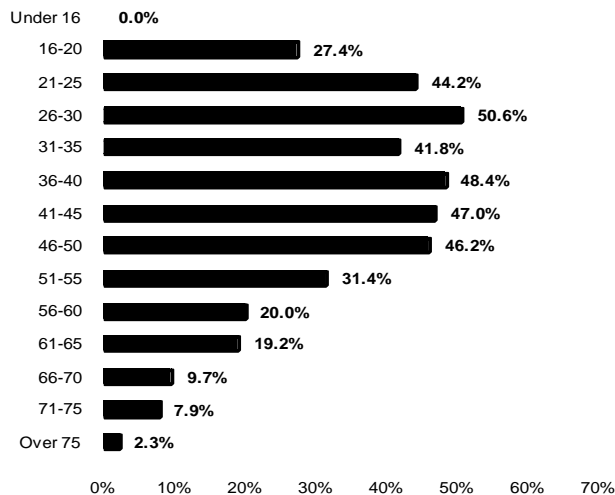


Age Group	Drinking Driver	Non-Drinking Driver
Under 16	8 (3.6%)	216 (96.4%)
16-20	1,286 (4.4%)	27,836 (95.6%)
21-25	2,992 (10.8%)	24,732 (89.2%)
26-30	1,791 (8.9%)	18,315 (91.1%)
31-35	1,310 (8.5%)	14,184 (91.6%)
36-40	1,271 (7.9%)	14,788 (92.1%)
41-45	1,207 (7.5%)	14,936 (92.5%)
46-50	1,162 (7.2%)	14,951 (92.8%)
51-55	844 (5.9%)	13,361 (94.1%)
56-60	480 (4.2%)	10,846 (95.8%)
Over 60	662 (2.7%)	23,920 (97.3%)

Alcohol-Related

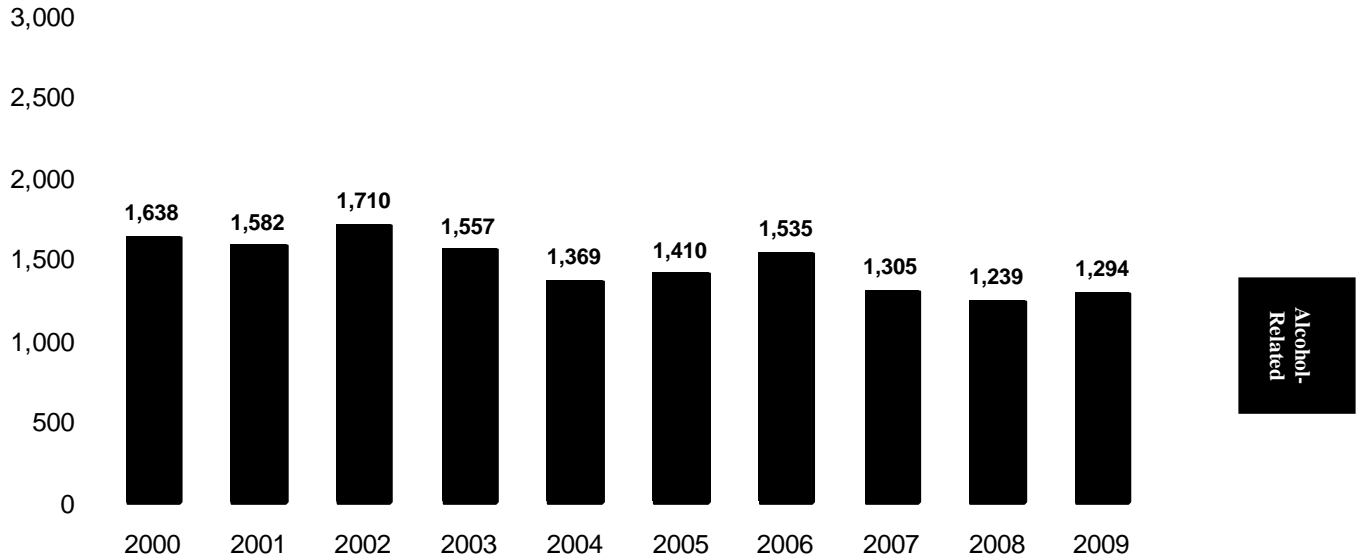
### Drinking Driver Deaths as a Percentage of Total Driver Deaths, by Age Group

The graph below shows drinking driver deaths as a percentage of total driver deaths within each respective age group for 2009 crashes. The age group from 26 to 30 had the highest percentage, with over 50% of the driver deaths in this age group being a drinking driver. The 16-20 age group increased from 21.6% in 2008. In 2009, 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 2008 there has been a downward trend with 2005 and 2006 disrupting the steady decrease.



**Note:** Beginning with 2003 data, alcohol involvement criteria changed to account for both BAC levels and suspected involvement when BAC is unknown. The effect can mostly be seen in the alcohol related fatalities for years 2003 and after.

## Seat Belts, Child Safety Seats, and Air Bags

### Restraints Overview

#### Safety Belts

- Pennsylvania's seat belt law requires drivers and front seat passengers to be properly buckled up 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 law that became effective on February 21, 2003.
- A driver who is under 18 years of age may not operate a motor vehicle in which 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 injury to front seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%. For light truck occupants, seat belts reduce the risk of fatal injury by 60% and moderate-to-critical injury 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 would wear 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 children under the age of four to be properly restrained in a child passenger restraint system whenever riding anywhere in the vehicle. Children age four and older, but under age eight, are required to be in an appropriately fitting child booster seat whenever riding anywhere in the vehicle due to law that became effective on February 21, 2003.
- Research shows that child safety seats, when properly installed, reduce the risk of death 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 under 1 year of age **and** 20 pounds should ride in a rear-facing position. Toddlers should ride forward-facing and upright from age 1 to about 40 pounds. Small children should use a belt positioning booster seat from 40 pounds to about 80 pounds and 4 feet 9 inches tall. The belt positioning booster seat must be used with a lap/shoulder belt.
- Children should ride in the rear seat whenever possible, and should always be properly buckled.

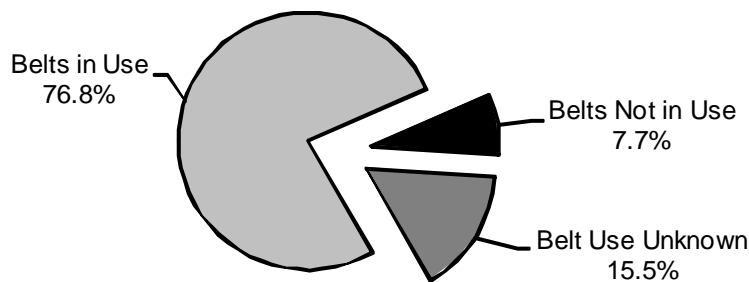
#### Air Bag Safety

- Driver and front seat passenger air bags have been a requirement 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.

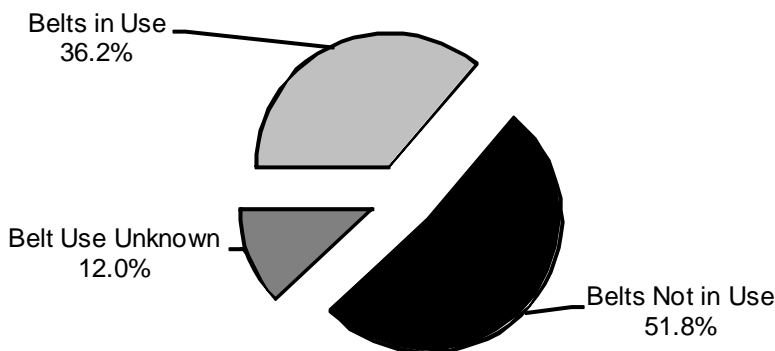
### Seat Belt Use in Crashes—Total People Involved

Seat belts have proven to be effective in reducing the severity of injuries sustained in a crash. In 2009, as shown in the two pie graphs below, 76.8% of all people involved in crashes were wearing seat belts. Many more people not wearing seat belts died in crashes than those who did. The table at the bottom shows the total number of people involved in crashes in 2009 by severity of injury and belt use.

**Total People Involved in Crashes**



**Total Deaths**



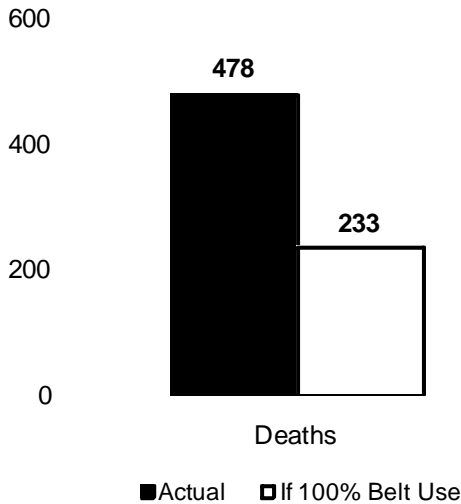
	Belts in Use	Belts Not in Use	Belt Use Unknown
Killed	316	453	105
Major Injury	1,115	941	408
Moderate Injury	7,359	2,375	1,480
Minor Injury	31,192	4,621	5,148
Unk Injury Sev	13,979	2,245	5,228
No Injury	149,970	9,677	28,901
<b>TOTAL</b>	<b>203,931</b>	<b>20,312</b>	<b>41,270</b>

**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 Deaths and Injuries

The table and graph below give estimates of the impact that 100% seat belt use would have on traffic deaths and injuries. The numbers in parentheses, in the last row of the table below, are the estimated decreases in 2009 deaths and injuries if 100% seat belt use was achieved. (Note: The data below is for passenger cars only.) The estimated economic savings of 100% belt use for occupants of just passenger cars in 2009 would have been **\$2,151,112,459** or approximately **\$171** for every man, woman, and child in Pennsylvania. More importantly, 245 people would have survived if they had worn their belts.

	Deaths	Injuries			
		Major	Moderate	Minor	None
Belts Used	210	719	4,749	28,392	80,594
Belts Not Used	268	576	1,407	4,376	5,384
<b>TOTAL</b>	<b>478</b>	<b>1,295</b>	<b>6,156</b>	<b>32,768</b>	<b>85,978</b>
<b>If 100% Belt Use</b>	<b>233</b>	<b>804</b>	<b>5,280</b>	<b>31,357</b>	<b>89,001</b>
<b>Net Increase/(Decrease)</b>	<b>(245)</b>	<b>(491)</b>	<b>(876)</b>	<b>(1,411)</b>	<b>3,023</b>



*Note:* PENNDOT’s cost estimating procedures were revised in 2008 dollars. “No Belts” is included in “Belts Not Used”.

Seat Belts,  
Etc.

### Seat Belt Use in Crashes—Historical Data

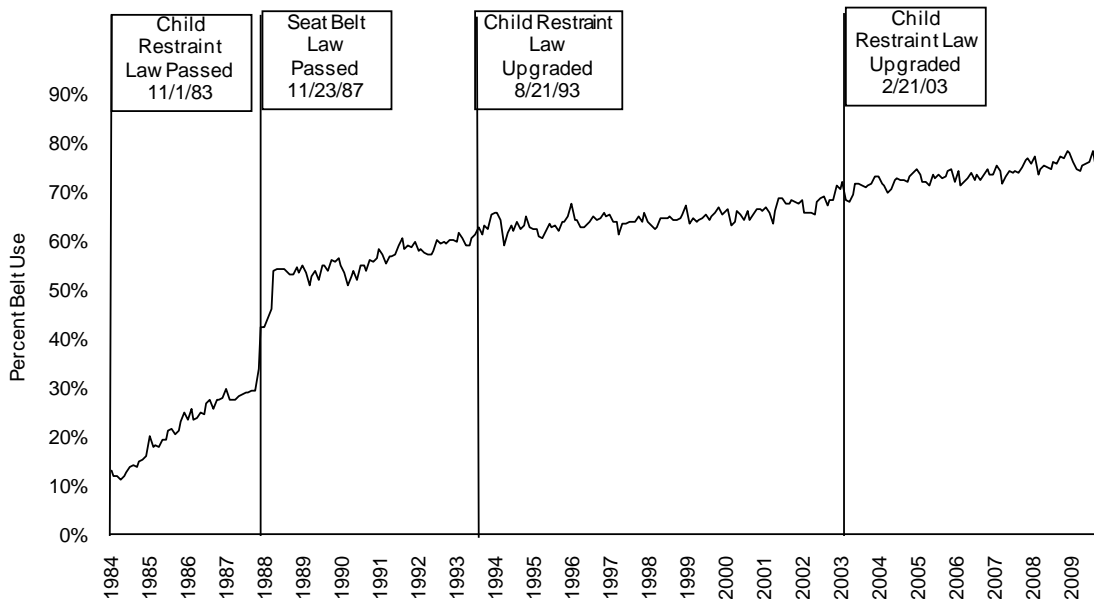
On November 1, 1983, Pennsylvania passed a primary law requiring drivers to secure children under age four in an approved child passenger restraint system when riding in a passenger car, Class I truck, Class II truck, classic motor vehicle, antique motor vehicle, or motor home registered in Pennsylvania.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

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

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

Effective February 21, 2003, the child passenger restraint law was upgraded to require children ages 4 through 7 to be in an appropriately fitting child booster seat and those children ages 8 through 17 to 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.

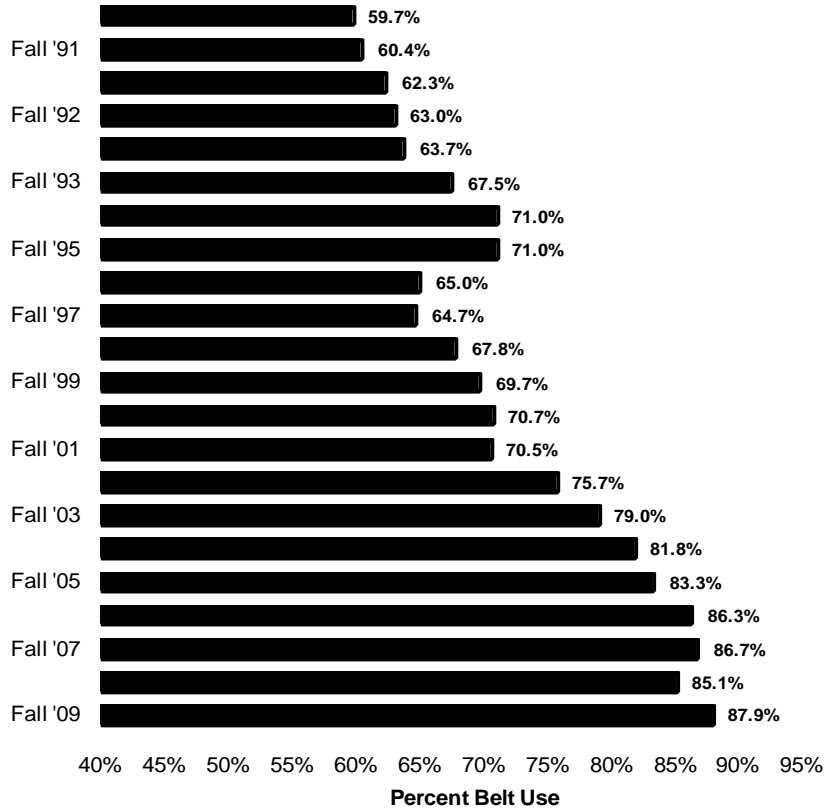


**Note:** Data shown for passenger cars only.



### 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 two years, most likely due to the redesign of the study methodology in 2008, which provided more detailed accounts.



Seat Belts,  
Etc.

### 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 four in a child passenger restraint system while sitting anywhere in the vehicle. As shown in the table below (for 2005-2009 crashes involving children under age four), the percentages of deaths and injuries (within restraint type by row) were lower when restraints were used. From 2005-2009, 82% of the children under age four who were involved in crashes and restrained in a child seat sustained no injury.

Child Restraint	Deaths	Injuries					No Injury	Total Persons
		Major	Moderate	Minor	Unknown			
Child Seat In Use	21 (0.1%)	70 (0.3%)	225 (0.8%)	2,227 (8.2%)	2,440 (9.0%)	22,112 (81.6%)	27,095	
No Restraint In Use	5 (0.3%)	26 (1.3%)	39 (1.9%)	277 (13.6%)	478 (23.5%)	1,211 (59.5%)	2,036	
Other Restraint In Use	0 (0.0%)	6 (0.4%)	31 (1.9%)	195 (12.1%)	162 (10.0%)	1,223 (75.6%)	1,617	

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

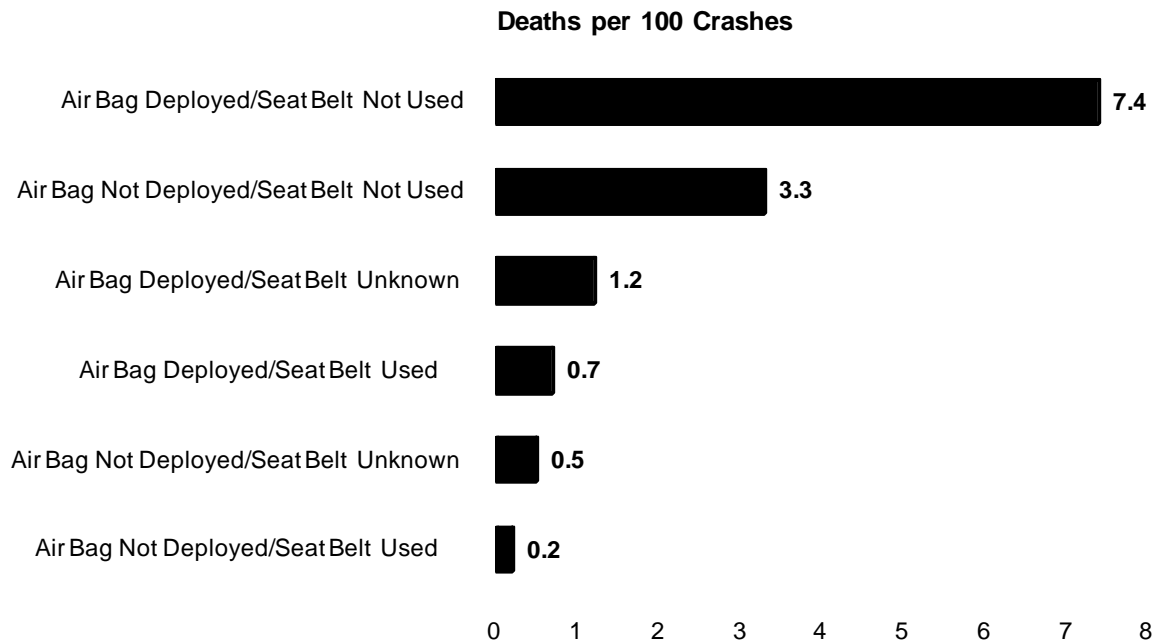


### Air Bag Deployment in Crashes—Injuries and Deaths

Air bags are becoming more prevalent for vehicles in crashes due to the manufacturing laws of the late 1990s, but many vehicles in crashes still do not have airbags as there are still many 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	Deaths	Injuries					Total Persons
			Major	Moderate	Minor	Unknown	No Injury	
None	n/a	267 (0.2%)	868 (0.8%)	3,930 (3.5%)	14,856 (13.1%)	11,491 (10.2%)	81,788 (72.3%)	113,200
Air Bag Deployed	Used	174 (0.4%)	586 (1.4%)	3,252 (8.0%)	10,248 (25.2%)	4,655 (11.5%)	21,715 (53.5%)	40,630
Air Bag Deployed	Not Used	231 (4.9%)	376 (8.0%)	805 (17.2%)	1,289 (27.5%)	738 (15.7%)	1,249 (26.6%)	4,688
Air Bag Deployed	Unknown	42 (0.8%)	165 (3.1%)	475 (8.8%)	1,166 (21.7%)	1,331 (24.7%)	2,202 (40.9%)	5,381
Air Bag Not Deployed	Used	55 (0.1%)	209 (0.3%)	1,905 (2.5%)	10,379 (13.5%)	4,608 (6.0%)	59,576 (77.6%)	76,732
Air Bag Not Deployed	Not Used	75 (2.0%)	153 (4.0%)	445 (11.5%)	1,063 (27.6%)	403 (10.5%)	1,716 (44.5%)	3,855
Air Bag Not Deployed	Unknown	11 (0.3%)	47 (1.2%)	142 (3.6%)	512 (12.9%)	610 (15.3%)	2,654 (66.8%)	3,976
Unknown If Deployed	n/a	14 (0.9%)	24 (1.5%)	85 (5.4%)	261 (16.5%)	261 (16.5%)	939 (59.3%)	1,584

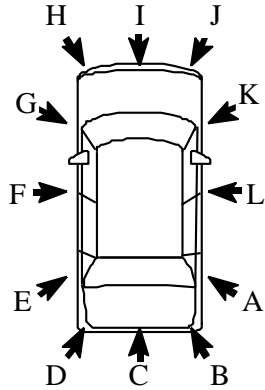
In crashes that are severe enough to deploy an airbag (for vehicles and seats so equipped), the data below shows that you are over 10 times more likely to die if you are not wearing a seat belt (7.4 deaths vs. 0.7 deaths per 100 crashes).



Seat Belts, Etc.

### 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 2009 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 902 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)	2,312	803	325 (26.4%)	907 (73.6%)	277
Right Rear (B)	4,961	1,769	440 (16.7%)	2,193 (83.3%)	559
Center Rear (C)	27,188	9,912	902 (6.3%)	13,448 (93.7%)	2,926
Left Rear (D)	4,526	1,620	365 (15.2%)	2,039 (84.8%)	502
Left Side Rear (E)	2,422	861	293 (22.7%)	999 (77.3%)	269
Left Side Center (F)	6,420	2,188	1,094 (32.7%)	2,254 (67.3%)	884
Left Side Forward (G)	6,298	1,997	1,213 (33.9%)	2,361 (66.1%)	727
Left Front (H)	25,051	7,160	6,509 (42.7%)	8,723 (57.3%)	2,659
Center Front (I)	60,960	15,883	20,373 (53.5%)	17,693 (46.5%)	7,011
Right Front (J)	23,826	6,924	6,523 (46.5%)	7,504 (53.5%)	2,875
Right Side Forward (K)	9,187	2,860	2,020 (38.7%)	3,205 (61.3%)	1,102
Right Side Center (L)	7,439	2,489	1,386 (35.6%)	2,507 (64.4%)	1,057
Other	5,634	1,591	862 (32.6%)	1,780 (67.4%)	1,401
None	3,170	1,262	205 (12.8%)	1,392 (87.2%)	311
<b>TOTAL</b>	<b>189,394</b>	<b>57,319</b>	<b>42,510 (38.8%)</b>	<b>67,005 (61.2%)</b>	<b>22,560</b>

Seat Belts, Etc.

### 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 moderate and major injuries, and even death, during crashes involving air bag deployment. (Percentages listed in the table are by age group.)

Age Group	Deaths	Injuries					Total Persons
		Major	Moderate	Minor	Unknown	No Injury	
0-4	0 (0.0%)	1 (3.5%)	0 (0.0%)	7 (24.1%)	6 (20.7%)	15 (51.7%)	29
5-8	0 (0.0%)	3 (3.0%)	6 (6.1%)	32 (32.3%)	11 (11.1%)	47 (47.5%)	99
9-12	0 (0.0%)	5 (1.7%)	15 (5.2%)	77 (26.5%)	39 (13.4%)	155 (53.3%)	291
13-64	115 (0.3%)	491 (1.4%)	2,759 (7.6%)	8,954 (24.7%)	3,927 (10.9%)	19,943 (55.1%)	36,189
65-74	17 (0.9%)	38 (1.9%)	238 (11.9%)	581 (28.9%)	301 (15.0%)	833 (41.5%)	2,008
75+	42 (2.1%)	48 (2.4%)	234 (11.6%)	597 (29.6%)	371 (18.4%)	722 (35.9%)	2,014
<b>Total</b>	<b>174 (0.4%)</b>	<b>586 (1.4%)</b>	<b>3,252 (8.0%)</b>	<b>10,248 (25.2%)</b>	<b>4,655 (11.5%)</b>	<b>21,715 (53.5%)</b>	<b>40,630</b>

Age Group	Deaths	Injuries					Total Persons
		Major	Moderate	Minor	Unknown	No Injury	
0-4	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	2
5-8	0 (0.0%)	0 (0.0%)	1 (25.0%)	2 (50.0%)	1 (25.0%)	0 (0.0%)	4
9-12	1 (6.3%)	1 (6.3%)	2 (12.5%)	5 (31.3%)	3 (18.8%)	4 (25.0%)	16
13-64	186 (4.2%)	358 (8.2%)	757 (17.3%)	1,212 (27.7%)	683 (15.6%)	1,187 (27.1%)	4,383
65-74	17 (12.8%)	7 (5.3%)	23 (17.3%)	32 (24.1%)	23 (17.3%)	31 (23.3%)	133
75+	27 (18.0%)	10 (6.7%)	22 (14.7%)	36 (24.0%)	28 (18.7%)	27 (18.0%)	150
<b>Total</b>	<b>231 (4.9%)</b>	<b>376 (8.0%)</b>	<b>805 (17.2%)</b>	<b>1,289 (27.5%)</b>	<b>738 (15.7%)</b>	<b>1,249 (26.6%)</b>	<b>4,688</b>

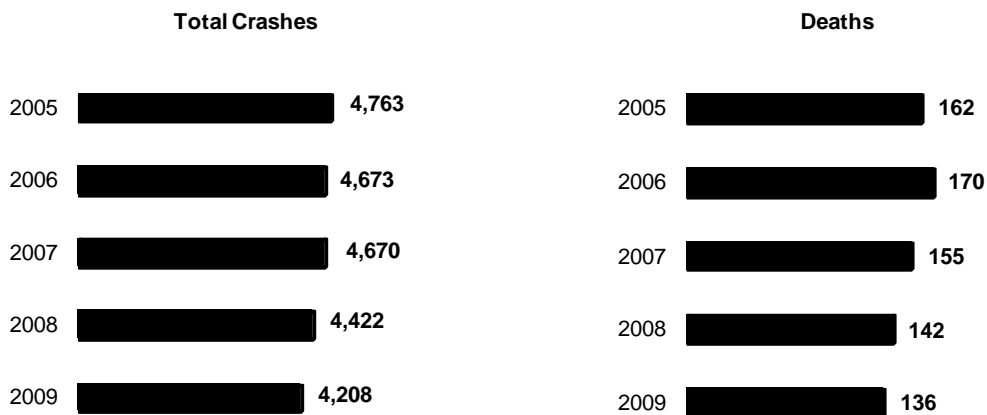
## ***Pedestrian and Bicycle Crashes***

### ***Pedestrian and Bicycles Overview***

- ▶ Pedestrian-related crashes represent 3.5% of the total reported traffic crashes; however, they account for 10.8% of all traffic crash deaths. (See also *Pennsylvania County Crashes*, pages 62, 63, and 68.)
  
- ▶ Bicycle crashes represent 1.1% of the total reported crashes and 1.3% of all traffic deaths. Although these percentages are small, they still represent 16 bicyclist deaths and 1,380 injuries in 2009.

### ***Pedestrian Crashes—Five-Year Trends***

Reported crashes involving pedestrians has slightly decreased in each of the last five years. Pedestrian deaths have fluctuated over the same period, but have gone down the last two years.

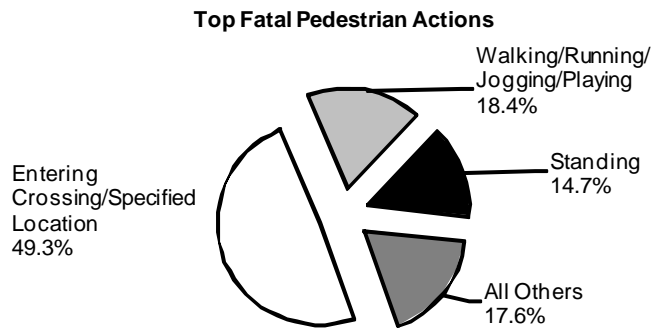
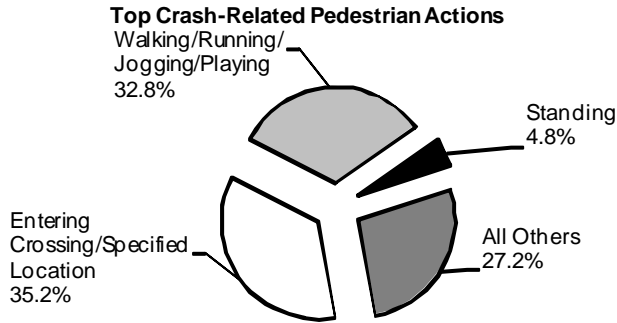


Year	Total Crashes	Deaths
2005	4,763	162
2006	4,673	170
2007	4,670	155
2008	4,422	142
2009	4,208	136



### Pedestrian-Related Crashes

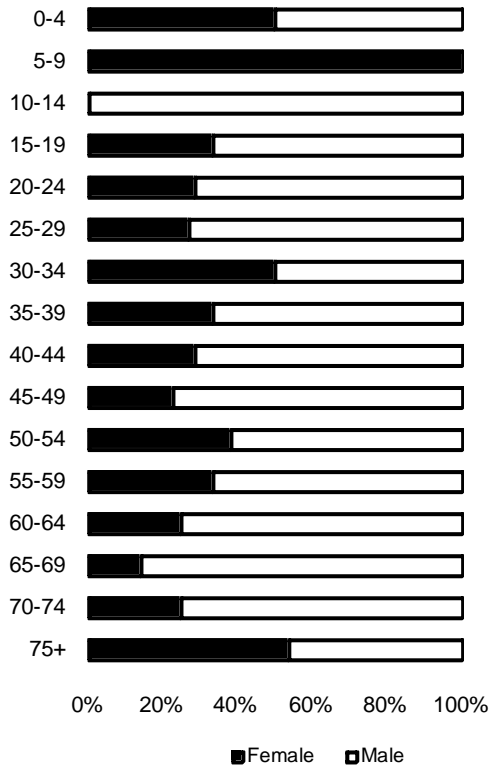
Referring to the table and pie charts below, most pedestrian crashes and deaths occur while pedestrians are “entering crossing/specified location.” This means that a pedestrian was most likely crossing the street at an intersection, mid-block crossing, or driveway entrance.



Pedestrian Action	Deaths	Pedestrians Involved
Entering Crossing/Specified Location	67	1,559
Walking/Running/Jogging/Playing	25	1,450
Working	5	74
Pushing a Vehicle	0	6
Working on Vehicle	2	20
Standing	20	211
Approaching/Leaving a Vehicle	3	161
Other/Unknown	14	942
<b>Total</b>	<b>136</b>	<b>4,423</b>

### Pedestrian Deaths by Age and Sex

Pedestrians aged 75 and over represent a sizable portion of pedestrian deaths as seen in the chart below. Overall, male pedestrian deaths were 64% of all pedestrian deaths, down from 69% in 2008. *Note:* Pedestrians of unknown sex are not included in the numbers below.



Age Group	Female	Male	Total
0-4	2	2	4
5-9	4	0	4
10-14	0	3	3
15-19	1	2	3
20-24	2	5	7
25-29	3	8	11
30-34	2	2	4
35-39	2	4	6
40-44	2	5	7
45-49	5	17	22
50-54	5	8	13
55-59	3	6	9
60-64	1	3	4
65-69	1	6	7
70-74	1	3	4
75 and over	14	12	26
Unknown	1	1	2
<b>TOTAL</b>	<b>49</b>	<b>87</b>	<b>136</b>

### Pedestrian Injury Severity by Municipality Type

The majority of pedestrians are injured in cities; however, the percentage of pedestrian deaths in townships is higher, perhaps due to higher vehicle speeds on rural roads.

Municipality Type	Deaths	Injuries	Non-Injury	Total
City	46 (33.8%)	2,806 (66.0%)	27 (71.1%)	2,879 (65.1%)
Borough/Town	20 (14.7%)	629 (14.8%)	5 (13.2%)	654 (14.8%)
Township	70 (51.5%)	809 (19.0%)	6 (15.8%)	885 (20.0%)
Other	0 (0.0%)	5 (0.1%)	0 (0.0%)	5 (0.1%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>	<b>38 (100.0%)</b>	<b>4,423 (100.0%)</b>

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



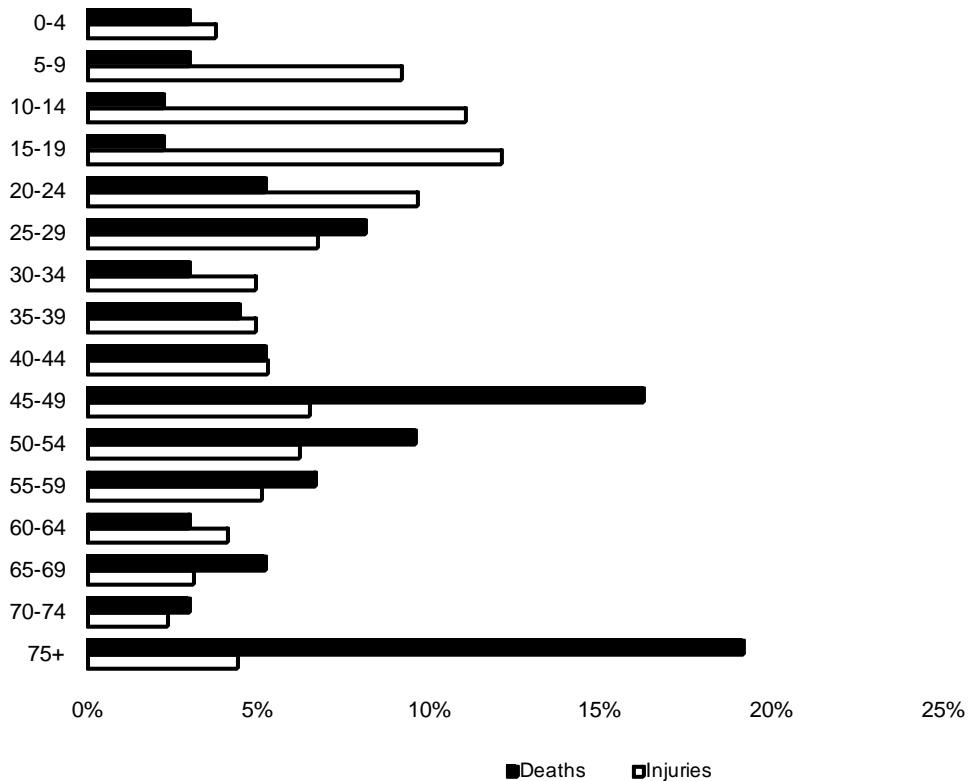
### Pedestrian Deaths and Injuries by Age

Elderly pedestrians, although involved in fewer pedestrian crashes, are more likely to be killed if struck by a moving vehicle. Younger pedestrians (age 19 and under) account for 36% of the pedestrian injuries.

**Note:** The totals in the table do not include an additional 38 pedestrians who were not killed or injured or where their injury severity was unknown.

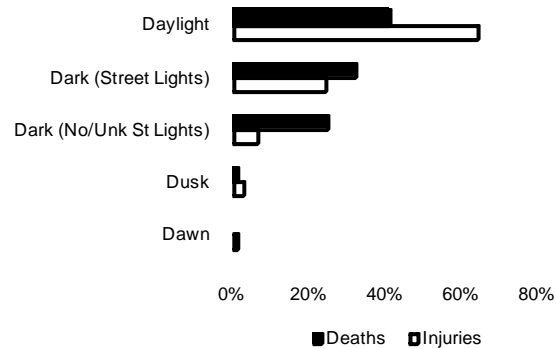
Pedestrian Age	Deaths	Injuries
0-4	4 (2.9%)	157 (3.7%)
5-9	4 (2.9%)	388 (9.1%)
10-14	3 (2.2%)	468 (11.0%)
15-19	3 (2.2%)	512 (12.1%)
20-24	7 (5.2%)	409 (9.6%)
25-29	11 (8.1%)	283 (6.7%)
30-34	4 (2.9%)	208 (4.9%)
35-39	6 (4.4%)	208 (4.9%)
40-44	7 (5.2%)	222 (5.2%)
45-49	22 (16.2%)	275 (6.5%)
50-54	13 (9.6%)	261 (6.1%)
55-59	9 (6.6%)	214 (5.0%)
60-64	4 (2.9%)	172 (4.1%)
65-69	7 (5.2%)	130 (3.1%)
70-74	4 (2.9%)	97 (2.3%)
75 and over	26 (19.1%)	186 (4.4%)
Unknown	2 (1.5%)	59 (1.4%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>

Peds & Bikes



### Pedestrian Deaths and Injuries by Light Level

The majority of pedestrians were injured in the daytime (64.4%), but more pedestrian deaths occurred during non-daylight hours (58.8%). As shown in the bar chart, pedestrians were more likely to be killed if struck in a non-daylight crash as compared to a day crash.

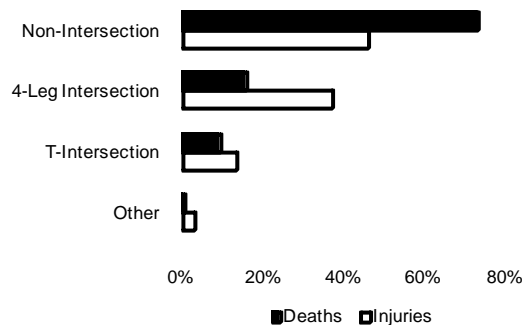


Light Level	Deaths	Injuries
Dawn	0 (0.0%)	47 (1.1%)
Daylight	56 (41.2%)	2,736 (64.4%)
Dark (Street Lights)	44 (32.4%)	1,042 (24.5%)
Dark (No/Unk St Lights)	34 (25.0%)	276 (6.5%)
Dusk	2 (1.5%)	130 (3.1%)
Other/Unknown	0 (0.0%)	18 (0.4%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>

*Note:* The totals in the table do not include an additional 38 pedestrians who were not killed or injured or where their injury severity was unknown.

### Pedestrian Deaths and Injuries by Intersection Type

Over 70% of pedestrian deaths and 46% of pedestrian injuries occurred in areas other than intersections. “Non-intersections” as used below includes mid-block crossings, driveway crossings, etc.



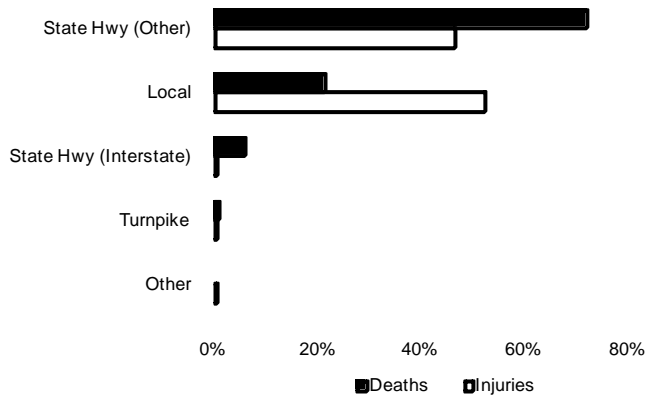
Intersection	Deaths	Injuries
Non-Intersection	100 (73.5%)	1,971 (46.4%)
4-Leg Intersection	22 (16.2%)	1,587 (37.4%)
T-Intersection	13 (9.6%)	571 (13.4%)
Other	1 (0.7%)	120 (2.8%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>

*Note:* The totals in the table do not include an additional 38 pedestrians who were not killed or injured or where their injury severity was unknown.



### Pedestrian Deaths and Injuries by Road Type

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

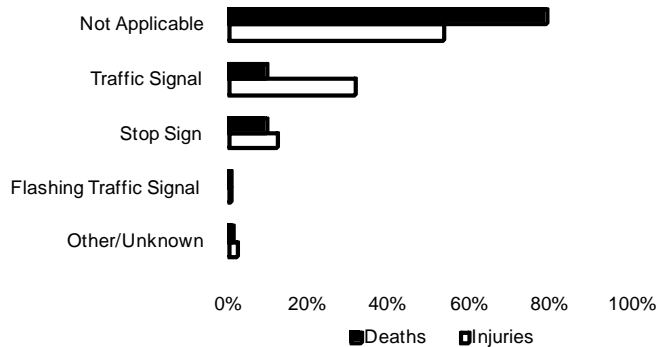


**Note:** The totals in the table do not include an additional 38 pedestrians who were not killed or injured or where their injury severity was unknown.

Road Type	Deaths	Injuries
State Hwy (Other)	98 (72.1%)	1,976 (46.5%)
Local	29 (21.3%)	2,233 (52.6%)
State Hwy (Interstate)	8 (5.9%)	13 (0.3%)
Turnpike	1 (0.7%)	6 (0.1%)
Other	0 (0.0%)	21 (0.5%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>

### Pedestrian Deaths and Injuries

As the graph shows, most pedestrian deaths and injuries occurred in areas without traffic control devices (TCDs). These areas accounted for 107 pedestrian deaths and 2,266 injuries.



**Note:** The totals in the table do not include an additional 38 pedestrians who were not killed or injured or where their injury severity was unknown.

Traffic Control Device	Deaths	Injuries
Not Applicable	107 (78.7%)	2,266 (53.3%)
Traffic Signal	13 (9.6%)	1,346 (31.7%)
Stop Sign	13 (9.6%)	530 (12.5%)
Flashing Traffic Signal	1 (0.7%)	14 (0.3%)
Other/Unknown	2 (1.5%)	93 (2.2%)
<b>TOTAL</b>	<b>136 (100.0%)</b>	<b>4,249 (100.0%)</b>

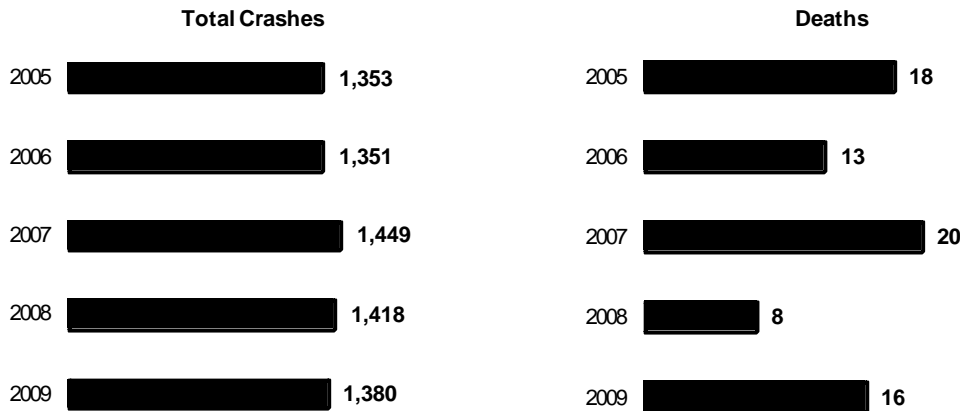
Peds & Bikes



### Bicycle Crashes—Five-Year Trends

The total number of bicycle crashes decreased in 2009, but remained very consistent over the last five years; bicycle deaths have fluctuated over the same time period, but in 2008 were the lowest.

Year	Total Crashes	Deaths
2005	1,353	18
2006	1,351	13
2007	1,449	20
2008	1,418	8
2009	1,380	16



### Bicycle Deaths and Injuries by Age

Children ages 5 to 14 were the most vulnerable to death and injury while riding a bicycle. Almost a third of the injuries involving bicycles were suffered by this age group. Sadly, 4 of the 16 bicyclist deaths were in this age group. Another vulnerable group, persons ages 15 to 19, suffered 2 deaths and 17% of the total injuries.

Victim's Age	Deaths	Injuries
0-4	0 (0.0%)	6 (0.4%)
5-9	1 (6.3%)	141 (10.2%)
10-14	3 (18.8%)	254 (18.4%)
15-19	2 (12.5%)	231 (16.7%)
20-34	5 (31.3%)	363 (26.3%)
35-44	2 (12.5%)	133 (9.6%)
45-54	3 (18.8%)	156 (11.3%)
55-64	0 (0.0%)	56 (4.1%)
65-74	0 (0.0%)	17 (1.2%)
75+	0 (0.0%)	3 (0.2%)
Unknown	0 (0.0%)	20 (1.5%)
<b>TOTAL</b>	<b>16 (100.0%)</b>	<b>1,380 (100.0%)</b>

The totals in the table do not include an additional 14 bicyclists who were not killed or injured or where their injury severity was unknown.



### Bicycle Deaths and Injuries by Light Level

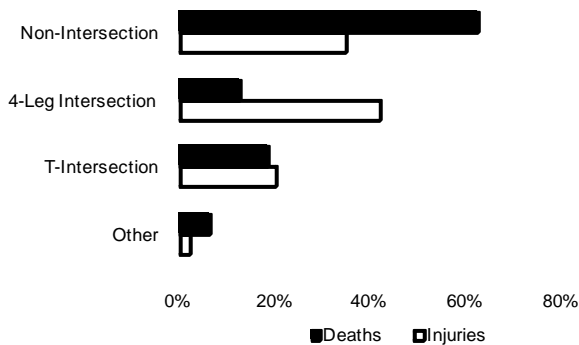
The majority of bicyclists were injured during the day. However, a majority of the deaths occurred during non-daylight conditions. These deaths totaled 63% of total bicyclist deaths in 2009 compared to 75% in 2008.

Light Level	Deaths	Injuries
Dawn	0 (0.0%)	6 (0.4%)
Daylight	6 (37.5%)	1,072 (77.7%)
Dark (Street Lights)	6 (37.5%)	212 (15.4%)
Dark (No/Unk St Lights)	3 (18.8%)	47 (3.4%)
Dusk	1 (6.3%)	40 (2.9%)
Other/Unknown	0 (0.0%)	3 (0.2%)
<b>TOTAL</b>	<b>16 (100.0%)</b>	<b>1,380 (100.0%)</b>

*Note:* The totals in the table do not include an additional 14 bicyclists who were not killed or injured or where their injury severity was unknown.

### Bicycle Deaths and Injuries by Intersection

The majority of bicyclists are injured at intersections; but in 2009, as in many of the past few years, most deaths occurred at non-intersections.



Peds & Bikes

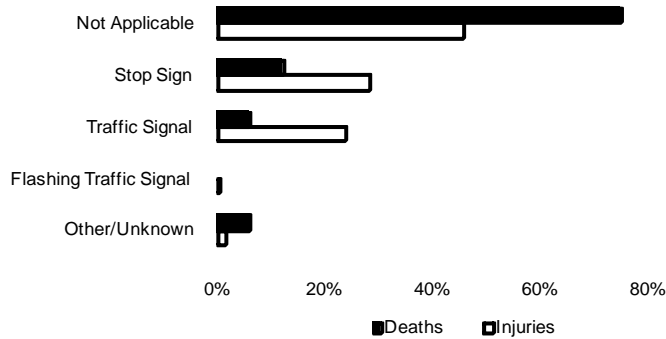
Intersection	Deaths	Injuries
Non-Intersection	10 (62.5%)	485 (35.1%)
4-Leg Intersection	2 (12.5%)	582 (42.2%)
T-Intersection	3 (18.8%)	282 (20.4%)
Other	1 (6.3%)	31 (2.3%)
<b>TOTAL</b>	<b>16 (100.0%)</b>	<b>1,380 (100.0%)</b>

*Note:* The totals in the table do not include an additional 14 bicyclists who were not killed or injured or where their injury severity was unknown.

### Bicycle Deaths and Injuries by Traffic Control Device

In 2009, injuries occurred pretty evenly at traffic control devices (TCD) and where there were no controls, but 75% of deaths occurred where there were no controls.

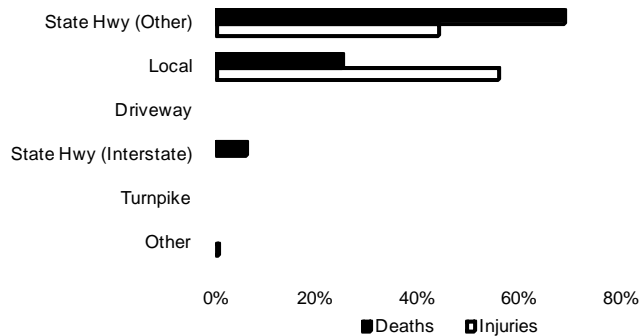
Traffic Control Device	Deaths	Injuries
Not Applicable	12 (75.0%)	630 (45.7%)
Stop Sign	2 (12.5%)	390 (28.3%)
Traffic Signal	1 (6.3%)	331 (24.0%)
Flashing Traffic Signal	0 (0.0%)	7 (0.5%)
Other/Unknown	1 (6.3%)	22 (1.6%)
<b>TOTAL</b>	<b>16 (100.0%)</b>	<b>1,380 (100.0%)</b>



**Note:** The totals in the table do not include an additional 14 bicyclists who were not killed or injured or where their injury severity was unknown.

### Bicycle Deaths and Injuries by Road Type

69% of the deaths of bicyclists occurred on state roads in 2009, while 56% of the injuries occurred on non-state roads.



**Note:** The totals in the table do not include an additional 14 bicyclists who were not killed or injured or where their injury severity was unknown.

Road Type	Deaths	Injuries
State Hwy (Other)	11 (68.8%)	607 (44.0%)
Local	4 (25.0%)	772 (55.9%)
Driveway	0 (0.0%)	0 (0.0%)
State Hwy (Interstate)	1 (6.3%)	0 (0.0%)
Turnpike	0 (0.0%)	0 (0.0%)
Other	0 (0.0%)	1 (0.1%)
<b>TOTAL</b>	<b>16 (100.0%)</b>	<b>1,380 (100.0%)</b>



## Crashes by Motor Vehicle Type

### Vehicle Crashes by Vehicle Types

	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes
<b>Passenger Car</b>	57.3%	73.3%	73.7%	73.3%
	655 crashes	45,330 crashes	42,931 crashes	88,916 crashes
<b>Lt Trk/Van/SUV</b>	45.1%	45.7%	45.5%	45.6%
	516 crashes	28,282 crashes	26,463 crashes	55,261 crashes
<b>Heavy Truck</b>	10.7%	4.0%	4.6%	4.3%
	122 crashes	2,478 crashes	2,647 crashes	5,247 crashes
<b>Bicycle</b>	1.4%	2.2%	0.0%	1.1%
	16 crashes	1,361 crashes	3 crashes	1,380 crashes
<b>Motorcycle</b>	17.1%	5.4%	0.3%	3.1%
	195 crashes	3,355 crashes	186 crashes	3,736 crashes
<b>School Bus</b>	0.4%	0.4%	0.3%	0.3%
	4 crashes	233 crashes	177 crashes	414 crashes
<b>Commercial Bus</b>	0.5%	0.7%	0.3%	0.5%
	6 crashes	458 crashes	167 crashes	631 crashes
<b>Other</b>	2.4%	1.6%	0.8%	1.3%
	27 crashes	1,017 crashes	472 crashes	1,516 crashes

Percentages compare the number of crashes with the total number of crashes in the crash severity category (for example, passenger cars were involved in 57.3% of all fatal crashes). Percentage totals exceed 100% due to multiple vehicle crashes.

### Vehicle Crashes—Single Vehicle Hitting Fixed Objects

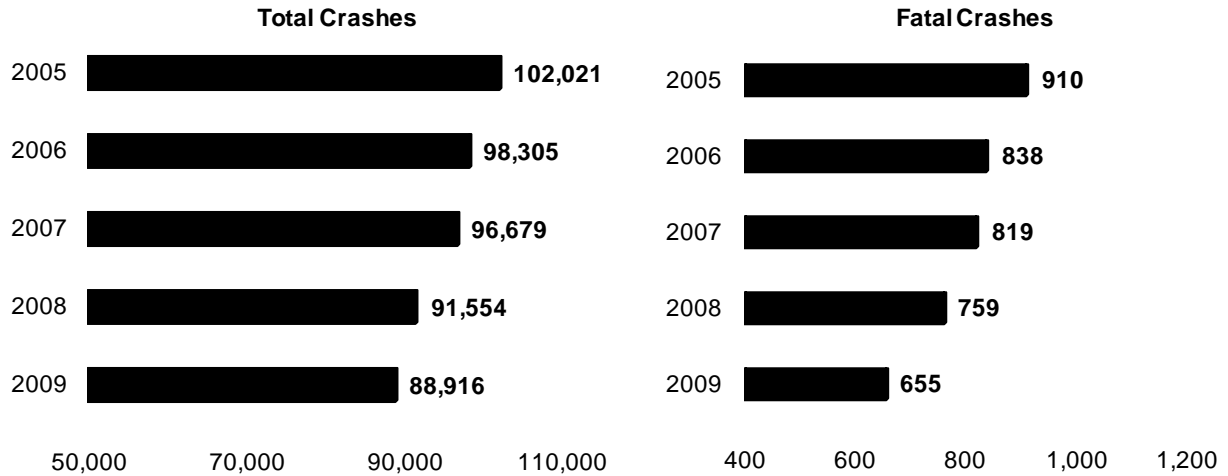
<b>Crashes in Which a Single Vehicle Hit a Fixed Object:</b>	<b>39,708</b>	Passenger Car	24,844	62.6%
		Lt Trk/Van/SUV	13,365	33.7%
		Heavy Truck	649	1.6%
		Motorcycle	712	1.8%
		School Bus	20	0.1%
		Commercial Bus	18	0.1%
		Other	100	0.3%

### Vehicle Crashes—Two-Vehicle Collisions

Striking Vehicle	Vehicle Struck								Total
	Passenger Car	Heavy Truck	Lt Trk/Vn/Sv	Motor-cycle	Bicycle	School Bus	Commer-cial Bus	Other/Unknown	
Passenger Car	20,417	1,126	11,802	368	523	120	181	215	34,752
Lt Trk/Van/SUV	9,510	592	6,498	176	274	77	63	124	17,314
Heavy Truck	918	228	410	16	5	9	8	8	1,602
Motorcycle	529	31	361	56	14	1	3	12	1,007
Bicycle	316	10	149	1	0	1	6	1	484
School Bus	77	2	26	0	2	3	3	0	113
Commercial Bus	127	8	46	0	10	0	1	1	193
Other/Unknown	290	7	135	16	29	0	2	15	494


### Passenger Car Crashes—Five-Year Trends

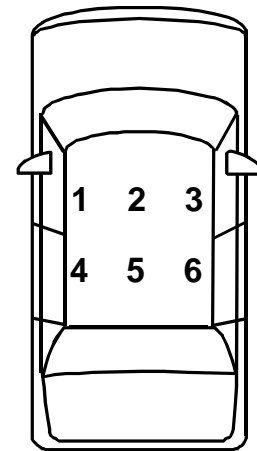
Total passenger car crashes and fatal crashes in 2009 were the lowest in the last five years.



### Passenger Car Deaths by Seating Position

In 2009, 44% of crash deaths involved passenger car occupants. The table below depicts the passenger car deaths in 2009 by seating position.

	Drivers		1 →
	<b>419 (75.5%)</b>		
	Center Front		2 →
	<b>0 (0.0%)</b>		→
	Right Front		3 →
	<b>99 (17.8%)</b>		
	Left Rear		4 →
	<b>15 (2.7%)</b>		
Center Rear		5 →	
<b>2 (0.4%)</b>			
Right Rear		6 →	
<b>13 (2.3%)</b>			
Total Deaths			
<b>555</b>			
Total Passengers			
<b>129 (23.2%)</b>			
Others			
<b>7 (1.3%)</b>			

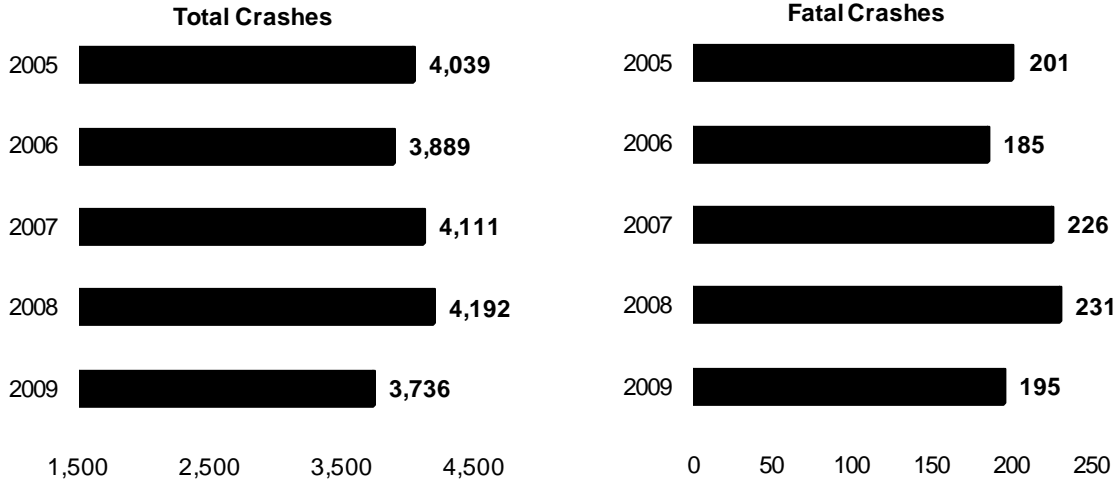


Crashes by Vehicle

“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 2009, total motorcycle crashes decreased 10.9% from 2008 while motorcycle fatal crashes decreased 15.6% from 2008.



Year	Deaths
2005	205
2006	187
2007	225
2008	237
2009	204
<b>TOTAL</b>	<b>1,058</b>

### Motorcycle Deaths—Five-Year Trends

Of the 204 deaths in 2009 involving motorcycle drivers or passengers:

- ▶ 184 (90.2%) were drivers
- ▶ 20 (9.8%) were passengers

Crashes by Vehicle

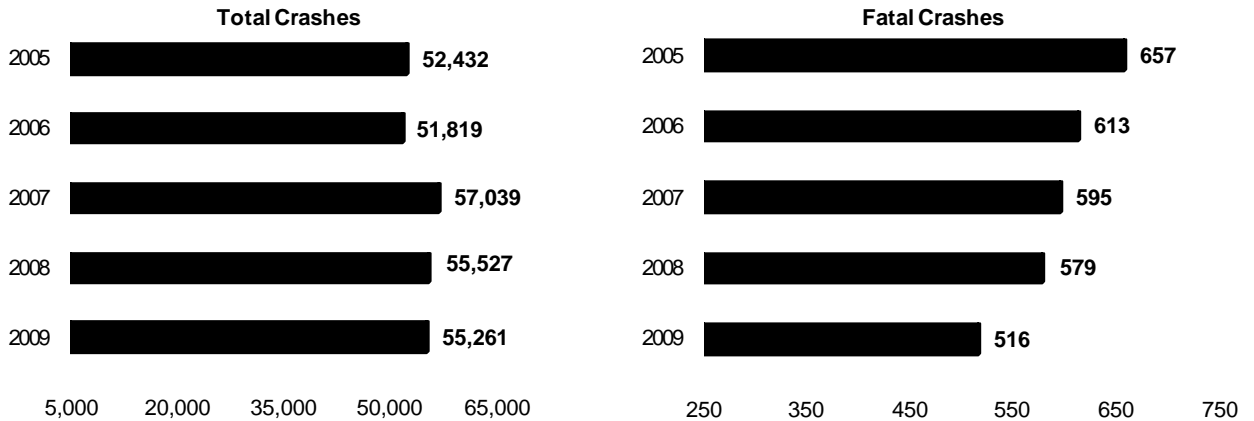
### Motorcycle Helmet Use in Crashes

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

	Deaths	Injuries	Not Injured	Total Motorcyclists
Helmets	98 (48.0%)	2,242 (61.0%)	246 (59.9%)	2,586 (60.3%)
No Helmets	98 (48.0%)	1,308 (35.6%)	122 (29.7%)	1,528 (35.6%)
Unknown	8 (3.9%)	127 (3.5%)	43 (10.5%)	178 (4.2%)
<b>TOTAL</b>	<b>204 (100.0%)</b>	<b>3,677 (100.0%)</b>	<b>411 (100.0%)</b>	<b>4,292 (100.0%)</b>

### 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 in 2009 decreased 0.0% from 2008 but remain high in comparison to other years.



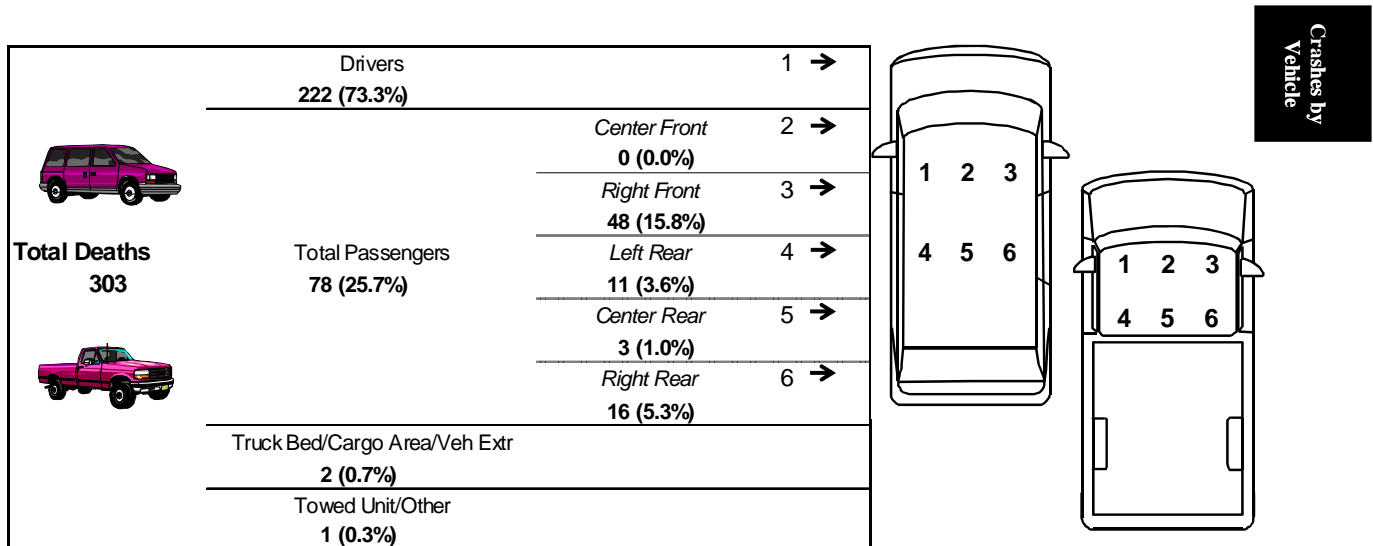
### Light Truck / SUV / Van Rollovers Compared to Passenger Cars

- ▶ The percentage of 2009 light truck / SUV / van crashes were higher than passenger cars in crashes involving rollovers (7.6% of all light truck / SUV / van crashes compared to 4.5% of all passenger car crashes).
- ▶ In 2009 rollover crashes, the percentage of light truck / SUV / van occupant deaths were nearly 70% higher than passenger car occupant deaths (34.7% of deaths compared to 20.4%).

	Rollover Crashes	Rollover Deaths
Lt Trk/Van/SUV	4,183 (7.6%)	105 (34.7%)
Passenger Cars	3,993 (4.5%)	113 (20.4%)

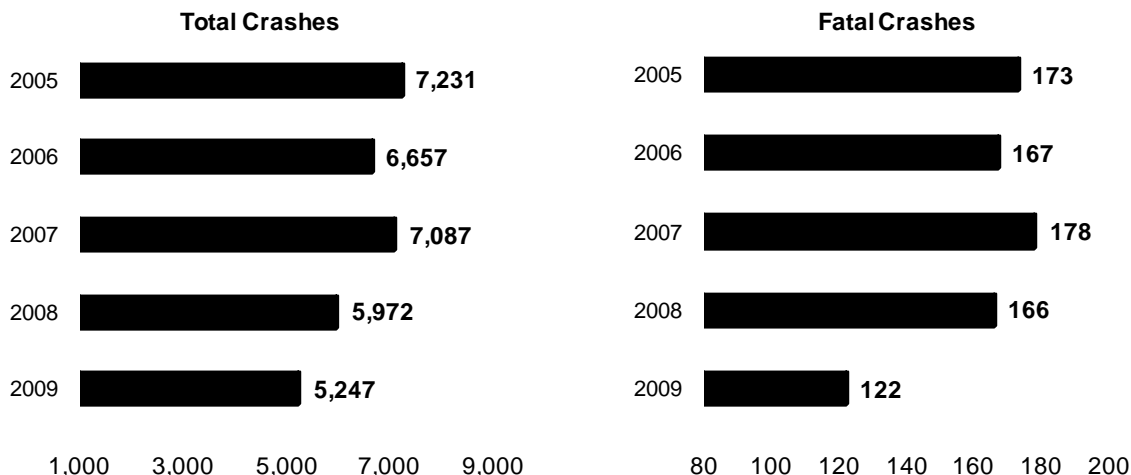
### Light Truck / SUV / Van Deaths by Seating Position

In 2009, 24.1% of crash deaths involved occupants in light trucks, vans, and sport utility vehicles. The table below depicts these deaths in 2009 by seating position.



## Heavy Truck Crashes—Five Year Trends

Total crashes involving heavy trucks in 2009 were the lowest since 2004. Fatal crashes in 2009 were the lowest over the last five years. The totals for fatal crashes have stayed fairly consistent over a number of years.



## Heavy Truck Crashes Involving Vehicle Failures

The vast majority of heavy truck crashes involving vehicle failures as primary contributing factors in the crash were related to tires and wheels, brakes, and unsecured or overloaded trailers.

Vehicle Defect	Crashes
Tire/Wheel-Related	79
Brake-Related	62
Unsecure Trailer/Overloaded	29
Power Train Failure	22
Total Steering System Failure	14
Trailer Hitch/Improper Towing	8
Vehicle Lighting Related	4
Other Failure	3
Suspension	3
Exhaust System Failure	0

## Heavy Truck Crashes by Road Type

Road Type	Crashes	Occupant Deaths
State Hwy (Interstate)	1,232 (23.5%)	6 (37.5%)
State Hwy (Other)	2,967 (56.6%)	7 (43.8%)
Turnpike	401 (7.6%)	2 (12.5%)
Local Road	646 (12.3%)	1 (6.3%)
Other	1 (0.0%)	0 (0.0%)
<b>TOTAL</b>	<b>5,247 (100.0%)</b>	<b>16 (100.0%)</b>

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




### Hazardous Material Crashes by Road Type

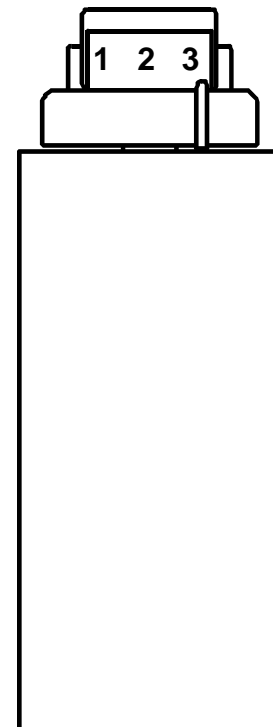
Road Type	Crashes	HazMat Released
State Hwy (Interstate)	30 (18.9%)	5 (18.5%)
State Hwy (Other)	105 (66.0%)	16 (59.3%)
Turnpike	7 (4.4%)	2 (7.4%)
Local Road	17 (10.7%)	4 (14.8%)
Other	0 (0.0%)	0 (0.0%)
<b>TOTAL</b>	<b>159 (100.0%)</b>	<b>27 (100.0%)</b>

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

### Heavy Truck Deaths by Seating Position

In 2009, only 1.3% of crash deaths involved heavy truck occupants. The table below depicts the heavy truck deaths in 2009 by seating position.

<b>Total Deaths</b> <b>16</b> 	Drivers	1→
	<b>13 (81.3%)</b>	
	Total Passengers	Center Front 2→
	<b>1 (6.3%)</b>	Right Front 3→
	<b>2 (12.5%)</b>	



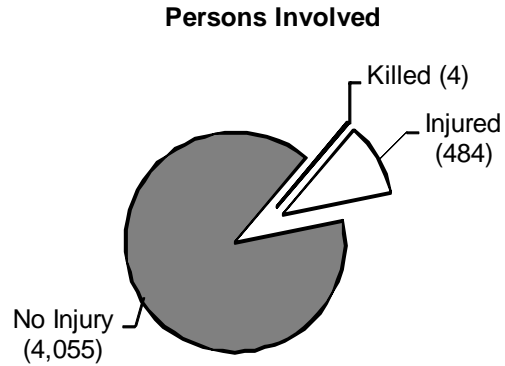
“Others” might be persons in the sleeping compartment; persons in the cargo trailer; or someone on, or attached to, the outside of the truck.

Crashes by Vehicle

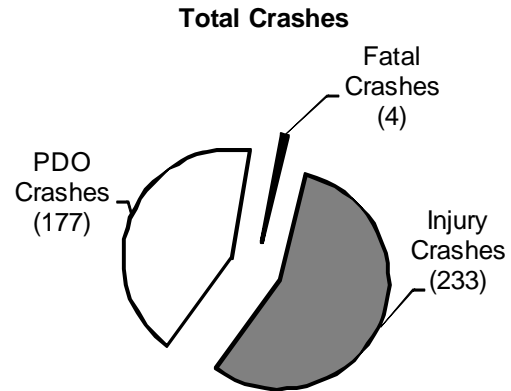
### School Bus Crashes

Of the more than 4500 persons involved in school bus crashes in 2009, only 4 were killed. 89% suffered no injury at all. See the tables at the bottom of page 57 for a breakdown of the persons involved. As shown, most fatalities were not school bus passengers.

Total persons involved: **4,543**



The majority (56%) of school bus crashes in 2009 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

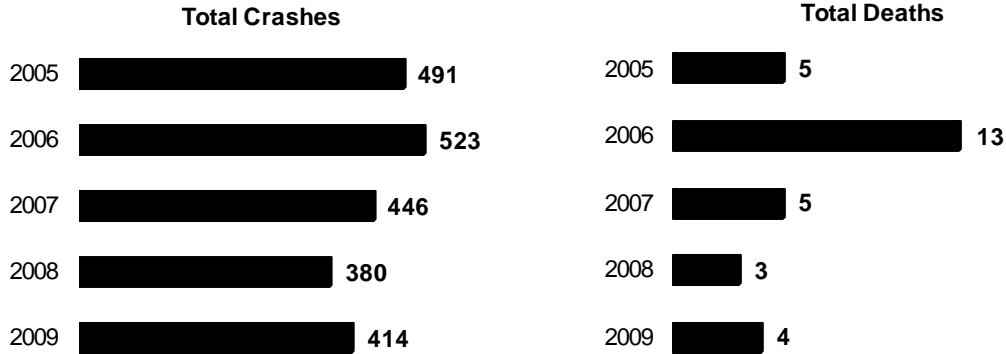
Crashes by Vehicle

Road Type	Crashes	Percentage
State Hwy (Interstate)	11	2.7%
State Hwy (Other)	267	64.5%
Turnpike	0	0.0%
Local Road	135	32.6%
Other	1	0.2%
<b>TOTAL</b>	<b>414</b>	<b>100.0%</b>

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

### School Bus Crashes—Five-Year Trends

The total number of school bus crashes and involved deaths increased in 2009. School bus related deaths are 0.3% of total fatalities in 2009. None of the persons killed were school bus passengers at the time of the crash, but two were school bus drivers.



Year	Crash Severity				Deaths	Injuries
	Fatal	Injury	PDO	Total		
2005	5	277	209	491	5	578
2006	12	312	199	523	13	798
2007	4	268	174	446	5	604
2008	3	218	159	380	3	471
2009	4	233	177	414	4	484
<b>TOTAL</b>	<b>28</b>	<b>1,308</b>	<b>918</b>	<b>2,254</b>	<b>30</b>	<b>2,935</b>

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

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

DEATHS							
Year	School Bus Drivers	School Bus Passengers	School-Age Pedestrians	Other Pedestrians	Driver/ Passenger of Other Vehicle	Other/ Unknown	Total Deaths
2005	0	0	1	1	3	0	5
2006	1	0	1	2	9	0	13
2007	0	0	0	0	4	1	5
2008	1	0	0	1	1	0	3
2009	0	0	0	0	4	0	4
<b>TOTAL</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>21</b>	<b>1</b>	<b>30</b>

INJURIES							
Year	School Bus Drivers	School Bus Passengers	School-Age Pedestrians	Other Pedestrians	Driver/ Passenger of Other Vehicle	Other/ Unknown	Total Injuries
2005	44	260	9	6	246	13	578
2006	74	436	6	12	257	13	798
2007	53	324	7	8	207	5	604
2008	34	217	7	8	199	6	471
2009	44	227	2	9	186	16	484
<b>TOTAL</b>	<b>249</b>	<b>1,464</b>	<b>31</b>	<b>43</b>	<b>1,095</b>	<b>53</b>	<b>2,935</b>

Crashes by Vehicle

## Pennsylvania County Crashes

### County Overview

The Commonwealth of Pennsylvania is comprised of 67 counties. Each county is made up of 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 2009, Pennsylvania’s total population was 12,604,767 people.

The ten most populated counties were:

Philadelphia (12.3%)	Allegheny (9.7%)	Montgomery (6.2%)
Bucks (5.0%)	Delaware (4.4%)	Lancaster (4.0%)
Chester (4.0%)	York (3.4%)	Berks (3.2%)
Westmoreland (2.9%)	<i>See page 59.</i>	

The ten least populated counties were:

Cameron (0.04%)	Sullivan (0.05%)	Forest (0.05%)
Fulton (0.12%)	Potter (0.13%)	Montour (0.14%)
Juniata (0.18%)	Wyoming (0.22%)	Elk (0.25%)
Clinton (0.29%)	<i>See page 59.</i>	

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

Westmoreland (3.01%)	Allegheny (2.96%)	York (2.84%)
Washington (2.74%)	Lancaster (2.63%)	Chester (2.56%)
Bucks (2.41%)	Crawford (2.28%)	Bradford (2.25%)
Somerset (2.21%)		

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

Allegheny (5.92%)	Montgomery (3.62%)	Lancaster (3.62%)
York (3.39%)	Chester (3.20%)	Bucks (3.18%)
Westmoreland (3.07%)	Berks (3.06%)	Philadelphia (2.86%)
Erie (2.30%)		

The ten counties with the most reported traffic crashes were:

Allegheny (9.6%)	Philadelphia (8.8%)	Montgomery (6.8%)
Bucks (5.4%)	Lancaster (4.4%)	York (3.8%)
Berks (3.8%)	Chester (3.7%)	Lehigh (3.7%)
Delaware (3.6%)	<i>See page 59.</i>	

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

Philadelphia (7.6%)	Bucks (5.1%)	Allegheny (4.6%)
Berks (4.0%)	Lancaster (3.9%)	Westmoreland (3.7%)
York (3.4%)	Montgomery (3.3%)	Luzerne (3.2%)
Lehigh (2.8%)	<i>See page 61.</i>	

\*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, 2008 information was used.

## Pennsylvania Crashes by County

Percentages compare the number to the statewide total at the bottom of the columns.

County	Population	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes
Adams	102,323 (0.8%)	21 (1.8%)	566 (0.9%)	571 (1.0%)	1,158 (1.0%)
Allegheny	1,218,494 (9.7%)	58 (5.1%)	5,448 (8.8%)	6,110 (10.5%)	11,616 (9.6%)
Armstrong	67,851 (0.5%)	10 (0.9%)	265 (0.4%)	281 (0.5%)	556 (0.5%)
Beaver	171,673 (1.4%)	10 (0.9%)	674 (1.1%)	777 (1.3%)	1,461 (1.2%)
Bedford	49,579 (0.4%)	12 (1.1%)	301 (0.5%)	367 (0.6%)	680 (0.6%)
Berks	407,125 (3.2%)	42 (3.7%)	2,111 (3.4%)	2,410 (4.1%)	4,563 (3.8%)
Blair	126,122 (1.0%)	8 (0.7%)	668 (1.1%)	663 (1.1%)	1,339 (1.1%)
Bradford	61,131 (0.5%)	10 (0.9%)	313 (0.5%)	263 (0.5%)	586 (0.5%)
Bucks	626,015 (5.0%)	60 (5.3%)	3,152 (5.1%)	3,300 (5.7%)	6,512 (5.4%)
Butler	184,694 (1.5%)	19 (1.7%)	790 (1.3%)	933 (1.6%)	1,742 (1.4%)
Cambria	143,998 (1.1%)	10 (0.9%)	645 (1.0%)	715 (1.2%)	1,370 (1.1%)
Cameron	5,163 (0.0%)	0 (0.0%)	19 (0.0%)	25 (0.0%)	44 (0.0%)
Carbon	63,865 (0.5%)	11 (1.0%)	312 (0.5%)	337 (0.6%)	660 (0.5%)
Centre	146,212 (1.2%)	12 (1.1%)	618 (1.0%)	632 (1.1%)	1,262 (1.0%)
Chester	498,894 (4.0%)	27 (2.4%)	1,808 (2.9%)	2,649 (4.6%)	4,484 (3.7%)
Clarion	39,479 (0.3%)	5 (0.4%)	250 (0.4%)	229 (0.4%)	484 (0.4%)
Clearfield	82,324 (0.7%)	19 (1.7%)	480 (0.8%)	467 (0.8%)	966 (0.8%)
Clinton	36,797 (0.3%)	4 (0.4%)	166 (0.3%)	205 (0.4%)	375 (0.3%)
Columbia	65,111 (0.5%)	9 (0.8%)	322 (0.5%)	398 (0.7%)	729 (0.6%)
Crawford	88,521 (0.7%)	9 (0.8%)	431 (0.7%)	458 (0.8%)	898 (0.7%)
Cumberland	232,483 (1.8%)	17 (1.5%)	998 (1.6%)	1,295 (2.2%)	2,310 (1.9%)
Dauphin	258,934 (2.1%)	25 (2.2%)	1,412 (2.3%)	1,494 (2.6%)	2,931 (2.4%)
Delaware	558,028 (4.4%)	20 (1.8%)	2,257 (3.7%)	2,083 (3.6%)	4,360 (3.6%)
Elk	32,011 (0.3%)	6 (0.5%)	139 (0.2%)	141 (0.2%)	286 (0.2%)
Erie	280,291 (2.2%)	27 (2.4%)	1,363 (2.2%)	1,182 (2.0%)	2,572 (2.1%)
Fayette	142,605 (1.1%)	30 (2.6%)	625 (1.0%)	528 (0.9%)	1,183 (1.0%)
Forest	6,775 (0.1%)	3 (0.3%)	31 (0.1%)	31 (0.1%)	65 (0.1%)
Franklin	144,994 (1.2%)	16 (1.4%)	663 (1.1%)	736 (1.3%)	1,415 (1.2%)
Fulton	14,852 (0.1%)	1 (0.1%)	144 (0.2%)	184 (0.3%)	329 (0.3%)
Greene	39,245 (0.3%)	5 (0.4%)	192 (0.3%)	161 (0.3%)	358 (0.3%)
Huntingdon	45,395 (0.4%)	10 (0.9%)	208 (0.3%)	215 (0.4%)	433 (0.4%)
Indiana	87,450 (0.7%)	18 (1.6%)	447 (0.7%)	407 (0.7%)	872 (0.7%)
Jefferson	44,634 (0.4%)	6 (0.5%)	196 (0.3%)	206 (0.4%)	408 (0.3%)
Juniata	23,118 (0.2%)	6 (0.5%)	111 (0.2%)	132 (0.2%)	249 (0.2%)
Lackawanna	208,801 (1.7%)	19 (1.7%)	1,262 (2.0%)	1,162 (2.0%)	2,443 (2.0%)
Lancaster	507,766 (4.0%)	44 (3.9%)	2,695 (4.4%)	2,569 (4.4%)	5,308 (4.4%)
Lawrence	90,160 (0.7%)	8 (0.7%)	389 (0.6%)	380 (0.7%)	777 (0.6%)
Lebanon	130,506 (1.0%)	14 (1.2%)	705 (1.1%)	675 (1.2%)	1,394 (1.2%)
Lehigh	343,519 (2.7%)	32 (2.8%)	2,154 (3.5%)	2,253 (3.9%)	4,439 (3.7%)
Luzerne	312,845 (2.5%)	37 (3.2%)	1,631 (2.6%)	1,457 (2.5%)	3,125 (2.6%)
Lycoming	116,840 (0.9%)	15 (1.3%)	554 (0.9%)	593 (1.0%)	1,162 (1.0%)
McKean	43,196 (0.3%)	3 (0.3%)	153 (0.3%)	183 (0.3%)	339 (0.3%)
Mercer	116,071 (0.9%)	15 (1.3%)	628 (1.0%)	584 (1.0%)	1,227 (1.0%)
Mifflin	45,937 (0.4%)	9 (0.8%)	189 (0.3%)	196 (0.3%)	394 (0.3%)
Monroe	166,355 (1.3%)	28 (2.5%)	959 (1.6%)	1,126 (1.9%)	2,113 (1.7%)
Montgomery	782,339 (6.2%)	38 (3.3%)	4,008 (6.5%)	4,136 (7.1%)	8,182 (6.8%)
Montour	17,715 (0.1%)	0 (0.0%)	97 (0.2%)	105 (0.2%)	202 (0.2%)
Northampton	298,990 (2.4%)	23 (2.0%)	1,447 (2.3%)	1,413 (2.4%)	2,883 (2.4%)
Northumberland	91,311 (0.7%)	8 (0.7%)	328 (0.5%)	268 (0.5%)	604 (0.5%)
Perry	45,502 (0.4%)	9 (0.8%)	233 (0.4%)	232 (0.4%)	474 (0.4%)
Philadelphia	1,547,297 (12.3%)	84 (7.4%)	8,397 (13.6%)	2,207 (3.8%)	10,688 (8.8%)
Pike	60,529 (0.5%)	5 (0.4%)	282 (0.5%)	308 (0.5%)	595 (0.5%)
Potter	16,714 (0.1%)	0 (0.0%)	68 (0.1%)	59 (0.1%)	127 (0.1%)
Schuylkill	146,952 (1.2%)	27 (2.4%)	652 (1.1%)	673 (1.2%)	1,352 (1.1%)
Snyder	38,519 (0.3%)	5 (0.4%)	183 (0.3%)	199 (0.3%)	387 (0.3%)
Somerset	76,953 (0.6%)	10 (0.9%)	415 (0.7%)	409 (0.7%)	834 (0.7%)
Sullivan	6,140 (0.0%)	3 (0.3%)	43 (0.1%)	36 (0.1%)	82 (0.1%)
Susquehanna	40,646 (0.3%)	6 (0.5%)	222 (0.4%)	275 (0.5%)	503 (0.4%)
Tioga	40,875 (0.3%)	6 (0.5%)	201 (0.3%)	220 (0.4%)	427 (0.4%)
Union	43,560 (0.3%)	7 (0.6%)	168 (0.3%)	195 (0.3%)	370 (0.3%)
Venango	54,183 (0.4%)	6 (0.5%)	263 (0.4%)	291 (0.5%)	560 (0.5%)
Warren	40,638 (0.3%)	10 (0.9%)	232 (0.4%)	169 (0.3%)	411 (0.3%)
Washington	207,389 (1.6%)	31 (2.7%)	902 (1.5%)	965 (1.7%)	1,898 (1.6%)
Wayne	51,337 (0.4%)	5 (0.4%)	252 (0.4%)	223 (0.4%)	480 (0.4%)
Westmoreland	362,251 (2.9%)	44 (3.9%)	1,547 (2.5%)	1,513 (2.6%)	3,104 (2.6%)
Wyoming	27,808 (0.2%)	8 (0.7%)	176 (0.3%)	141 (0.2%)	325 (0.3%)
York	428,937 (3.4%)	38 (3.3%)	2,315 (3.7%)	2,308 (4.0%)	4,661 (3.8%)
<b>TOTAL</b>	<b>12,604,767 (100.0%)</b>	<b>1,143 (100.0%)</b>	<b>61,875 (100.0%)</b>	<b>58,224 (99.8%)</b>	<b>121,242 (99.9%)</b>

Counties

### Crashes by County—Five-Year Trends

Percentages compare the number to the statewide total at the bottom of the columns.

County	2005 Crashes	2006 Crashes	2007 Crashes	2008 Crashes	2009 Crashes
Adams	1,025 (0.8%)	974 (0.8%)	1,061 (0.8%)	1,034 (0.8%)	1,158 (1.0%)
Allegheny	12,105 (9.1%)	11,609 (9.1%)	12,086 (9.3%)	11,754 (9.4%)	11,616 (9.6%)
Armstrong	673 (0.5%)	582 (0.5%)	595 (0.5%)	547 (0.4%)	556 (0.5%)
Beaver	1,618 (1.2%)	1,479 (1.2%)	1,513 (1.2%)	1,584 (1.3%)	1,461 (1.2%)
Bedford	783 (0.6%)	785 (0.6%)	770 (0.6%)	770 (0.6%)	680 (0.6%)
Berks	4,996 (3.8%)	4,972 (3.9%)	5,130 (3.9%)	4,807 (3.8%)	4,563 (3.8%)
Blair	1,438 (1.1%)	1,325 (1.0%)	1,444 (1.1%)	1,488 (1.2%)	1,339 (1.1%)
Bradford	643 (0.5%)	563 (0.4%)	597 (0.5%)	631 (0.5%)	586 (0.5%)
Bucks	6,834 (5.1%)	6,467 (5.0%)	6,751 (5.2%)	6,246 (5.0%)	6,512 (5.4%)
Butler	1,965 (1.5%)	1,858 (1.5%)	1,936 (1.5%)	1,937 (1.6%)	1,742 (1.4%)
Cambria	1,525 (1.2%)	1,308 (1.0%)	1,435 (1.1%)	1,419 (1.1%)	1,370 (1.1%)
Cameron	67 (0.1%)	60 (0.1%)	60 (0.1%)	51 (0.0%)	44 (0.0%)
Carbon	795 (0.6%)	763 (0.6%)	731 (0.6%)	704 (0.6%)	660 (0.5%)
Centre	1,400 (1.1%)	1,301 (1.0%)	1,357 (1.0%)	1,360 (1.1%)	1,262 (1.0%)
Chester	4,683 (3.5%)	4,585 (3.6%)	4,611 (3.5%)	4,700 (3.8%)	4,484 (3.7%)
Clarion	569 (0.4%)	504 (0.4%)	540 (0.4%)	564 (0.5%)	484 (0.4%)
Clearfield	1,090 (0.8%)	1,066 (0.8%)	985 (0.8%)	1,032 (0.8%)	966 (0.8%)
Clinton	488 (0.4%)	485 (0.4%)	480 (0.4%)	464 (0.4%)	375 (0.3%)
Columbia	741 (0.6%)	723 (0.6%)	770 (0.6%)	721 (0.6%)	729 (0.6%)
Crawford	1,063 (0.8%)	1,049 (0.8%)	1,101 (0.8%)	1,085 (0.9%)	898 (0.7%)
Cumberland	2,466 (1.9%)	2,574 (2.0%)	2,604 (2.0%)	2,340 (1.9%)	2,310 (1.9%)
Dauphin	2,966 (2.2%)	2,872 (2.2%)	3,110 (2.4%)	2,926 (2.3%)	2,931 (2.4%)
Delaware	4,870 (3.7%)	4,920 (3.8%)	4,613 (3.5%)	4,532 (3.6%)	4,360 (3.6%)
Elk	361 (0.3%)	349 (0.3%)	359 (0.3%)	342 (0.3%)	286 (0.2%)
Erie	2,766 (2.1%)	2,554 (2.0%)	2,731 (2.1%)	2,817 (2.3%)	2,572 (2.1%)
Fayette	1,293 (1.0%)	1,174 (0.9%)	1,250 (1.0%)	1,302 (1.0%)	1,183 (1.0%)
Forest	99 (0.1%)	88 (0.1%)	74 (0.1%)	88 (0.1%)	65 (0.1%)
Franklin	1,605 (1.2%)	1,613 (1.3%)	1,608 (1.2%)	1,490 (1.2%)	1,415 (1.2%)
Fulton	321 (0.2%)	314 (0.2%)	337 (0.3%)	320 (0.3%)	329 (0.3%)
Greene	414 (0.3%)	375 (0.3%)	381 (0.3%)	435 (0.4%)	358 (0.3%)
Huntingdon	482 (0.4%)	530 (0.4%)	482 (0.4%)	507 (0.4%)	433 (0.4%)
Indiana	897 (0.7%)	830 (0.7%)	920 (0.7%)	893 (0.7%)	872 (0.7%)
Jefferson	540 (0.4%)	530 (0.4%)	471 (0.4%)	537 (0.4%)	408 (0.3%)
Juniata	295 (0.2%)	243 (0.2%)	242 (0.2%)	297 (0.2%)	249 (0.2%)
Lackawanna	2,302 (1.7%)	2,356 (1.8%)	2,408 (1.8%)	2,518 (2.0%)	2,443 (2.0%)
Lancaster	5,736 (4.3%)	5,663 (4.4%)	5,875 (4.5%)	5,727 (4.6%)	5,308 (4.4%)
Lawrence	991 (0.8%)	841 (0.7%)	829 (0.6%)	838 (0.7%)	777 (0.6%)
Lebanon	1,534 (1.2%)	1,579 (1.2%)	1,578 (1.2%)	1,440 (1.2%)	1,394 (1.2%)
Lehigh	5,302 (4.0%)	5,040 (3.9%)	4,964 (3.8%)	4,516 (3.6%)	4,439 (3.7%)
Luzerne	3,192 (2.4%)	3,089 (2.4%)	2,926 (2.2%)	2,668 (2.1%)	3,125 (2.6%)
Lycoming	1,148 (0.9%)	1,085 (0.9%)	1,313 (1.0%)	1,244 (1.0%)	1,162 (1.0%)
McKean	406 (0.3%)	328 (0.3%)	376 (0.3%)	399 (0.3%)	339 (0.3%)
Mercer	1,451 (1.1%)	1,393 (1.1%)	1,391 (1.1%)	1,298 (1.0%)	1,227 (1.0%)
Mifflin	264 (0.2%)	350 (0.3%)	429 (0.3%)	420 (0.3%)	390 (0.3%)
Monroe	2,887 (2.2%)	2,572 (2.0%)	2,241 (1.7%)	2,093 (1.7%)	2,113 (1.7%)
Montgomery	9,609 (7.2%)	9,788 (7.6%)	9,443 (7.2%)	8,373 (6.7%)	8,182 (6.8%)
Montour	232 (0.2%)	208 (0.2%)	202 (0.2%)	206 (0.2%)	202 (0.2%)
Northampton	2,881 (2.2%)	3,003 (2.3%)	3,042 (2.3%)	2,799 (2.2%)	2,883 (2.4%)
Northumberland	651 (0.5%)	655 (0.5%)	678 (0.5%)	722 (0.6%)	604 (0.5%)
Perry	567 (0.4%)	566 (0.4%)	587 (0.5%)	593 (0.5%)	474 (0.4%)
Philadelphia	11,746 (8.8%)	11,682 (9.1%)	11,436 (8.8%)	10,605 (8.5%)	10,688 (8.8%)
Pike	675 (0.5%)	641 (0.5%)	684 (0.5%)	735 (0.6%)	595 (0.5%)
Potter	201 (0.2%)	135 (0.1%)	160 (0.1%)	162 (0.1%)	127 (0.1%)
Schuylkill	1,706 (1.3%)	1,541 (1.2%)	1,563 (1.2%)	1,291 (1.0%)	1,352 (1.1%)
Snyder	459 (0.4%)	430 (0.3%)	412 (0.3%)	433 (0.4%)	387 (0.3%)
Somerset	809 (0.6%)	794 (0.6%)	931 (0.7%)	867 (0.7%)	834 (0.7%)
Sullivan	71 (0.1%)	87 (0.1%)	89 (0.1%)	80 (0.1%)	82 (0.1%)
Susquehanna	574 (0.4%)	527 (0.4%)	507 (0.4%)	515 (0.4%)	503 (0.4%)
Tioga	450 (0.3%)	424 (0.3%)	463 (0.4%)	487 (0.4%)	427 (0.4%)
Union	381 (0.3%)	325 (0.3%)	379 (0.3%)	367 (0.3%)	370 (0.3%)
Venango	647 (0.5%)	637 (0.5%)	642 (0.5%)	598 (0.5%)	560 (0.5%)
Warren	442 (0.3%)	375 (0.3%)	483 (0.4%)	449 (0.4%)	411 (0.3%)
Washington	1,965 (1.5%)	1,781 (1.4%)	1,962 (1.5%)	2,013 (1.6%)	1,898 (1.6%)
Wayne	619 (0.5%)	629 (0.5%)	592 (0.5%)	561 (0.5%)	480 (0.4%)
Westmoreland	3,775 (2.8%)	3,407 (2.7%)	3,623 (2.8%)	3,513 (2.8%)	3,104 (2.6%)
Wyoming	352 (0.3%)	309 (0.2%)	307 (0.2%)	325 (0.3%)	325 (0.3%)
York	4,834 (3.6%)	4,580 (3.6%)	4,916 (3.8%)	4,659 (3.7%)	4,661 (3.8%)
<b>TOTAL</b>	<b>132,829 (99.9%)</b>	<b>128,342 (99.9%)</b>	<b>130,675 (99.9%)</b>	<b>125,327 (99.9%)</b>	<b>121,242 (99.9%)</b>

Counties

### Traffic Deaths by County—Five-Year Trends

Percentages compare the number to the statewide totals at the bottom of the columns.

County	2005 Deaths	2006 Deaths	2007 Deaths	2008 Deaths	2009 Deaths
Adams	27 (1.7%)	19 (1.3%)	17 (1.1%)	22 (1.5%)	22 (1.8%)
Allegheny	104 (6.4%)	79 (5.2%)	76 (5.1%)	75 (5.1%)	58 (4.6%)
Armstrong	9 (0.6%)	16 (1.1%)	7 (0.5%)	9 (0.6%)	11 (0.9%)
Beaver	18 (1.1%)	25 (1.6%)	15 (1.0%)	19 (1.3%)	13 (1.0%)
Bedford	18 (1.1%)	20 (1.3%)	12 (0.8%)	15 (1.0%)	15 (1.2%)
Berks	73 (4.5%)	50 (3.3%)	49 (3.3%)	63 (4.3%)	50 (4.0%)
Blair	20 (1.2%)	25 (1.6%)	10 (0.7%)	15 (1.0%)	9 (0.7%)
Bradford	9 (0.6%)	9 (0.6%)	7 (0.5%)	8 (0.5%)	10 (0.8%)
Bucks	74 (4.6%)	72 (4.7%)	60 (4.0%)	54 (3.7%)	64 (5.1%)
Butler	21 (1.3%)	26 (1.7%)	28 (1.9%)	23 (1.6%)	21 (1.7%)
Cambria	19 (1.2%)	24 (1.6%)	14 (0.9%)	20 (1.4%)	11 (0.9%)
Cameron	0 (0.0%)	0 (0.0%)	1 (0.1%)	2 (0.1%)	0 (0.0%)
Carbon	14 (0.9%)	17 (1.1%)	13 (0.9%)	16 (1.1%)	11 (0.9%)
Centre	18 (1.1%)	23 (1.5%)	20 (1.3%)	20 (1.4%)	13 (1.0%)
Chester	52 (3.2%)	54 (3.5%)	55 (3.7%)	40 (2.7%)	31 (2.5%)
Clarion	14 (0.9%)	13 (0.9%)	11 (0.7%)	10 (0.7%)	7 (0.6%)
Clearfield	23 (1.4%)	21 (1.4%)	22 (1.5%)	25 (1.7%)	23 (1.8%)
Clinton	12 (0.7%)	13 (0.9%)	11 (0.7%)	8 (0.5%)	4 (0.3%)
Columbia	14 (0.9%)	18 (1.2%)	14 (0.9%)	15 (1.0%)	9 (0.7%)
Crawford	22 (1.4%)	19 (1.3%)	22 (1.5%)	15 (1.0%)	10 (0.8%)
Cumberland	38 (2.4%)	29 (1.9%)	30 (2.0%)	23 (1.6%)	19 (1.5%)
Dauphin	36 (2.2%)	24 (1.6%)	37 (2.5%)	35 (2.4%)	27 (2.2%)
Delaware	31 (1.9%)	29 (1.9%)	22 (1.5%)	21 (1.4%)	20 (1.6%)
Elk	8 (0.5%)	3 (0.2%)	6 (0.4%)	9 (0.6%)	7 (0.6%)
Erie	23 (1.4%)	36 (2.4%)	27 (1.8%)	39 (2.7%)	30 (2.4%)
Fayette	28 (1.7%)	19 (1.3%)	38 (2.6%)	27 (1.8%)	33 (2.6%)
Forest	2 (0.1%)	5 (0.3%)	2 (0.1%)	4 (0.3%)	3 (0.2%)
Franklin	18 (1.1%)	23 (1.5%)	37 (2.5%)	21 (1.4%)	19 (1.5%)
Fulton	10 (0.6%)	5 (0.3%)	1 (0.1%)	6 (0.4%)	1 (0.1%)
Greene	8 (0.5%)	6 (0.4%)	12 (0.8%)	9 (0.6%)	5 (0.4%)
Huntingdon	9 (0.6%)	12 (0.8%)	5 (0.3%)	12 (0.8%)	10 (0.8%)
Indiana	21 (1.3%)	9 (0.6%)	16 (1.1%)	12 (0.8%)	18 (1.4%)
Jefferson	8 (0.5%)	4 (0.3%)	10 (0.7%)	6 (0.4%)	6 (0.5%)
Juniata	8 (0.5%)	10 (0.7%)	3 (0.2%)	6 (0.4%)	6 (0.5%)
Lackawanna	24 (1.5%)	23 (1.5%)	24 (1.6%)	22 (1.5%)	19 (1.5%)
Lancaster	71 (4.4%)	63 (4.1%)	64 (4.3%)	66 (4.5%)	49 (3.9%)
Lawrence	13 (0.8%)	12 (0.8%)	8 (0.5%)	12 (0.8%)	8 (0.6%)
Lebanon	15 (0.9%)	20 (1.3%)	19 (1.3%)	22 (1.5%)	18 (1.4%)
Lehigh	49 (3.0%)	40 (2.6%)	38 (2.6%)	41 (2.8%)	35 (2.8%)
Luzerne	31 (1.9%)	51 (3.3%)	53 (3.6%)	32 (2.2%)	40 (3.2%)
Lycoming	19 (1.2%)	22 (1.4%)	20 (1.3%)	13 (0.9%)	17 (1.4%)
McKean	6 (0.4%)	3 (0.2%)	9 (0.6%)	12 (0.8%)	5 (0.4%)
Mercer	27 (1.7%)	26 (1.7%)	22 (1.5%)	25 (1.7%)	18 (1.4%)
Mifflin	10 (0.6%)	5 (0.3%)	4 (0.3%)	6 (0.4%)	11 (0.9%)
Monroe	40 (2.5%)	36 (2.4%)	33 (2.2%)	37 (2.5%)	30 (2.4%)
Montgomery	44 (2.7%)	54 (3.5%)	57 (3.8%)	45 (3.1%)	41 (3.3%)
Montour	5 (0.3%)	4 (0.3%)	2 (0.1%)	5 (0.3%)	0 (0.0%)
Northampton	32 (2.0%)	31 (2.0%)	21 (1.4%)	23 (1.6%)	24 (1.9%)
Northumberland	18 (1.1%)	14 (0.9%)	9 (0.6%)	13 (0.9%)	8 (0.6%)
Perry	12 (0.7%)	18 (1.2%)	9 (0.6%)	17 (1.2%)	10 (0.8%)
Philadelphia	99 (6.1%)	104 (6.8%)	125 (8.4%)	92 (6.3%)	95 (7.6%)
Pike	12 (0.7%)	9 (0.6%)	9 (0.6%)	13 (0.9%)	5 (0.4%)
Potter	5 (0.3%)	3 (0.2%)	4 (0.3%)	5 (0.3%)	0 (0.0%)
Schuylkill	29 (1.8%)	32 (2.1%)	30 (2.0%)	33 (2.3%)	30 (2.4%)
Snyder	7 (0.4%)	10 (0.7%)	6 (0.4%)	9 (0.6%)	5 (0.4%)
Somerset	26 (1.6%)	13 (0.9%)	23 (1.5%)	12 (0.8%)	12 (1.0%)
Sullivan	3 (0.2%)	0 (0.0%)	0 (0.0%)	1 (0.1%)	3 (0.2%)
Susquehanna	13 (0.8%)	8 (0.5%)	11 (0.7%)	11 (0.8%)	8 (0.6%)
Tioga	11 (0.7%)	11 (0.7%)	9 (0.6%)	13 (0.9%)	7 (0.6%)
Union	11 (0.7%)	10 (0.7%)	3 (0.2%)	7 (0.5%)	7 (0.6%)
Venango	11 (0.7%)	9 (0.6%)	11 (0.7%)	7 (0.5%)	6 (0.5%)
Warren	10 (0.6%)	7 (0.5%)	11 (0.7%)	10 (0.7%)	11 (0.9%)
Washington	27 (1.7%)	21 (1.4%)	32 (2.2%)	31 (2.1%)	33 (2.6%)
Wayne	14 (0.9%)	11 (0.7%)	12 (0.8%)	9 (0.6%)	6 (0.5%)
Westmoreland	54 (3.3%)	35 (2.3%)	50 (3.4%)	58 (4.0%)	47 (3.7%)
Wyoming	9 (0.6%)	7 (0.5%)	0 (0.0%)	10 (0.7%)	9 (0.7%)
York	50 (3.1%)	56 (3.7%)	54 (3.6%)	52 (3.5%)	43 (3.4%)
<b>TOTAL</b>	<b>1,616 (100.0%)</b>	<b>1,525 (100.0%)</b>	<b>1,491 (100.0%)</b>	<b>1,468 (100.0%)</b>	<b>1,256 (100.0%)</b>

Counties

**Pedestrian Deaths by County—Five-Year Trends**

County	2005	2006	2007	2008	2009
Adams	0	0	2	1	3
Allegheny	14	14	10	14	6
Armstrong	1	0	0	1	2
Beaver	2	0	0	2	0
Bedford	2	1	0	0	1
Berks	6	3	4	7	4
Blair	2	3	0	4	1
Bradford	0	0	0	0	0
Bucks	10	13	9	9	15
Butler	2	3	2	2	1
Cambria	1	3	0	1	0
Cameron	0	0	0	0	0
Carbon	1	2	0	0	1
Centre	1	3	1	0	3
Chester	3	4	7	2	2
Clarion	1	0	1	0	0
Clearfield	2	1	6	0	1
Clinton	2	1	1	0	0
Columbia	0	1	1	2	0
Crawford	2	3	0	0	0
Cumberland	1	5	2	3	4
Dauphin	7	3	4	6	2
Delaware	7	7	2	3	6
Elk	0	0	0	0	1
Erie	4	3	2	0	1
Fayette	2	1	4	0	0
Forest	0	0	0	0	0
Franklin	0	2	3	1	0
Fulton	0	0	0	0	0
Greene	1	0	0	2	0
Huntingdon	0	2	0	0	1
Indiana	0	0	1	0	2
Jefferson	0	0	0	0	0
Juniata	0	1	0	0	0
Lackawanna	5	6	4	3	0
Lancaster	6	4	6	6	0
Lawrence	1	0	0	0	0
Lebanon	3	1	2	1	0
Lehigh	7	3	7	4	4
Luzerne	2	9	4	5	4
Lycoming	1	1	2	0	1
McKean	0	0	1	0	0
Mercer	2	2	3	2	1
Mifflin	0	0	0	0	0
Monroe	3	2	3	4	4
Montgomery	3	5	9	5	8
Montour	0	1	1	1	0
Northampton	3	3	1	0	4
Northumberland	0	0	1	0	1
Perry	0	1	0	1	2
Philadelphia	30	37	35	32	32
Pike	0	0	0	1	1
Potter	0	0	0	0	0
Schuylkill	3	1	2	2	3
Snyder	2	1	0	1	0
Somerset	3	1	0	2	1
Sullivan	0	0	0	0	0
Susquehanna	0	0	0	0	0
Tioga	1	1	0	0	0
Union	1	1	0	1	0
Venango	1	2	0	0	0
Warren	0	0	1	2	1
Washington	3	1	1	3	5
Wayne	1	0	0	0	0
Westmoreland	1	2	8	2	4
Wyoming	1	0	0	0	0
York	5	6	2	4	3
<b>TOTAL</b>	<b>162</b>	<b>170</b>	<b>155</b>	<b>142</b>	<b>136</b>

Counties



### Pedestrian Deaths and Injuries by Age Group by County

County	Age 0-4		Age 5-9		Age 10-14		Age 15-59		Age 60+		Total	
	Death	Injury	Death	Injury	Death	Injury	Death	Injury	Death	Injury	Death	Injury
Adams	0	0	0	2	0	2	3	7	0	2	3	13
Allegheny	1	5	0	23	0	30	2	267	3	60	6	385
Armstrong	0	0	0	1	0	0	2	1	0	2	2	4
Beaver	0	2	0	4	0	4	0	10	0	2	0	22
Bedford	0	0	0	0	0	1	1	2	0	1	1	4
Berks	0	3	0	20	0	23	3	69	1	16	4	131
Blair	0	1	0	0	0	6	0	9	1	5	1	21
Bradford	0	0	0	1	0	0	0	5	0	1	0	7
Bucks	0	2	0	6	0	11	13	74	2	22	15	115
Butler	0	0	0	1	0	2	1	9	0	1	1	13
Cambria	0	0	0	4	0	3	0	15	0	5	0	27
Cameron	0	0	0	0	0	0	0	1	0	0	0	1
Carbon	0	1	0	1	0	2	1	7	0	2	1	13
Centre	0	1	0	1	0	1	3	45	0	1	3	49
Chester	0	3	0	2	0	5	0	38	2	6	2	54
Clarion	0	0	0	0	0	1	0	2	0	0	0	3
Clearfield	0	0	1	2	0	0	0	7	0	4	1	13
Clinton	0	0	0	0	0	0	0	5	0	2	0	7
Columbia	0	0	0	1	0	1	0	6	0	1	0	9
Crawford	0	0	0	2	0	2	0	6	0	2	0	12
Cumberland	0	1	0	1	0	0	2	18	2	9	4	29
Dauphin	0	5	0	14	0	6	2	58	0	13	2	96
Delaware	0	12	0	12	0	25	5	104	1	33	6	186
Elk	0	0	0	0	0	0	1	3	0	0	1	3
Erie	0	4	0	8	0	5	1	56	0	3	1	76
Fayette	0	0	0	3	0	4	0	16	0	2	0	25
Forest	0	0	0	0	0	0	0	0	0	1	0	1
Franklin	0	0	0	0	0	6	0	16	0	8	0	30
Fulton	0	0	0	0	0	0	0	0	0	0	0	0
Greene	0	0	0	0	0	1	0	7	0	2	0	10
Huntingdon	0	0	0	0	0	0	1	4	0	0	1	4
Indiana	0	0	0	0	1	0	1	8	0	2	2	10
Jefferson	0	0	0	0	0	0	0	3	0	0	0	3
Juniata	0	0	0	0	0	1	0	2	0	1	0	4
Lackawanna	0	2	0	3	0	9	0	48	0	18	0	80
Lancaster	0	4	0	8	0	17	0	73	0	16	0	118
Lawrence	0	1	0	1	0	2	0	9	0	1	0	14
Lebanon	0	2	0	2	0	6	0	13	0	2	0	25
Lehigh	0	7	0	19	0	19	0	69	4	18	4	132
Luzerne	0	4	0	5	0	5	1	52	2	10	3	76
Lycoming	0	0	0	1	0	5	1	11	0	5	1	22
McKean	0	0	0	0	0	1	0	2	0	1	0	4
Mercer	0	0	0	1	0	0	0	7	1	6	1	14
Mifflin	0	2	0	1	0	0	0	3	0	1	0	7
Monroe	0	0	0	0	0	1	4	13	0	2	4	16
Montgomery	0	2	0	11	0	33	4	125	4	35	8	206
Montour	0	0	0	1	0	1	0	2	0	1	0	5
Northampton	0	3	0	6	0	7	1	48	3	5	4	69
Northumberland	0	1	0	3	0	1	1	2	0	2	1	9
Perry	0	0	0	0	0	0	2	3	0	0	2	3
Philadelphia	2	79	3	198	2	181	18	1,088	7	207	32	1,753
Pike	0	0	0	0	0	2	1	4	0	1	1	7
Potter	0	0	0	0	0	0	0	0	0	2	0	2
Schuylkill	0	3	0	1	0	2	1	17	2	3	3	26
Snyder	0	0	0	1	0	0	0	2	0	0	0	3
Somerset	0	1	0	0	0	2	0	8	1	2	1	13
Sullivan	0	0	0	0	0	0	0	0	0	0	0	0
Susquehanna	0	0	0	2	0	1	0	0	0	1	0	4
Tioga	0	0	0	0	0	1	0	4	0	1	0	6
Union	0	0	0	0	0	1	0	1	0	0	0	2
Venango	0	0	0	0	0	1	0	8	0	2	0	11
Warren	0	0	0	0	0	2	0	6	1	1	1	9
Washington	0	0	0	1	0	3	2	17	3	3	5	24
Wayne	0	0	0	0	0	1	0	3	0	2	0	6
Westmoreland	0	0	0	3	0	4	3	22	1	11	4	40
Wyoming	0	0	0	0	0	1	0	6	0	1	0	8
York	1	6	0	11	0	17	1	46	0	16	2	96
<b>TOTAL</b>	<b>4</b>	<b>157</b>	<b>4</b>	<b>388</b>	<b>3</b>	<b>468</b>	<b>82</b>	<b>2,592</b>	<b>41</b>	<b>585</b>	<b>134</b>	<b>4,190</b>

Counties

*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	2005 Belt Use	2006 Belt Use	2007 Belt Use	2008 Belt Use	2009 Belt Use
Adams	78	83	85	83	87
Allegheny	73	73	74	76	77
Armstrong	78	76	78	82	81
Beaver	65	66	64	68	69
Bedford	85	82	88	87	87
Berks	73	74	76	76	78
Blair	84	83	84	86	87
Bradford	83	79	86	85	87
Bucks	76	76	76	76	78
Butler	83	85	85	86	86
Cambria	69	70	72	75	76
Cameron	72	75	81	85	85
Carbon	75	72	74	77	76
Centre	82	81	84	83	86
Chester	81	80	82	82	83
Clarion	84	84	86	88	84
Clearfield	77	76	81	81	80
Clinton	82	82	83	84	89
Columbia	78	79	81	83	84
Crawford	79	81	84	85	87
Cumberland	83	84	86	87	88
Dauphin	81	81	80	84	83
Delaware	71	72	75	76	75
Elk	82	80	84	79	78
Erie	77	77	77	79	80
Fayette	78	76	76	77	77
Forest	87	77	71	85	84
Franklin	81	77	80	82	84
Fulton	83	83	85	83	92
Greene	77	77	76	77	75
Huntingdon	77	74	81	77	83
Indiana	81	83	85	86	84
Jefferson	82	76	78	77	81
Juniata	82	81	84	85	83
Lackawanna	62	62	65	66	67
Lancaster	83	83	84	84	85
Lawrence	69	71	74	71	71
Lebanon	79	82	84	83	84
Lehigh	77	76	75	73	74
Luzerne	78	77	77	77	79
Lycoming	77	72	75	80	82
McKean	71	73	74	71	75
Mercer	77	77	78	78	79
Mifflin	77	77	77	79	79
Monroe	79	83	87	90	89
Montgomery	82	83	83	84	85
Montour	87	87	87	88	92
Northampton	80	80	80	84	83
Northumberland	73	75	77	77	77
Perry	83	80	84	85	82
Philadelphia	31	29	32	38	39
Pike	84	85	88	89	89
Potter	81	80	74	75	79
Schuylkill	78	76	79	78	82
Snyder	84	83	86	84	87
Somerset	78	75	80	82	83
Sullivan	88	82	79	80	86
Susquehanna	82	76	78	81	82
Tioga	87	80	82	85	84
Union	85	81	79	82	85
Venango	75	76	78	85	84
Warren	86	83	88	85	87
Washington	78	79	78	81	78
Wayne	82	83	84	85	87
Westmoreland	80	80	80	81	82
Wyoming	83	83	75	76	82
York	80	83	83	84	85
<b>STATEWIDE</b>	<b>73</b>	<b>73</b>	<b>75</b>	<b>76</b>	<b>77</b>

Counties

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

County	2005 Deaths	2006 Deaths	2007 Deaths	2008 Deaths	2009 Deaths
Adams	13	9	3	8	11
Allegheny	42	21	37	25	15
Armstrong	4	6	1	2	2
Beaver	9	8	3	6	7
Bedford	4	9	3	2	3
Berks	22	19	15	26	20
Blair	7	4	6	6	1
Bradford	6	5	5	4	0
Bucks	23	22	24	18	21
Butler	8	12	12	5	10
Cambria	10	5	5	9	7
Cameron	0	0	1	1	0
Carbon	6	3	3	6	5
Centre	5	9	8	6	5
Chester	16	20	25	20	8
Clarion	5	5	3	3	5
Clearfield	8	2	5	10	6
Clinton	4	3	4	6	1
Columbia	3	8	5	3	2
Crawford	11	11	6	5	4
Cumberland	14	11	9	7	5
Dauphin	11	11	13	10	12
Delaware	13	9	8	7	7
Elk	5	1	2	3	1
Erie	13	17	9	10	9
Fayette	13	7	22	15	16
Forest	1	4	2	1	3
Franklin	7	7	11	8	8
Fulton	3	2	1	3	0
Greene	6	1	5	3	1
Huntingdon	4	6	1	6	4
Indiana	11	4	2	7	6
Jefferson	3	1	1	4	4
Juniata	2	2	0	3	3
Lackawanna	7	9	9	8	4
Lancaster	18	26	18	19	14
Lawrence	6	2	2	5	3
Lebanon	2	7	6	9	5
Lehigh	12	11	8	16	17
Luzerne	17	24	25	8	16
Lycoming	7	6	6	6	4
McKean	3	3	3	5	0
Mercer	8	8	5	6	7
Mifflin	6	2	0	1	5
Monroe	18	9	6	15	8
Montgomery	16	23	23	14	17
Montour	1	2	1	2	0
Northampton	12	7	7	8	11
Northumberland	6	8	2	3	2
Perry	3	5	6	8	4
Philadelphia	27	23	40	27	34
Pike	2	5	3	4	2
Potter	4	0	3	3	0
Schuylkill	8	8	9	5	11
Snyder	4	0	2	3	2
Somerset	12	4	8	4	6
Sullivan	2	0	0	1	1
Susquehanna	5	6	4	4	1
Tioga	0	1	3	4	3
Union	5	7	1	2	3
Venango	1	5	5	1	1
Warren	5	6	4	5	2
Washington	11	9	16	12	14
Wayne	2	5	4	6	4
Westmoreland	14	22	23	33	15
Wyoming	3	5	0	5	6
York	21	23	23	24	15
<b>TOTAL</b>	<b>580</b>	<b>545</b>	<b>535</b>	<b>534</b>	<b>449</b>



### Pennsylvania Counties

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

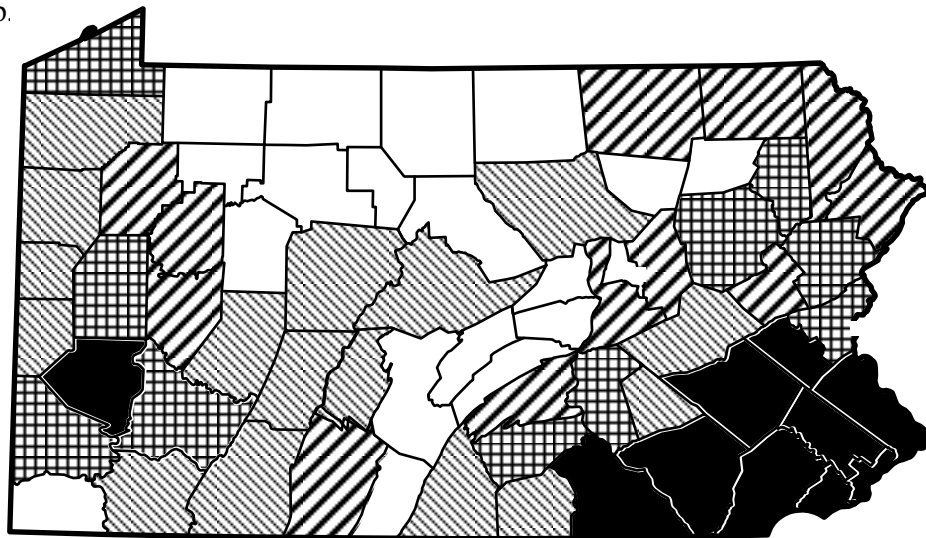


The following county-by-county maps have their data broken into five groups, with roughly the same number of counties in each group.

### Total Crashes by County

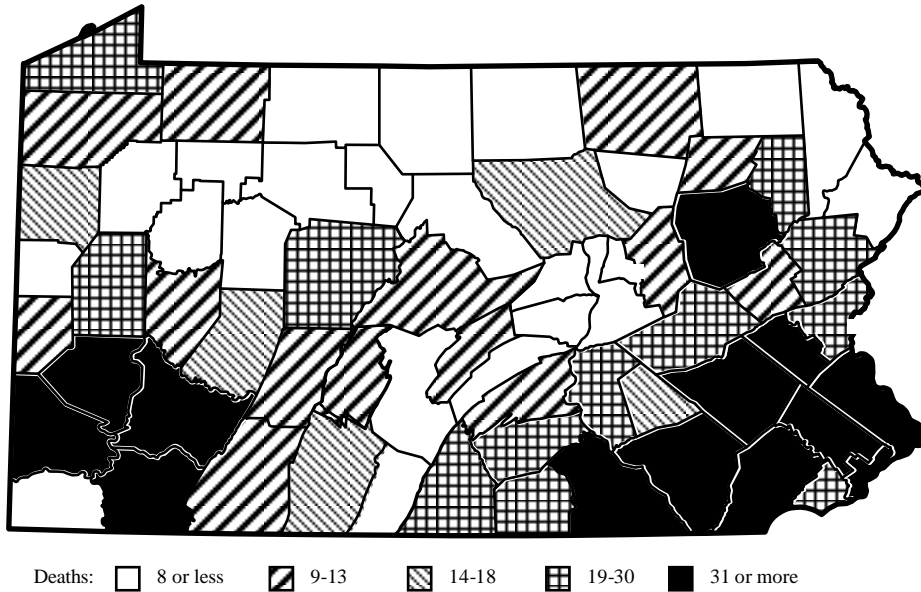
Urban counties, with their higher populations, number of vehicles, and vehicle-miles of travel, lend themselves to a higher number of crashes. Referring to the map below, 53% of the total traffic crashes occurred in only 10 of Pennsylvania’s 67 counties. These 10 counties appear in black on the map.

Counties



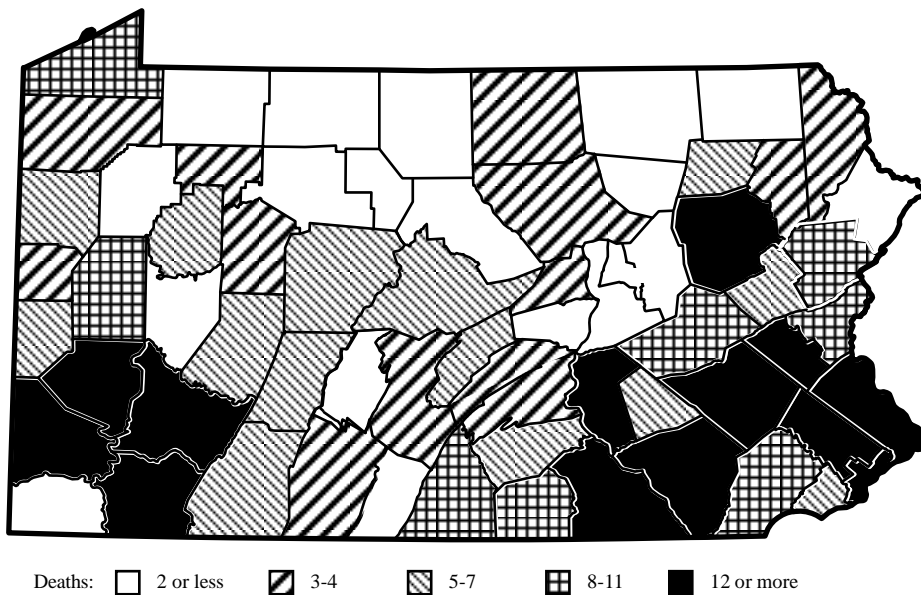
### Traffic Deaths by County

Referring to the map below, 49% of the total traffic deaths occurred in only 13 of Pennsylvania's 67 counties. These 13 counties appear in black on the map.



### Alcohol-Related Deaths by County

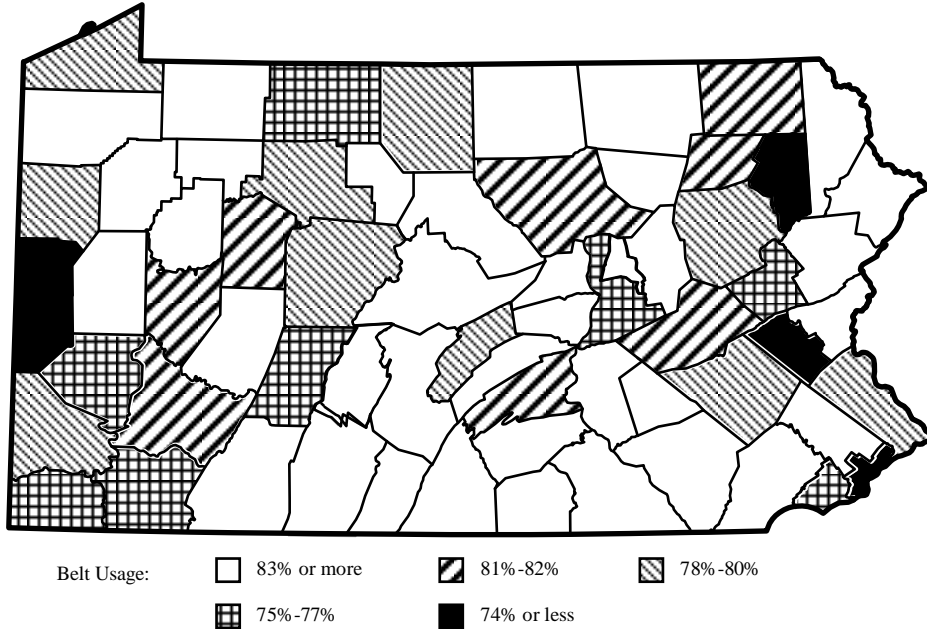
Referring to the map below, 50% of the total alcohol-related deaths occurred in only 13 of Pennsylvania's 67 counties. These 13 counties appear in black on the map.



Counties

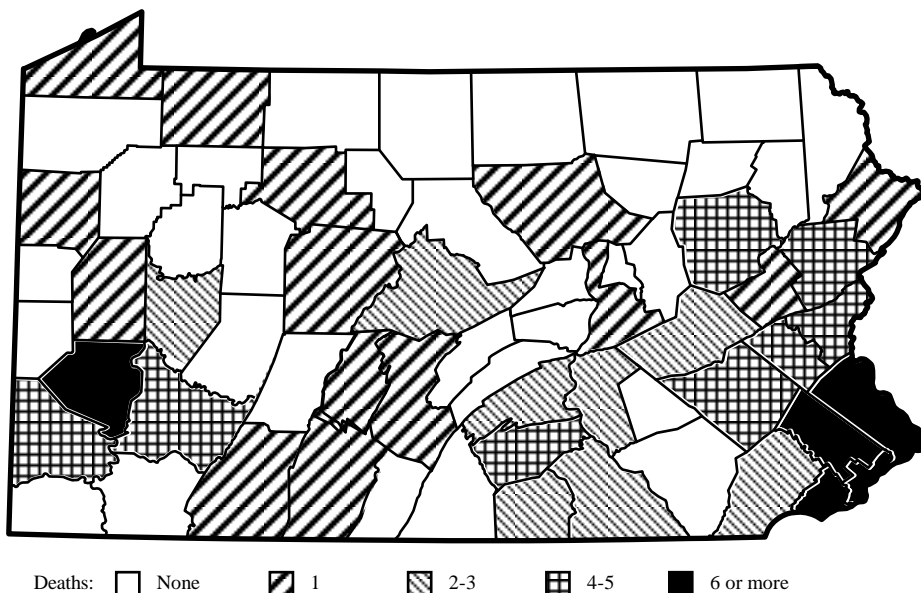
### Percent Seat Belt Use in Crashes by County

While the percent seat belt use in crashes tended to be lower in counties with major urban areas, some rural areas also had lower seat belt use in crashes. Below the worst 5 counties having 74% or less seat belt usage in crashes are shown in black on the map.



### Pedestrian Deaths by County

Referring to the map below, 62% of the total pedestrian deaths occurred in only 5 of Pennsylvania's 67 counties. These 5 counties appear in black on the map.

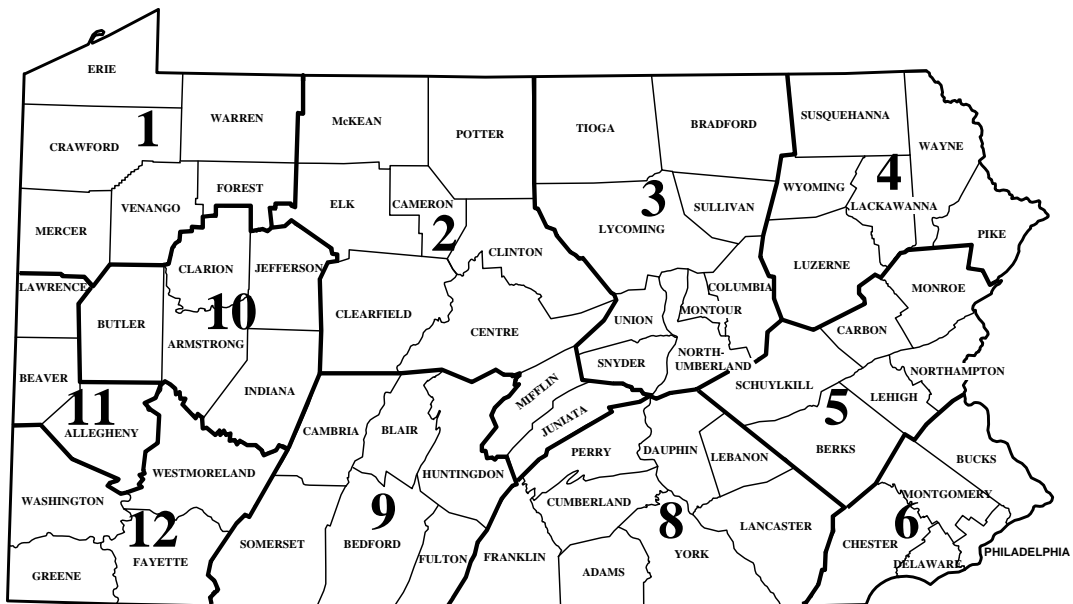


Counties

### Crashes by Engineering District

The map below illustrates the eleven PENNDOT engineering districts in Pennsylvania. The table below lists a breakdown of the number of crashes, deaths, and injuries in 2009 by engineering district.

District	Crashes	Deaths	Injuries
01	5,733	78	4,231
02	4,042	69	2,714
03	4,549	66	3,172
04	7,471	87	5,364
05	16,010	180	10,741
06	34,226	251	27,994
08	19,651	207	13,326
09	4,985	58	3,361
10	4,062	63	2,758
11	13,854	79	8,947
12	6,543	118	4,518
<b>Total</b>	<b>121,242</b>	<b>1,256</b>	<b>87,126</b>



Counties

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by Hour of Day.....	20, 28
by Light Level.....	18, 21, 45
by Month.....	19
by Road Type.....	14, 16, 18, 46, 49
by Sex.....	43
by Vehicle Type.....	9, 17
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## **NEW 2009 Pennsylvania Crash Facts & Statistics Feedback Survey**

The 2009 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

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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
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All Crashes and Deaths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Pedestrians and Bicycle Crashes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crashes by Motor Vehicle Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Bureau of Highway Safety and Traffic Engineering  
P.O. Box 2047  
Harrisburg, PA 17105-2047**

*2009 Pennsylvania Crash Facts & Statistics Survey Form*

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## *Dedication*

*The Commonwealth of Pennsylvania would like to extend its deepest sympathy to the families and friends of the victims of fatal 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 Highway Safety and Traffic Engineering  
P.O. Box 2047  
Harrisburg, PA 17105-2047**

**ADDRESS SERVICE REQUESTED**