2018 NORTH DAKOTA CRASH SUNMARY



About This Document

This document is prepared annually by the North Dakota Department of Transportation (NDDOT) to provide information about motor vehicle crashes, fatalities, and injuries in North Dakota.

Data for this document is collected by North Dakota law enforcement officers who complete a crash report when a crash on a public road involved a fatality, injury, or at least \$1,000 in property damage. Crashes that occur off of a public road (for example, on private property or parking lots) are not included.

Crash reports are submitted by law enforcement to the NDDOT Safety Division for central collection and data analysis. The data reported here reflects the point in time when the data was analyzed. Comparison to other data analysis may vary.

Gratitude is extended to all law enforcement personnel at the city, county, state, and tribal levels who provide this valuable data for analysis.



Crashes are not accidents. The word "accident" promotes the perception that crashes are outside of human control when, in fact, crashes are predictable results of specific actions.

Table of Contents

Executive Summary
Vehicle Crashes, Fatalities, & Injuries in North Dakota:
2018 Vehicle Crashes, Fatalities, & Injuries in North Dakota
Occupant Protection
Impaired Driving
Distracted Driving
Speed and/or Aggressive Driving
Young Drivers
Bicycles and Pedestrians
Motorcycles and Off-Highway Vehicles
Preventing Vehicle Crashes, Fatalities, & Injuries
Do you want to get involved in motor vehicle crash prevention?
North Dakota Crash Memorial Wall

Executive Summary

Motor vehicle crashes are the leading cause of injury-related death in North Dakota.1

Motor vehicle crash fatalities and injuries are sudden, violent, and traumatic events. The impact is long-lasting, often permanent, and extends beyond the victims to impact the lives of the victim's family, friends, and community.

The good news is, crashes are preventable.

Research shows that 94% of motor vehicle crashes can be attributed to a preventable human behavior. $^{2}\,$



In North Dakota, in 2018, preventable human behavior including not wearing a seat belt, alcohol, and speed and/ or aggressive driving contributed significantly to motor vehicle fatalities. Of the 105 fatalities in 2018, about 48% were not wearing their seat belt (excludes those where seat belts do not apply including pedestrians, bicycles, motorcycles, and off-highway vehicles), 32% were alcohol-related (includes both toxicology confirmed and officer suspected alcohol involvement), and 45% involved speed and/or aggressive driving.

Motor vehicle crash fatalities in North Dakota can be reduced if every driver and vehicle occupant takes personal responsibility for their safety.



This includes wearing seat belts at all times, transporting children in child passenger safety (CPS) seats appropriate for the child's age, height and weight, not driving while distracted by cell phones or any other form of distraction, driving only when sober (i.e., not under the influence of alcohol and/or drugs), and obeying all posted speed limits.

Vehicle Crashes, Fatalities, & Injuries in North Dakota:

A Decade in Review (2009-2018)

There are more than 15,000 vehicle crashes in North Dakota each year resulting in fatalities, injuries, and property damage.

The highest number of fatalities over this 10 year period occurred in 2012 (170), followed by a steady decrease in fatalities through 2016. In 2017, there was a 2.7% increase in fatalities; however, fatalities decreased by 9.5% from 2017 to 2018.



In the United States (U.S.), more than 33,000 lives are lost to vehicle crashes each year compared to more than 100 lives lost to crashes each year in North Dakota.

North Dakota Motor Vehicle Crashes, Fatalities, and Injuries, 2009-2018

Year	Crashes	Fatalities	Injuries
2009	17,673	140	4,462
2010	17,076	105	4,687
2011	18,823	148	5,018
2012	18,356	170	5,311
2013	18,977	148	5,365
2014	16,134	135	5,278
2015	15,077	131	4,917
2016	15,017	113	4,614
2017	15,280	116	4,432
2018	15,242	105	4,230

North Dakota Motor Vehicle Fatalities 2009-2018



However, with the exception of 2018 and 2016, North Dakota's fatality rate per 100 million vehicle miles traveled (VMT) is consistently **higher** than the national rate. VMT is a measure of crash exposure - the more vehicle miles driven, the greater the exposure to the risk of a crash.



According to the U.S. Census Bureau, North Dakota's population increased by slightly more than 113,000 people over the past 10 years.



North Dakota vs. United States Motor Vehicle Fatalities and Vehicle Fatality Rate, 2009-2018

Year	ND Fatalities	ND Fatality Rate*	U.S. Fatalities	U.S. Fatality Rate*
2009	140	1.72	33,883	1.15
2010	105	1.27	32,999	1.11
2011	148	1.62	32,479	1.10
2012	170	1.69	33,782	1.14
2013	148	1.47	32,893	1.10
2014	135	1.28	32,744	1.08
2015	131	1.31	35,485	1.15
2016	113	1.16	37,461	1.18
2017	116	1.19	37,133	1.16
2018	105	1.06	36,750**	1.14**

*Number of fatalities per 100 million vehicle miles traveled. **2018 figures are preliminary (NHTSA, May 2019).

Note: ND fatality rates were updated in 2018 to reflect NHTSA data which uses a slightly different VMT count.

North Dakota vs. United States Motor Vehicle Fatality Rate, 2009-2018



2018 Vehicle Crashes, Fatalities, & Injuries in North Dakota

In 2018, there were 105 individuals who lost their lives in motor vehicle crashes in North Dakota. Those who died ranged in age from 1 to 97. The majority (80%) were North Dakota residents.



Of the motor vehicle fatalities, 76 (72%) were in a passenger vehicle, 16 (15%) were motorcyclists, 6 (6%) were pedestrians, 3 (3%) were individuals on all-terrain vehicles (ATVs) and other miscellaneous vehicle types (such as snowmobiles, farm equipment, and horse drawn wagons), 2 (2%) were bicyclists, and 2 (2%) involved a motor vehicle and a train.



Fatalities occurred in 28 (53%) of North Dakota's 53 counties.

North Dakota Motor Vehicle Crashes, Fatalities, and Injuries by County, 2018

County	Crashes	Fatalities	Injuries
Adams	31	0	9
Barnes	246	2	55
Benson	32	4	18
Billings	45	2	7
Bottineau	52	2	22
Bowman	14	0	7
Burke	33	0	5
Burleigh	2,573	2	653
Cass	4,026	10	1,111
Cavalier	37	0	14
Dickey	54	1	12
Divide	18	1	8
Dunn	105	3	34
Eddy	27	1	3
Emmons	49	3	19
Foster	17	0	4
Golden Valley	25	0	4
Grand Forks	1,527	14	434
Grant	13	0	3
Griggs	20	0	10
Hettinger	20	0	8
Kidder	63	0	17
Lamoure	47	2	22
Logan	24	0	9
McHenry	52	2	12
McIntosh	25	0	5
McKenzie	443	7	175
McLean	118	2	43
Mercer	99	0	33
Morton	599	2	135
Mountrail	134	7	48

County	Crashes	Fatalities	Injuries
Nelson	39	0	11
Oliver	11	0	3
Pembina	81	3	30
Pierce	30	0	12
Ramsey	231	3	51
Ransom	51	0	4
Renville	24	1	9
Richland	214	7	71
Rolette	3	0	2
Sargent	29	0	16
Sheridan	18	0	3
Sioux	0	0	0
Slope	13	0	7
Stark	689	3	138
Steele	8	0	4
Stutsman	567	2	134
Towner	14	0	5
Traill	123	1	40
Walsh	159	1	45
Ward	1,232	7	384
Wells	52	0	15
Williams	1,086	10	307
TOTAL	15,242	105	4,230

Motor vehicle fatalities in North Dakota occur each month of the calendar year. However, over the past 5 years more people have died in motor vehicle crashes in the warm weather months in North Dakota (May through November) than the cold weather months. Warm weather months are also peak travel months in North Dakota where more vehicle miles are driven. During the 5 year period (2014-2018), August had the most motor vehicle fatalities in North Dakota.

North Dakota Motor Vehicle Fatalities by Month, 2018



North Dakota Motor Vehicle Fatalities by Month, 2014-2018



2018 Vehicle Crashes, Fatalities, & Injuries in North Dakota (continued)

In 2018, males died in motor vehicle crashes 2.6 times more than females.

North Dakota Motor Vehicle Fatalities by Gender, 2018



North Dakota Motor Vehicle Fatalities by Gender, 2014-2018



Nearly 3/4, 73%, of those who died in motor vehicle crashes in North Dakota over the past 5 years were between the ages of 21 and 64.

North Dakota Motor Vehicle Fatalities by Age, 2018



North Dakota Motor Vehicle Fatalities by Age, 2014-2018



Over the past 5 years, drivers in fatal crashes in North Dakota were primarily between the ages of 21 and 64.

North Dakota Age of Drivers Involved in Fatal Motor Vehicle Crashes, 2018



North Dakota Age of Drivers Involved in Fatal Motor Vehicle Crashes, 2014-2018



Historically, more fatalities occur during Labor Day and Memorial Day than other holidays.

Note: Data reflects a multiple day period that varies per holiday and the day of the week on which the holiday falls. The New Year's Eve holiday period includes both December and January fatalities with the fatalities counted in the year in which they occurred.

North Dakota Holiday Motor Vehicle Fatalities, 2018



(3)





New Years

Memorial Day (1) Independence Day (1)







Labor Day (2)

Thanksgiving (1)

Christmas (1)

North Dakota Holiday Motor Vehicle Fatalities, 2014-2018



Occupant Protection



Seat belts save lives. They are the single most effective safety device to prevent death and injury in a motor vehicle crash.³



Seat belts protect you by:

- Keeping you in the vehicle.
- Spreading the force of impact over a large area and the strongest part of the body.
- Allowing your body to slow down gradually, lessening the impact on internal organs.
- Preventing impact with the interior of the vehicle.
- Preventing collision with other occupants of the vehicle.
- Preventing trauma to the brain and spinal cord caused by sudden change in motion.

Fortunately, most people who drive and ride in motor vehicles in North Dakota understand how important it is to wear a seat belt. An annual survey of observed seat belt use in North Dakota in 2018 shows that more than 8 out of every 10 people wear a seat belt (82.5%). But, it is those who do not wear seat belts who are much more likely to lose their life in a crash.

North Dakota Unbelted Motor Vehicle Fatalities, 2014-2018

Year	Fatalities*	No Seat Belt Used	Percent Unbelted
2014	110	76	69%
2015	111	68	61%
2016	87	51	59%
2017	91	50	55%
2018	77	37	48%

*Includes fatalities where seat belts were available within the vehicle. Excludes fatalities where seat belts do not apply (pedestrians, bicycles, motorcycles, off-highway vehicles, persons riding on the exterior of motor vehicles, bus passengers, and farm/ construction equipment).

North Dakota Percent of Restraint Use by Injury Classification, 2014-2018



³ National Safety Council

Crash data shows a direct correlation between seat belt use and injury severity. Unbelted vehicle occupants in crashes in North Dakota account for the largest percent of fatalities and serious injuries, while belted occupants most commonly receive non-serious or no injuries.



In North Dakota, over the past 5 years (2014-2018), nearly 6 out of every 10 people killed in a motor vehicle crash were not wearing a seat belt at the time of the crash. And, 80% of the unbelted fatalities were males.

In 2018 alone, 48% of motor vehicle fatalities in North Dakota were not wearing their seat belt. Of those unbelted fatalities, 32% were partially or totally ejected. Further, 60% of single vehicle rollover fatalities were not wearing their seat belt and 43% of those unbelted fatalities were either partially or totally ejected.

And, while North Dakota's seat belt use has remained relatively stable over time, the national seat belt use rate has surpassed North Dakota's rate over the past 10 years.

Seat belts save lives. Wear your seat belt – everybody, every trip, every time!

North Dakota Seat Belt Use and Unbelted Motor Vehicle Fatalities, 2014-2018



North Dakota vs. United States Seat Belt Use Rate, 2009-2018



Impaired Driving



Alcohol and drug-related crashes are 100% preventable. Many lives would be saved in North Dakota each year if every driver consistently makes the choice to drive sober and not while under the influence of alcohol and/or drugs.





Yet, 265 people have died in alcohol-related crashes in North Dakota over the past 5 years. Alcohol is a factor in about 43% of fatal crashes in North Dakota annually. The percent of alcohol-related fatal crashes decreased annually between 2014 and 2015. Following increases in 2016 and 2017, the percent of alcohol-related fatal crashes decreased again in 2018.

Approximately 1 in 6 (16%) adult arrests in North Dakota in 2018 were for Driving Under the Influence (DUI).⁴ The **average** blood alcohol content (BAC) among DUI offenders in North Dakota is .159 – nearly twice the legal limit of .08.

Drive sober.

⁴ North Dakota Office of Attorney General, Bureau of Criminal Investigation, Crime in North Dakota, 2018

North Dakota Motor Vehicle Crashes, Fatalities, and Injuries Involving Alcohol, 2014-2018

Year	Total Fatal Crashes	Fatalities	Injuries
2014	53	63	564
2015	48	57	496
2016*	46	54	446
2017*	50	57	472
2018*	33	34	407

*Beginning in 2016, the criteria for determining alcoholrelated fatal crashes and fatalities was revised. Revised counts indicate at least one operator in the crash had a positive BAC and/or officer suspected alcohol involvement was indicated on the crash report; passenger BACs are excluded. Alcohol-related injuries are counted based on officer suspected alcohol involvement from the crash report; toxicology is not available.

North Dakota Percent Alcohol-Related Fatal Motor Vehicle Crashes, 2014-2018



Distracted Driving



Distraction – taking eyes, hands, or mental attention away from driving – is a common contributing factor in most motor vehicle crashes and near crashes.

Texting while driving is a behavior so dangerous that drivers are:



According to the National Highway Traffic Safety Administration (NHTSA), 3,166 people nationwide were killed in motor vehicle crashes involving distracted drivers in 2017,* and 9% of fatal crashes in 2017 were distraction-related.

Distracted driving is vastly underreported as a factor in a crash due to driver hesitancy to report, lack of witness verification, and other factors. As a result, North Dakota crash data related to distraction is limited. However, in 2018, just over 1,400 distracted driving violations were posted to the ND Driver's License System.



Sending one text at 55 mph is like *driving blindfolded* the entire length of a football field.

VISION ZER 9

Zero fatalities. Zero excuses.

Vision Zero is a statewide strategy to eliminate fatalities and serious injuries caused by motor vehicles on North Dakota roads.

VisionZero.ND.gov

PARENTS LEAD

Parents LEAD (Listen, Educate, Ask, Discuss) is an evidence-based underage drinking prevention program targeting parents and professionals through statewide, web-based communication.

ParentsLead.org

SPEAK VOLUMES

Speak Volumes is a campaign to educate North Dakota adults on standard drink sizes, binge drinking, and related consequences to help them make better decisions about alcohol consumption.

SpeakVolumes.ND.gov

Speed and/or Aggressive Driving

Speed and/or aggressive driving was a factor in over 40% of fatal crashes in North Dakota in 2018.



According to the National Highway Traffic Safety Administration (NHTSA), 9,717 lives were lost in speed-related vehicle crashes in the U.S. in 2017.*

Speeding endangers everyone on the road. It greatly reduces the driver's ability to slow a vehicle when necessary or to steer safely around an unexpected curve, or another vehicle, or hazardous object in the road. In school zones or neighborhoods, that could include a child or an animal crossing the road.

Of the 42 drivers involved in fatal crashes in North Dakota in 2018 with speed and/or aggressive driving identified as a contributing factor, 86% were ages 21-54 and 83% were male.

It's not just aggressive driving, it's deadly driving. Stop speeding before it stops you.

North Dakota Fatal Motor Vehicle Crashes Involving Speed/Aggressive Driving**, 2014-2018

Year	Total Fatal Crashes	Speed/Aggr. DrivInvolved Fatal Crashes	Percent
2014	121	49	40%
2015	111	46	41%
2016	102	29	28%
2017	106	30	28%
2018	95	42	44%

221 people have died in speed/aggressive drivinginvolved crashes in North Dakota over the past 5 years.

North Dakota Motor Vehicle Crashes, Fatalities, and Injuries Involving Speed/ Aggressive Driving**, 2014-2018

Year	Crashes	Fatalities	Injuries
2014	5,333	55	2,132
2015	5,033	54	1,818
2016	4,922	32	1,737
2017	5,296	33	1,755
2018	5,525	47	1,723

**Speed/Aggressive Driving-Involved is defined as speeding, driving too fast for conditions, following too close, or operating a vehicle in an erratic, reckless, careless, negligent, or aggressive manor.

^{*}Most current data available

Young Drivers

Motor vehicle crashes are the leading cause of injuryrelated death for North Dakota teens.⁵ Young driver inexperience, coupled with immaturity, often results in risk-taking behaviors such as speeding, alcohol use, and not wearing a seat belt – all of which contribute to an increased death rate.⁶





In North Dakota, teen drivers age 14-19 account for 5% of all licensed drivers but are behind the wheel in nearly 20% of all crashes.

Teen drivers were involved in 9% of fatal crashes in North Dakota in 2018. And, over the past 5 years in North Dakota, 45 teens have died in vehicle crashes.

North Dakota Teen Driver Involvement in All Crashes, 2014-2018

Year	Total Crashes	Teen Driver Crashes	Percent
2014	16,134	2,862	18%
2015	15,077	2,794	19%
2016	15,017	2,853	19%
2017	15,280	3,075	20%
2018	15,242	2,952	19%

North Dakota Teen Driver Involvement in Fatal Crashes, 2014-2018

Year	Total Fatal Crashes	Teen Driver Fatal Crashes	Percent
2014	121	16	13%
2015	111	14	13%
2016	102	11	11%
2017	106	13	12%
2018	95	9	9%

North Dakota Teen Fatalities from Motor Vehicle Crashes, 2014-2018



⁵ Centers for Disease Control and Prevention

⁶ Governors Highway Safety Administration

Bicycles and Pedestrians

Everyone has different preferences when it comes to transportation. Regardless of mode of transport, being safe on the road is a responsibility shared by all. Bicyclists and pedestrians have the same rights, privileges, and responsibilities as every motorist; however, they are more vulnerable since they do not have the protection provided by a vehicle.



Pedestrians are at a disadvantage when crossing streets, intersections, and standing on corners, as they are not always visible to drivers. Tips to keep safe when walking from one destination to another: watch walkways – make sure the driver sees you by making eye contact with them, don't be a distracted walker, make yourself visible, watch for wide loads, and be aware of blind spots.

As a bicyclist, you need to take extra precautions to protect yourself. Tips to help keep you riding safely – wear a helmet, be aware of traffic, check your brakes, ride with traffic, and be aware of blind spots.

North Dakota Crashes, Fatalities, and Injuries Involving Bicycles, 2014-2018

Year	Crashes	Fatalities	Injuries
2014	85	3	78
2015	96	1	90
2016	94	3	88
2017	93	2	79
2018	74	2	68

In 2018, the bicycle-related fatalities involving a motor vehicle included 1 male and 1 female.

North Dakota Crashes, Fatalities, and Injuries Involving Pedestrians, 2014-2018

Year	Crashes	Fatalities	Injuries
2014	109	9	101
2015	108	7	96
2016	132	7	100
2017	138	5	106
2018	131	6	91

In 2018, 83% of pedestrian-related fatalities involving a motor vehicle were male.

Motorcycles and Off-Highway Vehicles

Since 2009 in North Dakota, the number of motorcycle licensed drivers has increased by 36%, and motorcycle registrations have also increased by 29%.



Motorcyclists can increase their safety on the roads by wearing All The Gear, All The Time (ATGATT), taking a rider safety course, and obeying all traffic laws.

Motorcycle Fatality Facts, ND 2018



Motorists can prevent a crash with motorcyclists by checking all mirrors and blind spots, staying back, and looking for motorcyclists, especially at intersections.

North Dakota Crashes, Fatalities, and Injuries Involving Motorcycles, 2014-2018

Year	Crashes	Fatalities	Injuries
2014	219	10	191
2015	284	8	243
2016	248	12	198
2017	248	13	204
2018	210	16	167

Last year in North Dakota, 78% (164) of all reported motorcycle crashes resulted in injury or death. In the past 5 years, speed has been a contributing factor in 32% of motorcycle fatalities in North Dakota.

North Dakota Crashes, Fatalities, and Injuries Involving Off-Highway Vehicles**, 2014-2018

Year	Crashes	Fatalities	Injuries
2014	51	2	47
2015	57	2	54
2016	60	3	59
2017	61	2	59
2018	71	2	73

**Off-highway vehicles include all-terrain vehicles (ATV) and snowmobiles.

Note: Tables have been updated from previous Crash Summaries to reflect a change in methodology for consistent analysis across the 5 year period.

Preventing Vehicle Crashes, Fatalities, & Injuries

The North Dakota Vision Zero Plan identifies partners and "E" strategies to reduce motor vehicle fatalities and injuries in the state. The "E" strategies are described below.

Education. All North Dakotans should know that they can save their lives, and the lives of others, from motor vehicle crashes by taking personal responsibility. This includes wearing seat belts at all times, transporting children in child passenger safety seats appropriate for the child's age, height, and weight, not driving while distracted by cell phones or any other form of distraction, driving only when sober (i.e., not under the influence of alcohol and/or drugs), and obeying all posted speed limits.

Environment. Behavior change can occur through changing the environment in which the behavior occurs. This is done through strengthening traffic safety policies and laws such as mandating seat belt use for all vehicle occupants at all times, increasing the fines associated with speed violations, eliminating cell phone use in vehicles, and mandating alcohol beverage server training to prevent overconsumption of alcohol by consumers.

Enforcement. Regular enforcement of traffic safety laws deters unsafe driver and occupant behavior.

Engineering. State and local North Dakota roads are designed, constructed, and maintained with safety as a priority.

Emergency Medical Services. In the event that a motor vehicle crash does occur, assure that crash victims are transported to an appropriate level of health care for their injuries, in the shortest amount of time possible.

Do you want to get involved in motor vehicle crash prevention?

The NDDOT and our traffic safety partners invite you to **join the Vision Zero Partner Network (VZPN)** for resources and ideas to help reduce risky driver and occupant behaviors to save lives.

Risky behaviors cause hundreds of preventable crashes in North Dakota every year. By joining the Vision Zero Partner Network, you can help prevent motor vehicle crash fatalities and serious injuries on North Dakota roads. Marketing and resource materials are free and all contributions are voluntary.

Benefits of VZPN:

- · Protect your organization's human and financial resources
- · Guard against potential liabilities associated with work-related crashes
- · Demonstrate your company, school, or organization's commitment to the community
- · Show your students or employees you care about them and their families
- Address the problems of distracted driving, impaired driving, speed, aggressive driving, and lack of seat belt use

What partners will receive from NDDOT:

- · Education tools and materials bundled for each campaign
- · Help getting a driver and occupant safety program started
- · Opportunities to collaborate with other network organizations and agencies
- · Technical support for local opportunities such as media interviews

To sign up, go to VisionZero.ND.gov and click on "Partners."

Working together, we can save lives.

The North Dakota Crash Memorial Wall

The North Dakota Crash Memorial Wall is an online space to safely honor someone you love who lost their life in a motor vehicle crash on a North Dakota road. Memorials are public in the hope that sharing their stories will offer comfort to families and friends and remind visitors about the devastating impact of motor vehicle fatalities.

The Crash Memorial Wall was developed by the North Dakota Department of Transportation and launched in August 2015. In 2016, the American Association of Motor Vehicle Administrators (AAMVA) recognized the North Dakota Crash Memorial Wall with a Public Affairs and Consumer Education Award (PACE) for outstanding website.

Immediate family members are invited to create a memorial at **VisionZero.ND.gov**. Extended family and friends can comment on the memorials. All submissions are reviewed by the North Dakota Department of Transportation within 10 business days.

⁶⁶ Even one life lost in a motor vehicle crash is too many; every life is precious.



Ouestions and requests for additional data or copies of this document can be directed to:

NDDOT Safety Division

701-328-2598 dottrafficgrp@nd.gov

The report can be found online at: VisionZero.ND.gov/statistics