## 2019 | Injuries Data Brief





#### Key Findings from 2017-2018 Injury Data

A note on data in this report: The processing requirements of birth and death certificate records results in a delay in public availability of the data.

- In 2017, the overall leading cause of injury deaths was unintentional poisoning, followed by motor vehicle injury deaths, unintentional falls, suicide and homicide.
- Unintentional poisoning deaths (118 in 2017) were due primarily to adverse reactions to prescription and non-prescription use of opioid drugs.
- Deaths due to motor vehicle crashes have shown an increasing trend since 2011.
- Mortality rates due to non-motor vehicle-related injuries in Guilford County and North Carolina continued to increase.
- Homicide deaths declined in Guilford County from 13 per 100,000 in 1997 to 8.2 per 100,000 in 2016. Those most at risk of homicide are young adults ages 25-34.
- Suicide deaths, which increased sharply from 43 deaths in 2014 to 71 deaths in 2015, declined to 60 in 2016.
- Firearms were used in most suicides and homicides.
- Opioid-related Emergency Department visits declined in 2018.

### Inside this Data Brief

K E, I,	1
Key Findings	1
Leading Causes of Injury Mortality	2
Leading Causes of Injury Mortality by Sex	2
Leading Causes of Injury Mortality by Race and Ethnicity	3
Detailed Causes of Injury Mortality	4-5
Opioid Drug Trends, Quarterly	6
Opioid Drug Trends, Annual	6
Injury Mortality by Age Group	7
Motor and Non-Motor Vehicle Injury Mortality Trends	8
Suicide Mortality Trends	8
Homicide Suicide Mortality Trends	8

This report was prepared by Health Surveillance & Analysis Unit of the Division of Public Health:

Mark H. Smith, Ph.D., Epidemiologist

Laura Mrosla, MPH, MSW, Community Health Educator

For more information about Guilford County health statistics, visit:

www.guilfordcountync.gov/our-county/human-services/health-department/health-statistics.

# Leading Causes of Injury Mortality and Rates per 100,000 Guilford County, 2013-2017

All Residents										
Injury Type	2013	3	2014		2015		2016		2017	
Injury Type	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor Vehicle Injury	47	9.2	53	10.3	53	10.2	57	10.9	71	13.5
Unintentional Falls	83	16.4	74	14.4	77	14.9	83	15.9	67	12.7
Suicide, Self-Inflicted Injury	52	10.3	43	8.4	71	13.7	60	11.5	63	12.0
Homicide	33	6.5	28	5.5	39	7.5	44	8.4	51	9.7
Unintentional Poisoning	37	7.3	51	10.0	62	12.0	95	18.2	118	22.4
Unintentional Death by Fire	5	1.0	4	0.8	1	0.2	5	1.0	2	0.4
Population	506,6	10	512,1	19	517,60	00	521,3	521,330		53

Source: North Carolina Department of Health and Human Services, Division of Public Health. State Center for Health Statistics.

## Leading Causes of Injury Mortality and Rates per 100,000 by Sex Guilford County, 2013-2017

Female Residents										
Injum Type	2013	2013		2014		2015			2017	
Injury Type	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor Vehicle Injury	9	3.4	8	3.0	14	5.2	19	6.9	18	6.5
Unintentional Falls	46	17.2	44	16.4	47	17.3	50	18.2	34	12.4
Suicide, Self-Inflicted Injury	18	6.7	11	4.1	15	5.5	18	5.6	13	4.7
Homicide	8	3.0	8	3.0	7	2.6	6	2.2	10	3.6
Unintentional Poisoning	9	3.4	17	6.3	17	6.3	29	10.6	36	13.0
Unintentional Death by Fire	1	0.4	1	0.4	1	0.4	3	1.1	0	0.0
Population	267,29	93	268,635		271,543		274,081		277,132	

Male Residents										
Injury Type	2013		2014		2015		2016		2017	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor Vehicle Injury	38	15.8	45	18.5	39	15.8	38	15.4	53	21.2
Unintentional Falls	37	15.4	30	12.3	30	12.2	33	13.3	33	13.2
Suicide, Self-Inflicted Injury	34	14.2	32	13.2	56	22.7	42	17.0	50	20.0
Homicide	25	10.4	20	8.2	32	13.2	38	15.4	41	16.4
Unintentional Poisoning	28	11.7	34	14.0	45	18.3	66	26.7	82	32.8
Unintentional Death by Fire	4	1.7	3	1.2	0	0.0	2	0.8	2	0.8
Population	240,12	26	243,119		246,057		247,249		249,821	

Source: North Carolina Department of Health and Human Services, Division of Public Health. State Center for Health Statistics.

# Leading Causes of Injury Mortality and Rates per 100,000, by Race Guilford County, 2013-2017

White Residents										
Injury Type	2013		2014	2014		2015		· )	2017	
mjury Type	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor Vehicle Injury	26	8.7	29	9.5	32	10.5	33	10.9	31	10.2
Unintentional Falls	70	23.4	63	20.7	66	21.7	74	24.3	56	18.4
Suicide, Self-Inflicted Injury	38	12.7	34	11.2	62	20.4	53	17.4	50	16.4
Homicide	12	4.0	5	1.6	6	2.0	6	2.0	8	2.6
Unintentional Poisoning	26	8.7	40	13.2	46	15.1	72	23.7	96	31.5
Unintentional Death by Fire	5	1.7	2	0.7	1	0.3	4	1.3	2	0.7
Population	298,91	14	303,718		304,661		303,976		304,724	

Black/African-American Residents										
Injury Type	2013		2014	2014		2015		2016		7
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor Vehicle Injury	20	11.7	17	9.5	18	9.9	19	10.2	30	15.9
Unintentional Falls	12	7.0	10	5.6	9	4.9	9	4.8	9	4.8
Suicide, Self-Inflicted Injury	13	7.6	8	4.5	5	2.7	4	2.1	11	5.8
Homicide	19	11.2	21	11.7	29	15.9	34	18.3	42	22.2
Unintentional Poisoning	10	5.9	9	5.0	11	6.0	21	11.4	18	9.5
Unintentional Death by Fire	0	0.0	1	0.6	0	0.0	1	0.5	0	0
Population	170,20	60	179,3	32	182,5	48	185,8	46	189,159	

Asian, Native American and Hispanic, 2017										
Injury Type	Asian	Native American	Hispanic							
	Number	Number	Number							
Motor Vehicle Injury	8	2	6							
Unintentional Falls	1	1	1							
Suicide, Self-Inflicted Injury	2	0	1							
Homicide and Intentional Injury	1	0	1							
Unintentional Poisoning	2	0	3							
Unintentional Death by Fire	0	0	0							

Source: North Carolina Department of Health and Human Services, Division of Public Health. State Center for Health Statistics.

## Detailed External Injury Causes of Mortality, 2017

ICD-10 Cause of Death Codes	Cause of Death Description	Number of Deaths
De	eaths due to Motor Vehicle and other Transport-Related Injuries	
V00-V99	Transport Accidents	75
V00-V09	Pedestrian injured in transport accident	20
V10-19	Pedal cycle rider injured in transport accident	1
V20-V29	Motorcycle rider injured in transport accident	8
V40-V49	Car occupant injured in transport accident	6
V60-V69	Occupant of heavy transport vehicle injured in transport accident	1
V80-V89	Other land transport accidents	38
V90-V94	Water transport accidents	1
	Deaths due to Falls	
W00-W19	Deaths due to Falls	67
W01	Fall from slipping, tripping or stumbling	9
W05	Fall from wheelchair or nonmotorized scooter	1
W06	Fall from bed	2
W07	Fall from chair	4
W10	Fall from stairs or steps	4
W11	Fall from ladder	2
W13	From building or structure	1
W15	Fall from cliff	1
W18	Other slipping, tripping, stumbling and falls	24
W19	Unspecified fall	19
	Exposure to Inanimate Mechanical Forces	
W30	Contact with agricultural machinery	1
W32	Accidental handgun discharge and malfunction	3
W34	Accidental discharge and malfunction from other unspecified firearms and guns	1
	Deaths Due to Accidental Threats to Breathing	
W67	Accidental drowning and submersion while in swimming pool	1
W75	Accidental suffocation and strangulation in bed	1
W76	Accidental hanging and strangulations	1
W78	Inhalation of gastric contents	1
W79	Inhalation and ingestion of food causing obstruction of respiratory tract	2
W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	6
	Exposure to Smoke, Fire and Flames	
X00	Exposure to uncontrolled fire in building or structure	2
	Exposure to Forces of Nature	
X30	Exposure to excessive natural heat	1
X31	Exposure to excessive natural cold	1
t	i -	1

ICD-10 Cause of Death Codes	Cause of Death Description	Number of Deaths
	Deaths due to Unintentional Poisoning	
X40-X49	Accidental poisoning by and exposure to noxious substances	118
X41	Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs	2
X42	Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], Not Elsewhere Classified (NEC)	68
X44	Accidental poisoning by and exposure to other and unspecified drugs, medicaments & biological substances	43
X45	Accidental poisoning by and exposure to alcohol	4
X47	Accidental poisoning by and exposure to other gases and vapors	1
	Deaths due to Suicide	
X60-X84	Intentional self-harm	63
X61	Intentional self-poisoning by & exposure to antiepileptic, sedative-hypnotic, anti- parkinsons and psychotropic drugs	3
X62	Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], NEC	1
X64	Intentional self-poisoning by and exposure to other & unspecified drugs, medicaments and biological substances	3
X67	Intentional self-poisoning by and exposure to other gases and vapors	1
X69	Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances	1
X70	Intentional self-harm by hanging, strangulation and suffocation	19
X72	Intentional self-harm by handgun discharge	13
X73	Intentional self-harm by rifle, shotgun and larger	3
X74	Intentional self-harm by other and unspecified firearm and gun discharge	15
X78	Intentional self-harm by sharp object	1
X80	Intentional self-harm by jumping from a high place	2
X81	Intentional self-harm by jumping or lying in front of motor vehicle	1
	Deaths due to Homicide	
X85-Y09	Assault	51
X91	Assault by hanging, strangulation and suffocation	1
X93	Assault by handgun discharge	1
X94	Assault by rifle, shotgun and larger firearm discharge	3
X95	Assault by other and unspecified firearm discharge	39
X99	Assault by sharp object	3
Y09	Assault by unspecified means	4

Source: Detailed Mortality Statistics, North Carolina Residents, 2014, NC State Center for Health Statistics.

Opioid Drug Trends in Guilford County: Quarterly Data

	Jan-Mar 2017	Apr-Jun 2017	Jul-Sept 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sept 2018	Oct-Dec 2018
Heroin Overdose ED Visits	48	67	82	94	41	30	54	47
Opioid Overdose ED Visits	72	96	107	115	70	57	71	60
Heroin-Related ED Visits	235	249	294	233	160	198	229	170

<sup>1</sup>Source: NC DETECT (NC Disease Event Tracking and Epidemiologic Collection Tool).

Opioid Drug Trends in Guilford County: Annual Data Trends

	2011	2012	2013	2014	2015	2016	2017	2018
Heroin Overdose ED Visits <sup>1</sup>	14	36	70	191	107	156	291	173
Opioid Overdose ED Visits <sup>1</sup>	73	119	184	305	243	263	390	261
Heroin-Related ED Visits <sup>1</sup>	156	178	104	234	180	611	1,009	750
Opiate Poisoning Deaths <sup>2,3</sup>	28	32	17	42	47	71	99	NA
Heroin Poisoning Deaths <sup>2,4</sup>	7	9	9	25	23	40	29	NA
Synthetic Opioid Poisoning Deaths <sup>2,5</sup>	2	1	1	18	11	34	84	NA

Source: NC DETECT (NC Disease Event Tracking and Epidemiologic Collection Tool), Emergency Department data.

Characteristics of Cases: Opioid Overdose ED Visits, January 01-December 31, 2017

Characteristic	Number	Percent
Patient City/Location		
Greensboro	126	49.0%
High Point	54	20.7%
Archdale	15	5.7%
Gibsonville	9	3.4%
Summerfield	8	3.1%
Browns Summit	7	2.7%
McLeansville	6	2.3%
Other	36	16.7%
Patient Sex		
Male	175	67.0%
Female	86	33.0%
Patient Race		
White	207	79.3%
Black	47	18.0%
Other	7	2.7%
Patient Age Group		
Ages 0-9	2	0.5%
Ages 10-19	10	2.5%
Ages 20-29	132	33.8%
Ages 30-39	114	29.2%
Ages 40-49	56	14.4%
Ages 50-59	55	14.1%
Ages 60 and Over	21	5.4%
Total	261	100.0%

<sup>1</sup>Source: NC DETECT (NC Disease Event Tracking and Epidemiologic Collection Tool).

Data prepared by the Guilford County Department of Health and Human Services, Division of Public Health.

<sup>&</sup>lt;sup>2</sup>Source: Injury and Violence Prevention Branch, NCDHHS.

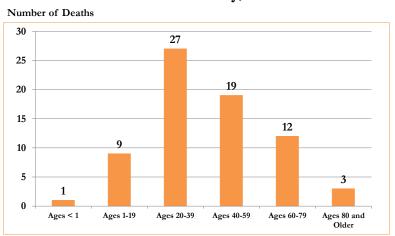
<sup>&</sup>lt;sup>3</sup>Cause of Death Codes used: Any mention (cod1-cod21) of T40.0 (Opium), T40.1 (Heroin), T40.2 (Other Opioids), T40.3 (Methadone) and/or T40.4 (Other synthetic opioid).

<sup>&</sup>lt;sup>4</sup>Cause of Death Codes used: Any mention (cod1-cod21) of T40.1 (Heroin).

<sup>&</sup>lt;sup>5</sup>Cause of Death Codes used: Any mention (cod1-cod21) of T40.4 (Other Synthetic Opioids).

#### Injury Mortality by Age Group

## Motor Vehicle Injury Deaths by Age Group Guilford County, 2017

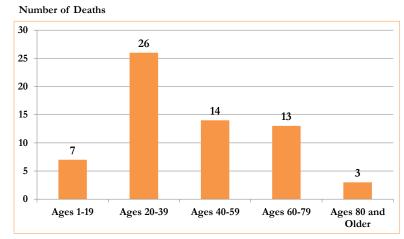


Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

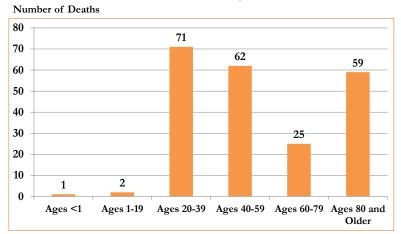
Source: Data provided by the NC Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

## Suicide Deaths by Age Group Guilford County, 2017

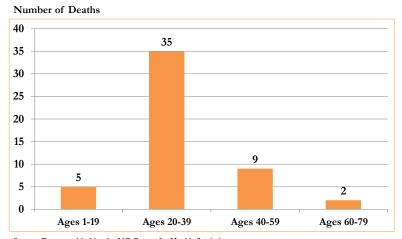


## Non-Motor Vehicle Injury Deaths by Age Group Guilford County, 2017



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

## Homicide Deaths by Age Group Guilford County, 2017

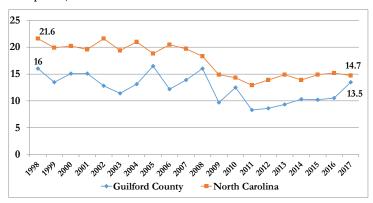


Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

#### **Injury Mortality Trends**

## Motor Vehicle Injury Mortality, Guilford County and NC, 1998-2017

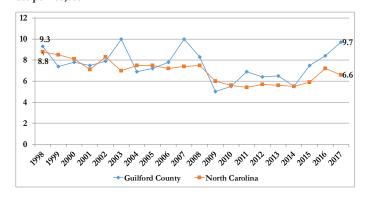
Rate per 100,000



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

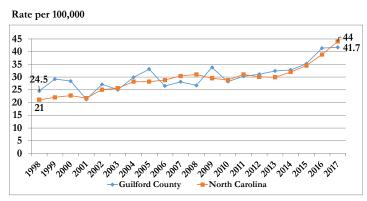
## Homicide Mortality, Guilford County and NC, 1998-2017

Rate per 100,000



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

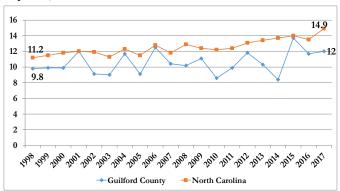
## Mortality Due to Unintentional Injury other than Motor Vehicle Injury, Guilford County and NC, 1998-2017



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

## Suicide Mortality, Guilford County and NC, 1998-2017

Rate per 100,000



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.