



ANNUAL REPORT

Deaths Investigated by the North Carolina Medical Examiner System, 2016

ABSTRACT

In 2016, 11,794 deaths were investigated by the medical examiner system, representing 12.9% of the total number of deaths in North Carolina ($n = 91,427$). Of these deaths, 45.4% ($n = 5,349$) were certified as accidents, 35.0% ($n = 4,124$) were natural deaths, 11.6% ($n = 1,371$) were suicides, 6.2% ($n = 735$) were homicides, 1.8% ($n = 215$) were ruled undetermined. This report provides an overview of these deaths and summarizes the activities of the Office of the Chief Medical Examiner (OCME).

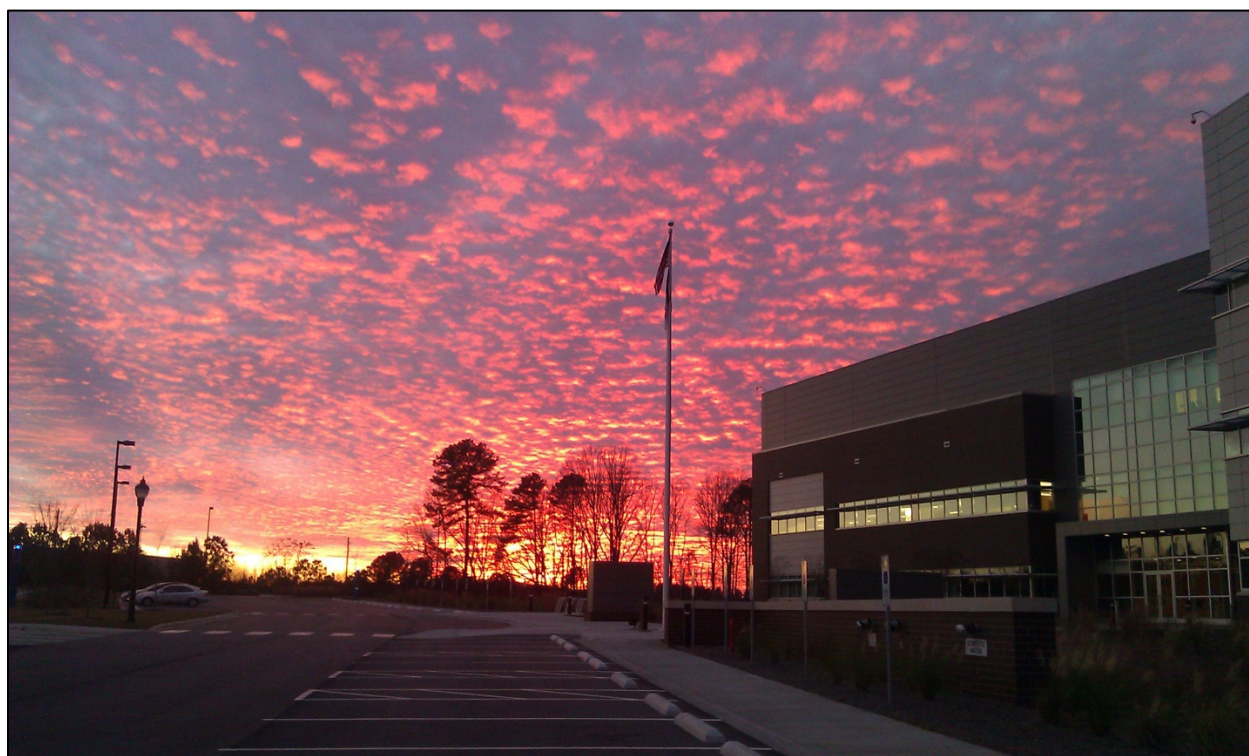
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Division of Public Health

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TABLE OF CONTENTS

OVERVIEW	11
JURISDICTIONAL AUTHORITY	11
INTRODUCTION.....	12
PREPARATION OF THE ANNUAL REPORT	12
DATA COLLECTION.....	12
STATISTICAL SUMMARY	12
CHAPTER 1	14
Total Deaths	14
CHAPTER 2	43
Accidental Deaths	43
CHAPTER 3	56
Homicide Deaths.....	56
CHAPTER 4	68
Natural Deaths	68
CHAPTER 5	81
Suicide Deaths.....	81
CHAPTER 6	94
Undetermined Deaths	94
SPECIAL SECTION	106
Poisoning Deaths in North Carolina, 2006 – 2016	106
GLOSSARY.....	135
REFERENCES.....	138

FIGURES

Figure 1 Percentage of Deaths by Manner of Death, 2016.....	14
Figure 2 Number of Deaths by Month of Death, 2016.....	15
Figure 3 Number of Deaths by Month of Death and Manner of Death, 2016.....	15
Figure 4 Number and Rate of Deaths by Gender and Manner of Death, 2016	36
Figure 5 Number of Deaths by Race and Manner of Death, 2016.....	37
Figure 6 Number and Rate of Deaths by Age Group, 2016.....	38
Figure 7 Number of Deaths by Age Group and Manner of Death, 2016.....	39
Figure 8 Number and Rate of Deaths by Age Group and Gender, 2016	40
Figure 9 Number and Rate of Deaths by Gender and Race, 2016.....	42
Figure 10 Number and Rate of Accidental Deaths by Race, 2016	52
Figure 11 Number and Rate of Accidental Deaths by Age Group, 2016	53
Figure 12 Number and Rate of Accidental Deaths by Gender and Age Group, 2016.....	54
Figure 13 Number and Rate of Accidental Deaths by Gender and Race, 2016.....	55
Figure 14 Number and Rate of Homicide Deaths by Race, 2016.....	64
Figure 15 Number and Rate of Homicide Deaths by Age Group, 2016.....	65
Figure 16 Number and Rate of Homicide Deaths by Gender and Age Group, 2016	66
Figure 17 Number and Rate of Homicide Deaths by Gender and Race, 2016.....	67
Figure 18 Number and Rate of Natural Deaths by Race, 2016	77
Figure 19 Number and Rate of Natural Deaths by Age Group, 2016	78
Figure 20 Number and Rate of Natural Deaths by Age Group and Gender, 2016.....	79
Figure 21 Number and Rate of Natural Deaths by Age Group and Gender, 2016.....	79
Figure 22 Number and Rate of Natural Deaths by Gender and Race, 2016	80
Figure 23 Number and Rate of Suicide Deaths by Race, 2016.....	90

Figure 24 Number and Rate of Suicide Deaths by Age Group, 2016.....	91
Figure 25 Number and Rate of Suicide Deaths by Age Group and Gender, 2016	92
Figure 26 Number and Rate of Suicide Deaths by Gender and Race, 2016	93
Figure 27 Number and Rate of Undetermined Deaths by Race, 2016	102
Figure 28 Number and Rate of Undetermined Deaths by Age Group, 2016	103
Figure 29 Number and Rate of Undetermined Deaths by Age Group and Gender, 2016.....	104
Figure 30 Number and Rate of Undetermined Deaths by Gender and Race, 2016	105
Figure 31 Number and Rate of Poisoning Deaths in North Carolina, 2006 – 2016	107
Figure 32 Poisoning Deaths in North Carolina by Manner of Death, 2006 – 2016.....	107
Figure 33 Number and Rate of Poisoning Deaths in North Carolina by Gender, 2006 – 2016	129
Figure 34 Number of Poisoning Deaths in North Carolina by Age Group, 2010 – 2015.....	131
Figure 35 Number of Poisoning Deaths in North Carolina by Age Group, 2011 – 2016	131
Figure 36 Rate of Poisoning Deaths in North Carolina by Race, 2006 – 2016.....	132
Figure 37 Poisoning Deaths in North Carolina Involving Prescription and/or Illicit Opioids, 2006 – 2016.....	133

TABLES

Table 1 Number and Rate of Deaths by County of Death, Sorted by Highest Number	16
Table 2 Number and Rate of Deaths by County of Death, Sorted by Highest Rate	16
Table 3 Number and Rate of Deaths by County of Residence, Sorted by Highest Number	16
Table 4 Number and Rate of Deaths by County of Residence, Sorted by Highest Rate	16
Table 5 Number of Deaths by County of Death and Manner of Death, 2016.....	17
Table 6 Number and Rate of Deaths by County of Death and Manner of Death, 2016.....	21
Table 7 Number of Deaths by County of Residence and Manner of Death, 2016.....	26
Table 8 Number and Rate of Deaths by County of Residence and Manner of Death, 2016.....	30
Table 9 Number of Deaths by Gender, Age Group, and Manner of Death, 2016.....	35
Table 10 Number and Rate of Deaths by Gender, 2016	36
Table 11 Number and Percentage of Deaths by Gender and Manner of Death, 2016	36
Table 12 Number and Rate of Deaths by Race, 2016.....	37
Table 13 Number and Percentage of Deaths by Race and Manner of Death, 2016.....	37
Table 14 Number and Rate of Deaths by Age Group, 2016	38
Table 15 Number of Deaths by Age Group and Manner of Death, 2016.....	39
Table 16 Number and Rate of Deaths by Age Group and Gender, 2016	40
Table 17 Number of Deaths by Gender, Race, and Manner of Death, 2016	41
Table 18 Number and Rate of Deaths by Gender and Race, 2016	42
Table 19 Number and Rate of Accidental Deaths by Means of Death, 2016.....	43
Table 20 Number of Accidental Deaths by Means of Death, 2016.....	44
Table 21 Number and Rate of Accidental Deaths by County of Death, Sorted by Highest Number	46
Table 22 Number and Rate of Accidental Deaths by County of Death, Sorted by Highest Rate	46
Table 23 Number and Rate of Accidental Deaths by County of Residence, Sorted by Highest Number	46

Table 24 Number and Rate of Accidental Deaths by County of Residence, Sorted by Highest Rate.....	46
Table 25 Number and Rate of Accidental Deaths by County of Death, 2016	47
Table 26 Number and Rate of Accidental Deaths by County of Residence, 2016	49
Table 27 Number of Accidental Deaths by Gender, Age Group, and Race, 2016.....	51
Table 28 Number and Rate of Accidental Deaths by Gender, 2016	52
Table 29 Number and Rate of Accidental Deaths by Race, 2016.....	52
Table 30 Number and Rate of Accidental Deaths by Age Group, 2016.....	53
Table 31 Number and Rate of Accidental Deaths by Age Group and Gender, 2016	54
Table 32 Number and Rate of Accidental Deaths by Gender and Race, 2016.....	55
Table 33 Number and Rate of Homicide Deaths by Means of Death, 2016	56
Table 34 Number of Homicide Deaths by Means of Death, 2016	57
Table 35 Number and Rate of Homicide Deaths by County of Death, Sorted by Highest Number.....	58
Table 36 Number and Rate of Homicide Deaths by County of Death, Sorted by Highest Rate	58
Table 37 Number and Rate of Homicide Deaths by County of Residence, Sorted by Highest Number	58
Table 38 Number and Rate of Homicide Deaths by County of Residence, Sorted by Highest Rate	58
Table 39 Number and Rate of Homicide Deaths by County of Death, 2016.....	59
Table 40 Number and Rate of Homicide Deaths by County of Residence, 2016.....	61
Table 41 Number of Homicide Deaths by Gender, Age Group, and Race, 2016	63
Table 42 Number and Rate of Homicide Deaths by Gender, 2016.....	64
Table 43 Number and Rate of Homicide Deaths by Race, 2016	64
Table 44 Number and Rate of Homicide Deaths by Age Group, 2016	65
Table 45 Number and Rate of Homicide Deaths by Age Group and Gender, 2016.....	66
Table 46 Number and Rate of Homicide Deaths by Gender and Race, 2016	67
Table 47 Number and Rate of Natural Deaths by Cause of Death, 2016	68

Table 48 Number of Natural Deaths by Cause of Death, 2016.....	69
Table 49 Number and Rate of Natural Deaths by County of Death, Sorted by Highest Number	71
Table 50 Number and Rate of Natural Deaths by County of Death, Sorted by Highest Rate	71
Table 51 Number and Rate of Natural Deaths by County of Residence, Sorted by Highest Number	71
Table 52 Number and Rate of Natural Deaths by County of Residence, Sorted by Highest Rate	71
Table 53 Number and Rate of Natural Deaths by County of Death, 2016	72
Table 54 Number and Rate of Natural Deaths by County of Residence, 2016	74
Table 55 Number of Natural Deaths by Gender, Age Group, and Race, 2016.....	76
Table 56 Number and Rate of Natural Deaths by Gender, 2016.....	77
Table 57 Number and Rate of Natural Deaths by Race, 2016	77
Table 58 Number and Rate of Natural Deaths by Age Group, 2016.....	78
Table 59 Number and Rate of Natural Deaths by Gender and Race, 2016.....	80
Table 60 Number and Rate of Suicide Deaths by Means of Death, 2016	81
Table 61 Number of Suicide Deaths by Means of Death, 2016	82
Table 62 Number and Rate of Suicide Deaths by County of Death, Sorted by Highest Number.....	84
Table 63 Number and Rate of Suicide Deaths by County of Death, Sorted by Highest Rate	84
Table 64 Number and Rate of Suicide Deaths by County of Residence, Sorted by Highest Number	84
Table 65 Number and Rate of Suicide Deaths by County of Residence, Sorted by Highest Rate	84
Table 66 Number and Rate of Suicide Deaths by County of Death, 2016.....	85
Table 67 Number and Rate of Suicide Deaths by County of Residence, 2016.....	87
Table 68 Number of Suicide Deaths by Gender, Age Group, and Race, 2016	89
Table 69 Number and Rate of Suicide Deaths by Gender, 2016.....	90
Table 70 Number and Rate of Suicide Deaths by Race, 2016	90
Table 71 Number and Rate of Suicide Deaths by Age Group, 2016	91

Table 72 Number and Rate of Suicide Deaths by Age Group and Gender, 2016.....	92
Table 73 Number and Rate of Suicide Deaths by Gender and Race, 2016	93
Table 74 Number and Rate of Undetermined Deaths by Means of Death, 2016.....	94
Table 75 Number of Undetermined Deaths by Means of Death, 2016.....	95
Table 76 Number and Rate of Undetermined Deaths by County of Death, Sorted by Highest Number	96
Table 77 Number and Rate of Undetermined Deaths by County of Death, Sorted by Highest Rate	96
Table 78 Number and Rate of Undetermined Deaths by County of Residence, Sorted by Highest Number	96
Table 79 Number and Rate of Undetermined Deaths by County of Residence, Sorted by Highest Rate	96
Table 80 Number and Rate of Undetermined Deaths by County of Death, 2016	97
Table 81 Number and Rate of Undetermined Deaths by County of Residence, 2016	99
Table 82 Number of Undetermined Deaths by Gender, Age Group, and Race, 2016.....	101
Table 83 Number and Rate of Undetermined Deaths by Gender, 2016.....	102
Table 84 Number and Rate of Undetermined Deaths by Race, 2016	102
Table 85 Number and Rate of Undetermined Deaths by Age Group, 2016.....	103
Table 86 Number and Rate of Undetermined Deaths by Age Group and Gender, 2016	104
Table 87 Number and Rate of Undetermined Deaths by Gender and Race, 2016.....	105
Table 88 Number of Poisoning Deaths in North Carolina by County of Death, 2006 – 2016	108
Table 90 Rate of Poisoning Deaths in North Carolina by County of Death, 2006 – 2016.....	113
Table 92 Number of Poisoning Deaths in North Carolina by County of Residence, 2006 – 2016	118
Table 94 Rate of Poisoning Deaths in North Carolina by County of Residence, 2006 – 2016.....	123
Table 96 Number of Poisoning Deaths in North Carolina by Gender, Age Group, and Race, 2006 – 2016	128
Table 97 Rate of Poisoning Deaths in North Carolina by Gender, 2006 – 2016	129
Table 98 Number of Poisoning Deaths in North Carolina by Age Group, 2006 – 2016.....	130
Table 99 Number of Poisoning Deaths in North Carolina by Race, 2006 – 2016.....	132

Table 100 Poisoning Deaths in North Carolina Involving Prescription and/or Illicit Opioids, 2006 – 2016..... 133

Table 101 Opioid-Related Deaths in North Carolina by Drug, 2006 – 2016..... 134

OVERVIEW

The North Carolina General Assembly passed the Statewide Medical Examiner Act of 1967 to provide a statewide system for postmortem medicolegal examinations. The Office of the Chief Medical Examiner was established and the first Chief Medical Examiner was appointed in 1968. In addition to the Office of the Chief Medical Examiner, there are three (3) regional autopsy centers and another five (5) hospital-based pathology practices that are contracted to perform autopsies for the medical examiner system. The Office of the Chief Medical Examiner is responsible for overseeing the operations of the entire medical examiner system in North Carolina.

JURISDICTIONAL AUTHORITY

Pursuant to § 130A-383 of the North Carolina General Statutes, the following deaths are investigated by the medical examiner system:

- Any death resulting from violence, poisoning, accident, suicide, or homicide;
- Sudden deaths when the deceased had been in apparent good health or when unattended by a physician;
- Deaths occurring in a jail, prison, correctional institution, or in police custody;
- Deaths occurring in State facilities operated in accordance with Part 5 of Article 4 of Chapter 122C of the General Statutes;
- Deaths occurring pursuant to Article 19 of Chapter 15 of the General Statutes;
- Deaths occurring under suspicious, unusual or unnatural circumstances.

The Chief Medical Examiner has appointed approximately 450 medical examiners across the state to conduct medicolegal death investigations. Once the medical examiner has determined that a death falls under the jurisdiction of the medical examiner system, the medical examiner may investigate the death scene and must investigate the circumstances surrounding the death, perform an external examination on the body, collect specimens for toxicological testing, and sign a certificate of death. As part of the death investigation, the

medical examiner may also send certain types of cases to a regional autopsy center or hospital for further examination. Such cases will receive both an external and internal examination by a forensic pathologist or anatomic pathologist. At the regional autopsy centers, American Board of Pathology-certified forensic pathologists perform autopsy examinations.

INTRODUCTION

This report presents information relating to the deaths investigated by the medical examiner system in the 2016 calendar year. This section includes information about how the report was prepared, a summary of deaths investigated by the medical examiner system, and information on postmortem examinations performed at the OCME. Section II contains data on deaths investigated by the medical examiner system by manner of death, as well as detailed statistics relating to causes of death and population demographics.

PREPARATION OF THE ANNUAL REPORT

This report was prepared by Alison Miller, MA, using data maintained by Information Technology Services (ITS). This report may be accessed and downloaded from our website: www.ocme.dhhs.nc.gov.

DATA COLLECTION

The data included in this report reflect deaths that occurred in North Carolina and were subsequently investigated by the medical examiner system during the 2016 calendar year. The medical examiner system investigates the deaths of residents and non-residents of North Carolina whose remains were discovered in North Carolina pursuant to § 130A-383 of the North Carolina General Statutes. Data presented in this report may vary from data presented by other organizations as a result of differing data collection and analytical practices.

STATISTICAL SUMMARY

- “Total deaths” includes North Carolina residents and non-North Carolina residents whose deaths have come under the jurisdiction of the medical examiner system in 2016.
- “County of death” refers to the county in which the death occurred.

- “County of residence” refers to the county in which the decedent legally resided prior to death.
- Rates are per 100,000 persons in the specific population being described.
- Rates calculated based on less than five (5) cases should be considered unreliable.
- “ND” represents “no denominator” and occurs when a population value is not available to use in calculating rates.
- Population estimates and demographic data used in this report were obtained from the North Carolina Office of State Budget and Management (OSBM).
- Percentages may total above or below 100% due to rounding.
- Toxicology results are based on blood, vitreous fluid, or other specimens used for testing at the discretion of the pathologist and/or toxicologist.
- Pending cases have been excluded.

CHAPTER 1

Total Deaths

SUMMARY

11,794 deaths were investigated by the medical examiner system in 2016, excluding deaths that were pending final determination at the time of this report ($n = 239$).

45.4% ($n = 5,349$) were certified as accidental deaths. Accidental deaths occurred at a rate of 52.7 per 100,000 based on county of death.

66.4% ($n = 7,831$) were male. Overall, males had the highest rate with 158.6 per 100,000. Males over 85 years of age had the highest rate of any age group with 638.3 per 100,000.

73.2% ($n = 8,633$) were white. Overall, whites had the highest rate with 45.5 per 100,000.

18.9% ($n = 2,229$) were between 55 and 64 years of age. Individuals over 85 years of age had the highest rate with 521.8 per 100,000.

23.5% ($n = 2,767$) of deaths were attributed to diseases of the cardiovascular system.

Mecklenburg County had the highest number of deaths based on county of death ($n = 963$), but Haywood County had the highest rate with 280.1 per 100,000.

Figure 1 Percentage of Deaths by Manner of Death, 2016

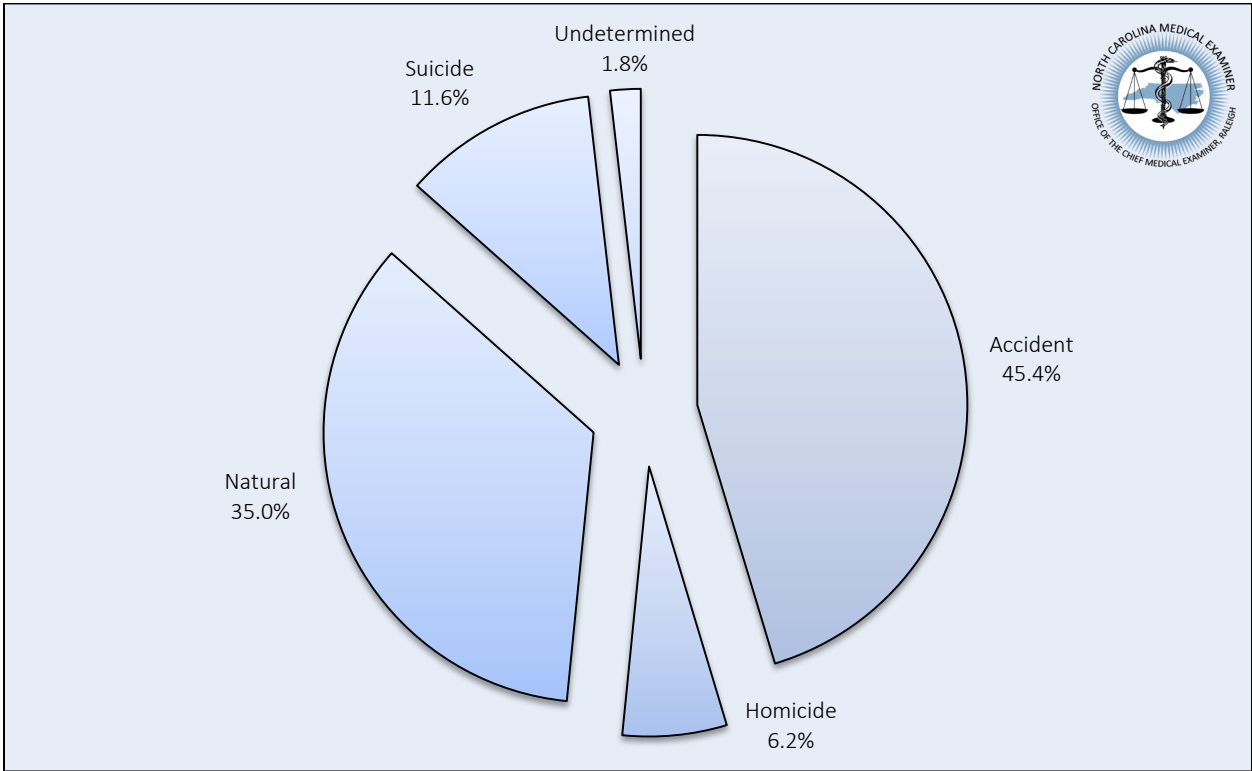


Figure 2 Number of Deaths by Month of Death, 2016

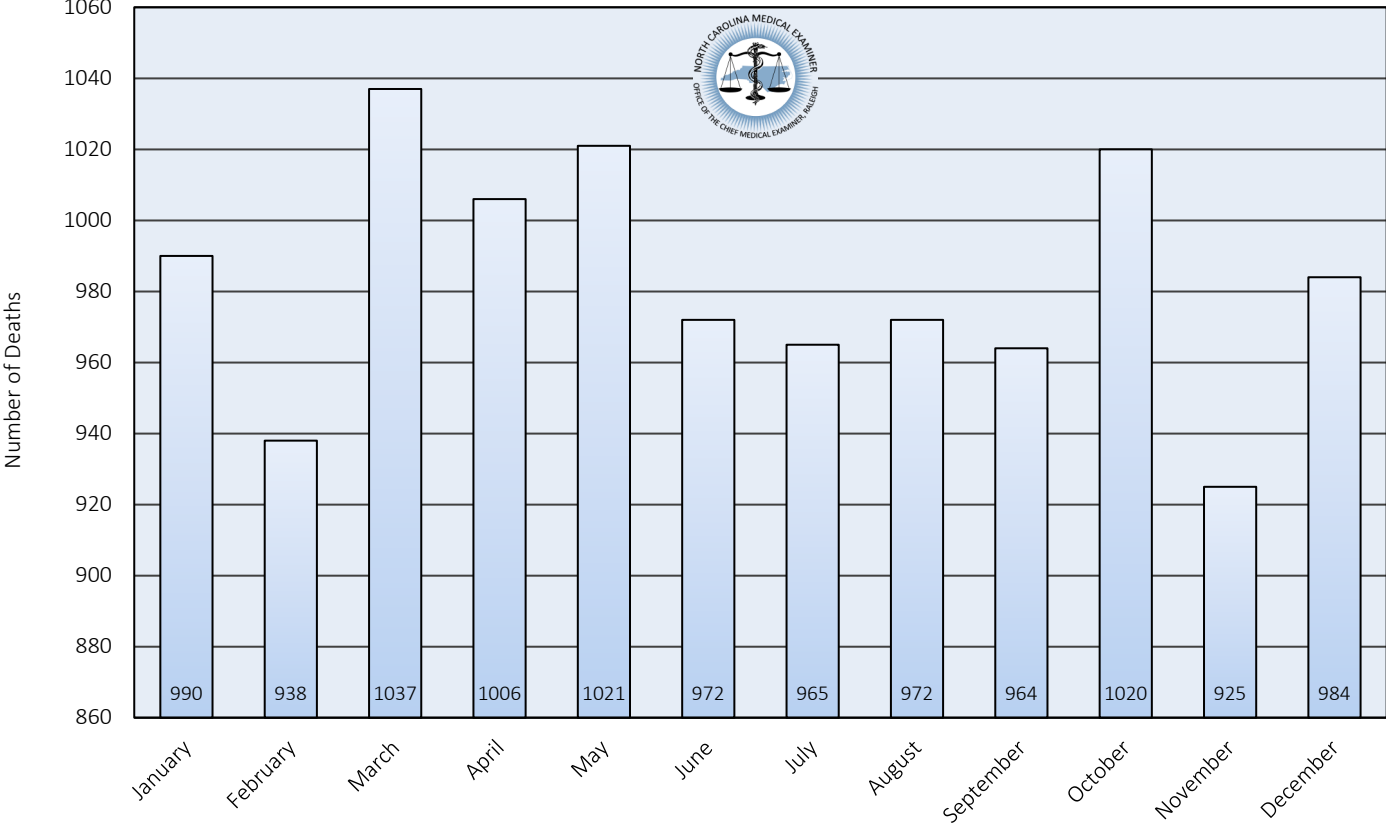


Figure 3 Number of Deaths by Month of Death and Manner of Death, 2016

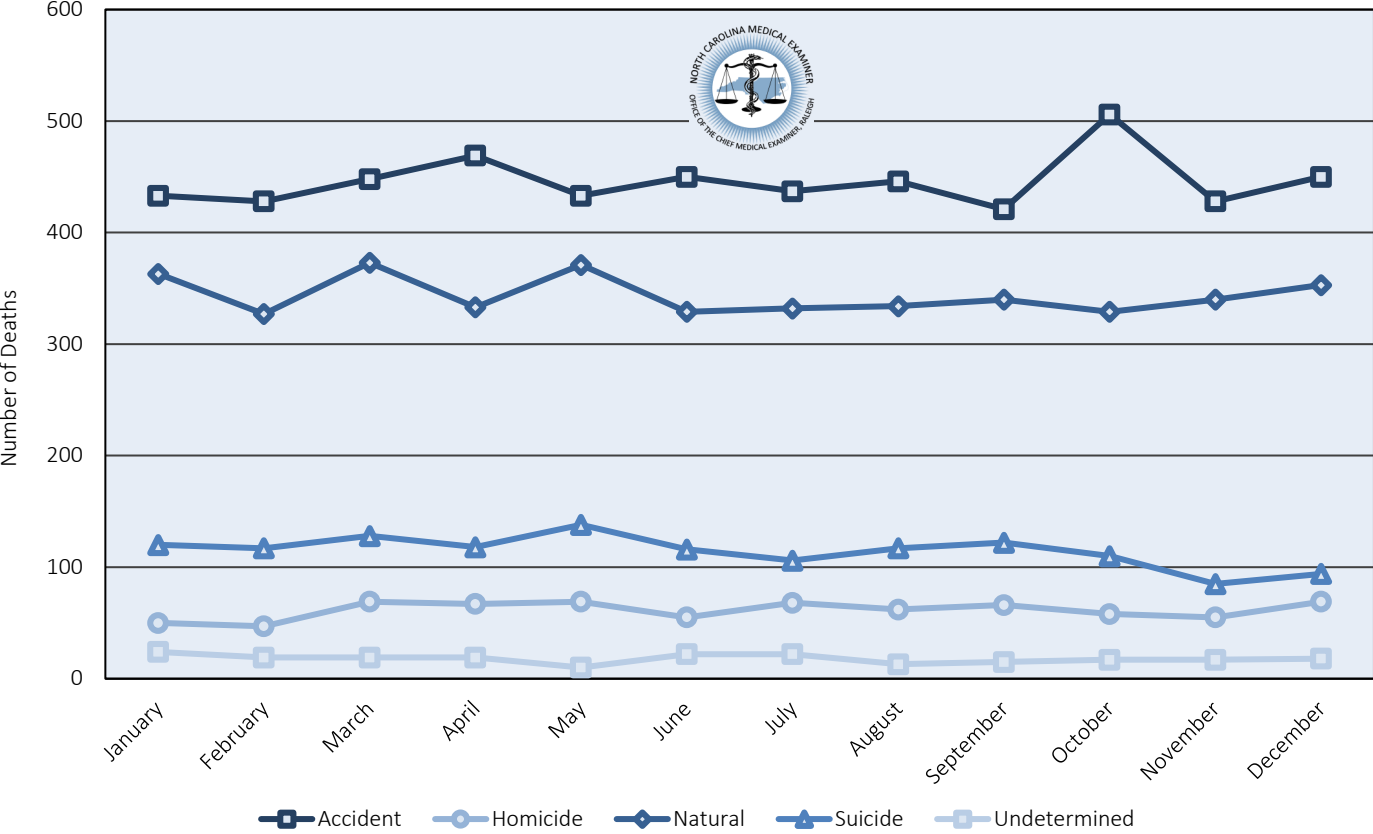


Table 1 Number and Rate of Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Mecklenburg	963	91.4
Wake	816	79.5
Guilford	629	170.4
Forsyth	629	120.9
Cumberland	498	151.0

Table 2 Number and Rate of Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Haywood	173	280.1
Columbus	131	229.1
Pitt	358	203.5
Bertie	36	181.4
Pasquotank	70	173.8

Table 3 Number and Rate of Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Mecklenburg	732	69.5
Wake	681	66.3
Guilford	536	103.0
Cumberland	470	142.5
Forsyth	372	100.8

Table 4 Number and Rate of Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Haywood	169	273.6
Columbus	126	220.3
Wilkes	147	209.9
Beaufort	93	195.3
Greene	41	191.4

Table 5 Number of Deaths by County of Death and Manner of Death, 2016

County of Death	Accident	Homicide	Natural	Suicide	Undetermined	Total
Alamance	67	10	75	23	2	177
Alexander	10	3	5	10	1	29
Alleghany	8	0	6	1	0	15
Anson	6	2	16	4	1	29
Ashe	9	0	8	7	0	24
Avery	13	0	8	2	0	23
Beaufort	23	2	46	8	1	80
Bertie	11	9	13	2	1	36
Bladen	18	4	22	3	1	48
Brunswick	57	6	83	12	1	159
Buncombe	247	17	104	57	12	437
Burke	48	4	55	21	3	131
Cabarrus	117	8	55	17	4	201
Caldwell	31	4	29	14	2	80
Camden	2	0	4	3	0	9
Carteret	46	1	44	15	2	108
Caswell	13	3	13	2	0	31
Catawba	71	11	57	32	3	174
Chatham	14	0	15	12	1	42
Cherokee	12	0	19	4	1	36
Chowan	9	2	10	1	0	22
Clay	5	0	2	0	0	7
Cleveland	83	7	36	19	1	146
Columbus	47	10	65	9	0	131
Craven	68	3	62	13	4	150
Cumberland	160	41	245	43	9	498
Currituck	14	0	23	3	0	40
Dare	16	0	19	3	1	39
Davidson	69	6	23	23	3	124
Davie	21	0	14	6	0	41

County of Death	Accident	Homicide	Natural	Suicide	Undetermined	Total
Duplin	13	4	20	6	1	44
Durham	180	44	164	22	2	412
Edgecombe	20	3	34	5	2	64
Forsyth	373	44	130	65	17	629
Franklin	18	3	25	7	0	53
Gaston	113	20	82	33	1	249
Gates	7	0	11	1	0	19
Graham	7	0	4	1	1	13
Granville	21	1	36	8	0	66
Greene	4	1	19	6	0	30
Guilford	322	45	190	61	11	629
Halifax	22	4	24	4	0	54
Harnett	41	7	49	10	3	110
Haywood	55	3	99	9	7	173
Henderson	74	3	66	13	1	157
Hertford	10	4	9	7	0	30
Hoke	11	5	17	6	0	39
Hyde	4	0	1	1	0	6
Iredell	74	8	59	32	4	177
Jackson	20	1	22	7	1	51
Johnston	60	6	67	25	1	159
Jones	6	0	4	0	0	10
Lee	20	8	22	9	2	61
Lenoir	17	7	29	6	2	61
Lincoln	23	1	26	10	3	63
Macon	25	1	23	7	4	60
Madison	7	1	10	2	1	21
Martin	11	3	8	5	1	28
McDowell	23	2	14	8	1	48
Mecklenburg	494	88	237	130	14	963
Mitchell	15	0	3	5	0	23

County of Death	Accident	Homicide	Natural	Suicide	Undetermined	Total
Montgomery	10	4	5	5	0	24
Moore	62	5	41	13	3	124
Nash	51	4	71	14	0	140
New Hanover	174	15	78	41	8	316
Northampton	9	3	7	0	0	19
Onslow	47	12	61	28	4	152
Orange	114	11	54	24	7	210
Pamlico	8	0	9	6	0	23
Pasquotank	18	4	36	10	2	70
Pender	37	0	26	13	3	79
Perquimans	3	0	1	1	0	5
Person	9	4	12	4	0	29
Pitt	213	25	98	15	7	358
Polk	10	2	13	8	0	33
Randolph	47	2	75	24	3	151
Richmond	27	5	35	10	0	77
Robeson	77	28	17	9	1	132
Rockingham	47	12	28	12	4	103
Rowan	89	15	88	25	4	221
Rutherford	38	3	25	6	1	73
Sampson	33	3	25	4	1	66
Scotland	15	7	19	4	1	46
Stanly	19	1	9	7	1	37
Stokes	19	2	20	11	3	55
Surry	35	6	29	16	3	89
Swain	10	0	9	3	2	24
Transylvania	24	0	21	11	0	56
Tyrrell	1	0	3	0	0	4
Union	59	8	40	24	4	135
Vance	21	9	14	6	0	50
Wake	431	40	240	97	8	816

County of Death	Accident	Homicide	Natural	Suicide	Undetermined	Total
Warren	10	0	8	2	0	20
Washington	6	1	9	0	0	16
Watauga	14	1	17	4	1	37
Wayne	61	15	55	12	1	144
Wilkes	44	3	62	8	3	120
Wilson	32	11	68	5	3	119
Yadkin	12	1	5	3	3	24
Yancey	4	0	11	4	0	19
Subtotal	5345	732	4124	1369	215	11785
OUT OF STATE	4	3	0	2	0	9
Subtotal	4	3	0	2	0	9
TOTAL	5349	735	4124	1371	215	11794

Table 6 Number and Rate of Deaths by County of Death and Manner of Death, 2016

County of Death	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Alamance	67	42.1	10	6.3	75	47.2	23	14.5	2	1.3	177	111.3
Alexander	10	26.1	3	7.8	5	13.1	10	26.1	1	2.6	29	75.7
Alleghany	8	71.4	0	0.0	6	53.6	1	8.9	0	0.0	15	133.9
Anson	6	23.4	2	7.8	16	62.4	4	15.6	1	3.9	29	113.2
Ashe	9	32.9	0	0.0	8	29.3	7	25.6	0	0.0	24	87.8
Avery	13	71.8	0	0.0	8	44.2	2	11.1	0	0.0	23	127.1
Beaufort	23	48.3	2	4.2	46	96.6	8	16.8	1	2.1	80	168.0
Bertie	11	55.4	9	45.3	13	65.5	2	10.1	1	5.0	36	181.4
Bladen	18	51.9	4	11.5	22	63.5	3	8.7	1	2.9	48	138.5
Brunswick	57	44.6	6	4.7	83	65.0	12	9.4	1	0.8	159	124.5
Buncombe	247	95.6	17	6.6	104	40.2	57	22.1	12	4.6	437	169.1
Burke	48	53.4	4	4.5	55	61.2	21	23.4	3	3.3	131	145.9
Cabarrus	117	58.3	8	4.0	55	27.4	17	8.5	4	2.0	201	100.2
Caldwell	31	37.4	4	4.8	29	35.0	14	16.9	2	2.4	80	96.6
Camden	2	19.4	0	0.0	4	38.9	3	29.2	0	0.0	9	87.5
Carteret	46	65.8	1	1.4	44	63.0	15	21.5	2	2.9	108	154.5
Caswell	13	54.9	3	12.7	13	54.9	2	8.4	0	0.0	31	130.9
Catawba	71	45.4	11	7.0	57	36.4	32	20.5	3	1.9	174	111.2
Chatham	14	19.1	0	0.0	15	20.5	12	16.4	1	1.4	42	57.3
Cherokee	12	42.0	0	0.0	19	66.5	4	14.0	1	3.5	36	125.9
Chowan	9	62.5	2	13.9	10	69.4	1	6.9	0	0.0	22	152.7

County of Death	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Clay	5	44.2	0	0.0	2	17.7	0	0.0	0	0.0	7	61.8
Cleveland	83	84.5	7	7.1	36	36.6	19	19.3	1	1.0	146	148.6
Columbus	47	82.2	10	17.5	65	113.7	9	15.7	0	0.0	131	229.1
Craven	68	65.6	3	2.9	62	59.8	13	12.5	4	3.9	150	144.6
Cumberland	160	48.5	41	12.4	245	74.3	43	13.0	9	2.7	498	151.0
Currituck	14	53.6	0	0.0	23	88.1	3	11.5	0	0.0	40	153.3
Dare	16	44.0	0	0.0	19	52.2	3	8.2	1	2.7	39	107.2
Davidson	69	41.5	6	3.6	23	13.8	23	13.8	3	1.8	124	74.6
Davie	21	49.8	0	0.0	14	33.2	6	14.2	0	0.0	41	97.1
Duplin	13	21.8	4	6.7	20	33.6	6	10.1	1	1.7	44	73.8
Durham	180	59.7	44	14.6	164	54.4	22	7.3	2	0.7	412	136.6
Edgecombe	20	37.4	3	5.6	34	63.5	5	9.3	2	3.7	64	119.6
Forsyth	373	101.0	44	11.9	130	35.2	65	17.6	17	4.6	629	170.4
Franklin	18	27.5	3	4.6	25	38.2	7	10.7	0	0.0	53	81.0
Gaston	113	52.4	20	9.3	82	38.1	33	15.3	1	0.5	249	115.6
Gates	7	58.9	0	0.0	11	92.5	1	8.4	0	0.0	19	159.8
Graham	7	79.2	0	0.0	4	45.3	1	11.3	1	11.3	13	147.1
Granville	21	35.3	1	1.7	36	60.6	8	13.5	0	0.0	66	111.0
Greene	4	18.7	1	4.7	19	88.7	6	28.0	0	0.0	30	140.0
Guilford	322	61.9	45	8.7	190	36.5	61	11.7	11	2.1	629	120.9
Halifax	22	42.2	4	7.7	24	46.0	4	7.7	0	0.0	54	103.5
Harnett	41	31.8	7	5.4	49	38.0	10	7.8	3	2.3	110	85.4

County of Death	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Haywood	55	89.0	3	4.9	99	160.3	9	14.6	7	11.3	173	280.1
Henderson	74	64.7	3	2.6	66	57.7	13	11.4	1	0.9	157	137.3
Hertford	10	41.6	4	16.6	9	37.4	7	29.1	0	0.0	30	124.8
Hoke	11	21.1	5	9.6	17	32.6	6	11.5	0	0.0	39	74.7
Hyde	4	71.2	0	0.0	1	17.8	1	17.8	0	0.0	6	106.7
Iredell	74	42.7	8	4.6	59	34.0	32	18.5	4	2.3	177	102.1
Jackson	20	47.0	1	2.3	22	51.7	7	16.4	1	2.3	51	119.8
Johnston	60	31.7	6	3.2	67	35.4	25	13.2	1	0.5	159	83.9
Jones	6	57.9	0	0.0	4	38.6	0	0.0	0	0.0	10	96.6
Lee	20	33.8	8	13.5	22	37.1	9	15.2	2	3.4	61	103.0
Lenoir	17	29.5	7	12.2	29	50.4	6	10.4	2	3.5	61	105.9
Lincoln	23	28.0	1	1.2	26	31.7	10	12.2	3	3.7	63	76.8
Macon	25	71.3	1	2.9	23	65.6	7	20.0	4	11.4	60	171.2
Madison	7	31.8	1	4.5	10	45.5	2	9.1	1	4.5	21	95.5
Martin	11	46.6	3	12.7	8	33.9	5	21.2	1	4.2	28	118.6
McDowell	23	50.5	2	4.4	14	30.8	8	17.6	1	2.2	48	105.5
Mecklenburg	494	46.9	88	8.4	237	22.5	130	12.3	14	1.3	963	91.4
Mitchell	15	98.3	0	0.0	3	19.7	5	32.8	0	0.0	23	150.7
Montgomery	10	36.0	4	14.4	5	18.0	5	18.0	0	0.0	24	86.4
Moore	62	64.5	5	5.2	41	42.7	13	13.5	3	3.1	124	129.0
Nash	51	54.0	4	4.2	71	75.2	14	14.8	0	0.0	140	148.3
New Hanover	174	77.8	15	6.7	78	34.9	41	18.3	8	3.6	316	141.3

County of Death	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Northampton	9	43.3	3	14.4	7	33.7	0	0.0	0	0.0	19	91.4
Onslow	47	24.2	12	6.2	61	31.5	28	14.4	4	2.1	152	78.4
Orange	114	80.9	11	7.8	54	38.3	24	17.0	7	5.0	210	149.1
Pamlico	8	60.0	0	0.0	9	67.5	6	45.0	0	0.0	23	172.5
Pasquotank	18	44.7	4	9.9	36	89.4	10	24.8	2	5.0	70	173.8
Pender	37	62.2	0	0.0	26	43.7	13	21.9	3	5.0	79	132.9
Perquimans	3	22.1	0	0.0	1	7.4	1	7.4	0	0.0	5	36.9
Person	9	22.7	4	10.1	12	30.2	4	10.1	0	0.0	29	73.0
Pitt	213	121.1	25	14.2	98	55.7	15	8.5	7	4.0	358	203.5
Polk	10	47.6	2	9.5	13	61.8	8	38.0	0	0.0	33	156.9
Randolph	47	32.7	2	1.4	75	52.2	24	16.7	3	2.1	151	105.1
Richmond	27	60.1	5	11.1	35	77.9	10	22.3	0	0.0	77	171.4
Robeson	77	58.0	28	21.1	17	12.8	9	6.8	1	0.8	132	99.5
Rockingham	47	51.1	12	13.1	28	30.5	12	13.1	4	4.4	103	112.1
Rowan	89	63.1	15	10.6	88	62.4	25	17.7	4	2.8	221	156.8
Rutherford	38	56.1	3	4.4	25	36.9	6	8.9	1	1.5	73	107.8
Sampson	33	52.0	3	4.7	25	39.4	4	6.3	1	1.6	66	103.9
Scotland	15	41.9	7	19.6	19	53.1	4	11.2	1	2.8	46	128.5
Stanly	19	30.8	1	1.6	9	14.6	7	11.3	1	1.6	37	59.9
Stokes	19	40.6	2	4.3	20	42.8	11	23.5	3	6.4	55	117.6
Surry	35	48.0	6	8.2	29	39.8	16	22.0	3	4.1	89	122.2
Swain	10	67.3	0	0.0	9	60.6	3	20.2	2	13.5	24	161.6

County of Death	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Transylvania	24	70.3	0	0.0	21	61.5	11	32.2	0	0.0	56	164.0
Tyrrell	1	24.2	0	0.0	3	72.5	0	0.0	0	0.0	4	96.7
Union	59	26.3	8	3.6	40	17.9	24	10.7	4	1.8	135	60.3
Vance	21	46.7	9	20.0	14	31.1	6	13.3	0	0.0	50	111.2
Wake	431	42.0	40	3.9	240	23.4	97	9.4	8	0.8	816	79.5
Warren	10	49.7	0	0.0	8	39.8	2	9.9	0	0.0	20	99.4
Washington	6	48.3	1	8.0	9	72.4	0	0.0	0	0.0	16	128.8
Watauga	14	25.5	1	1.8	17	30.9	4	7.3	1	1.8	37	67.3
Wayne	61	48.9	15	12.0	55	44.1	12	9.6	1	0.8	144	115.4
Wilkes	44	62.8	3	4.3	62	88.5	8	11.4	3	4.3	120	171.4
Wilson	32	39.1	11	13.5	68	83.2	5	6.1	3	3.7	119	145.6
Yadkin	12	31.8	1	2.7	5	13.3	3	8.0	3	8.0	24	63.6
Yancey	4	22.0	0	0.0	11	60.6	4	22.0	0	0.0	19	104.7
Subtotal	5345	52.6	732	7.2	4124	40.6	1369	13.5	215	2.1	11785	116.0
OUT OF STATE	4	ND	3	ND	0	ND	2	ND	0	ND	9	ND
Subtotal	4	ND	3	ND	0	ND	2	ND	0	ND	9	ND
TOTAL	5349	52.7	735	7.2	4124	40.6	1371	13.5	215	2.1	11794	116.1

Table 7 Number of Deaths by County of Residence and Manner of Death, 2016

County of Residence	Accident	Homicide	Natural	Suicide	Undetermined	Total
Alamance	78	12	74	23	2	189
Alexander	16	5	9	10	1	41
Alleghany	9	0	6	1	0	16
Anson	6	4	15	4	1	30
Ashe	12	0	9	7	0	28
Avery	11	0	5	2	0	18
Beaufort	34	2	48	8	1	93
Bertie	12	7	15	2	0	36
Bladen	28	6	24	3	2	63
Brunswick	64	8	73	13	1	159
Buncombe	153	12	84	44	11	304
Burke	61	4	52	24	3	144
Cabarrus	106	5	51	19	4	185
Caldwell	48	5	35	16	2	106
Camden	3	1	4	3	0	11
Carteret	52	1	40	15	2	110
Caswell	21	3	14	3	0	41
Catawba	81	12	53	32	4	182
Chatham	29	2	16	11	2	60
Cherokee	13	1	15	4	1	34
Chowan	11	1	9	1	1	23
Clay	9	0	2	0	0	11
Cleveland	79	8	33	18	1	139
Columbus	47	8	63	8	0	126
Craven	72	5	60	12	5	154
Cumberland	154	35	233	42	6	470
Currituck	8	0	19	3	0	30
Dare	9	0	14	2	1	26
Davidson	98	4	34	31	4	171
Davie	40	1	16	10	0	67

County of Residence	Accident	Homicide	Natural	Suicide	Undetermined	Total
Duplin	25	5	23	5	1	59
Durham	113	41	63	22	2	241
Edgecombe	38	7	40	5	2	92
Forsyth	180	27	107	42	16	372
Franklin	36	4	29	7	0	76
Gaston	129	20	88	37	1	275
Gates	8	0	12	1	0	21
Graham	5	0	4	1	0	10
Granville	26	1	37	6	0	70
Greene	13	1	22	5	0	41
Guilford	266	41	163	60	6	536
Halifax	32	5	27	5	1	70
Harnett	66	12	53	9	3	143
Haywood	49	3	99	11	7	169
Henderson	83	3	62	13	0	161
Hertford	11	4	7	6	0	28
Hoke	19	4	19	8	0	50
Hyde	1	0	1	0	0	2
Iredell	85	10	62	29	4	190
Jackson	29	1	18	9	2	59
Johnston	76	10	70	24	2	182
Jones	6	0	5	0	0	11
Lee	25	9	28	10	2	74
Lenoir	28	7	28	5	3	71
Lincoln	41	2	25	14	2	84
Macon	31	2	19	7	4	63
Madison	6	1	11	3	2	23
Martin	18	3	8	4	0	33
McDowell	27	5	13	8	2	55
Mecklenburg	320	81	209	107	15	732
Mitchell	14	0	4	5	0	23

County of Residence	Accident	Homicide	Natural	Suicide	Undetermined	Total
Montgomery	10	4	6	5	0	25
Moore	59	6	41	14	3	123
Nash	60	8	65	12	2	147
New Hanover	122	12	68	32	5	239
Northampton	14	3	8	1	0	26
Onslow	72	12	63	33	5	185
Orange	46	4	35	15	3	103
Pamlico	9	0	11	5	0	25
Pasquotank	12	3	29	8	2	54
Pender	39	0	20	16	4	79
Perquimans	5	1	6	1	0	13
Person	16	3	9	5	1	34
Pitt	92	14	81	13	3	203
Polk	11	1	13	10	0	35
Randolph	89	3	87	25	6	210
Richmond	21	5	37	9	0	72
Robeson	86	35	29	9	3	162
Rockingham	60	11	36	11	4	122
Rowan	111	18	80	27	5	241
Rutherford	38	3	24	6	2	73
Sampson	46	3	26	6	2	83
Scotland	17	6	14	4	0	41
Stanly	28	1	15	8	1	53
Stokes	35	2	23	14	3	77
Surry	43	6	27	18	2	96
Swain	6	0	7	2	1	16
Transylvania	22	0	18	13	0	53
Tyrrell	3	0	3	0	0	6
Union	71	9	36	26	2	144
Vance	30	9	18	5	1	63
Wake	350	33	194	96	8	681

County of Residence	Accident	Homicide	Natural	Suicide	Undetermined	Total
Warren	10	3	11	3	0	27
Washington	8	0	10	0	0	18
Watauga	17	1	18	2	1	39
Wayne	69	17	56	12	1	155
Wilkes	62	4	68	10	3	147
Wilson	39	10	57	7	1	114
Yadkin	17	1	8	3	3	32
Yancey	8	0	9	4	0	21
Subtotal	5023	712	3847	1329	209	11120
OUT OF STATE	326	23	277	42	6	674
Subtotal	326	23	277	42	6	674
TOTAL	5349	735	4124	1371	215	11794

Table 8 Number and Rate of Deaths by County of Residence and Manner of Death, 2016

County of Residence	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Alamance	78	49.0	12	7.5	74	46.5	23	14.5	2	1.3	189	118.8
Alexander	16	41.8	5	13.1	9	23.5	10	26.1	1	2.6	41	107.1
Alleghany	9	80.3	0	0.0	6	53.6	1	8.9	0	0.0	16	142.8
Anson	6	23.4	4	15.6	15	58.5	4	15.6	1	3.9	30	117.1
Ashe	12	43.9	0	0.0	9	32.9	7	25.6	0	0.0	28	102.4
Avery	11	60.8	0	0.0	5	27.6	2	11.1	0	0.0	18	99.5
Beaufort	34	71.4	2	4.2	48	100.8	8	16.8	1	2.1	93	195.3
Bertie	12	60.5	7	35.3	15	75.6	2	10.1	0	0.0	36	181.4
Bladen	28	80.8	6	17.3	24	69.2	3	8.7	2	5.8	63	181.7
Brunswick	64	50.1	8	6.3	73	57.1	13	10.2	1	0.8	159	124.5
Buncombe	153	59.2	12	4.6	84	32.5	44	17.0	11	4.3	304	117.6
Burke	61	67.9	4	4.5	52	57.9	24	26.7	3	3.3	144	160.3
Cabarrus	106	52.8	5	2.5	51	25.4	19	9.5	4	2.0	185	92.2
Caldwell	48	58.0	5	6.0	35	42.3	16	19.3	2	2.4	106	128.0
Camden	3	29.2	1	9.7	4	38.9	3	29.2	0	0.0	11	106.9
Carteret	52	74.4	1	1.4	40	57.2	15	21.5	2	2.9	110	157.4
Caswell	21	88.6	3	12.7	14	59.1	3	12.7	0	0.0	41	173.1
Catawba	81	51.8	12	7.7	53	33.9	32	20.5	4	2.6	182	116.3
Chatham	29	39.6	2	2.7	16	21.8	11	15.0	2	2.7	60	81.9
Cherokee	13	45.5	1	3.5	15	52.5	4	14.0	1	3.5	34	118.9
Chowan	11	76.3	1	6.9	9	62.5	1	6.9	1	6.9	23	159.6

County of Residence	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Clay	9	79.5	0	0.0	2	17.7	0	0.0	0	0.0	11	97.2
Cleveland	79	80.4	8	8.1	33	33.6	18	18.3	1	1.0	139	141.5
Columbus	47	82.2	8	14.0	63	110.2	8	14.0	0	0.0	126	220.3
Craven	72	69.4	5	4.8	60	57.8	12	11.6	5	4.8	154	148.5
Cumberland	154	46.7	35	10.6	233	70.6	42	12.7	6	1.8	470	142.5
Currituck	8	30.7	0	0.0	19	72.8	3	11.5	0	0.0	30	114.9
Dare	9	24.7	0	0.0	14	38.5	2	5.5	1	2.7	26	71.5
Davidson	98	59.0	4	2.4	34	20.5	31	18.7	4	2.4	171	102.9
Davie	40	94.8	1	2.4	16	37.9	10	23.7	0	0.0	67	158.7
Duplin	25	41.9	5	8.4	23	38.6	5	8.4	1	1.7	59	99.0
Durham	113	37.5	41	13.6	63	20.9	22	7.3	2	0.7	241	79.9
Edgecombe	38	71.0	7	13.1	40	74.8	5	9.3	2	3.7	92	172.0
Forsyth	180	48.8	27	7.3	107	29.0	42	11.4	16	4.3	372	100.8
Franklin	36	55.0	4	6.1	29	44.3	7	10.7	0	0.0	76	116.1
Gaston	129	59.9	20	9.3	88	40.8	37	17.2	1	0.5	275	127.6
Gates	8	67.3	0	0.0	12	100.9	1	8.4	0	0.0	21	176.6
Graham	5	56.6	0	0.0	4	45.3	1	11.3	0	0.0	10	113.2
Granville	26	43.7	1	1.7	37	62.3	6	10.1	0	0.0	70	117.8
Greene	13	60.7	1	4.7	22	102.7	5	23.3	0	0.0	41	191.4
Guilford	266	51.1	41	7.9	163	31.3	60	11.5	6	1.2	536	103.0
Halifax	32	61.3	5	9.6	27	51.8	5	9.6	1	1.9	70	134.2
Harnett	66	51.2	12	9.3	53	41.2	9	7.0	3	2.3	143	111.0

County of Residence	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Haywood	49	79.3	3	4.9	99	160.3	11	17.8	7	11.3	169	273.6
Henderson	83	72.6	3	2.6	62	54.2	13	11.4	0	0.0	161	140.8
Hertford	11	45.8	4	16.6	7	29.1	6	25.0	0	0.0	28	116.5
Hoke	19	36.4	4	7.7	19	36.4	8	15.3	0	0.0	50	95.8
Hyde	1	17.8	0	0.0	1	17.8	0	0.0	0	0.0	2	35.6
Iredell	85	49.0	10	5.8	62	35.8	29	16.7	4	2.3	190	109.6
Jackson	29	68.1	1	2.3	18	42.3	9	21.1	2	4.7	59	138.6
Johnston	76	40.1	10	5.3	70	36.9	24	12.7	2	1.1	182	96.1
Jones	6	57.9	0	0.0	5	48.3	0	0.0	0	0.0	11	106.2
Lee	25	42.2	9	15.2	28	47.3	10	16.9	2	3.4	74	124.9
Lenoir	28	48.6	7	12.2	28	48.6	5	8.7	3	5.2	71	123.3
Lincoln	41	50.0	2	2.4	25	30.5	14	17.1	2	2.4	84	102.4
Macon	31	88.5	2	5.7	19	54.2	7	20.0	4	11.4	63	179.8
Madison	6	27.3	1	4.5	11	50.0	3	13.6	2	9.1	23	104.6
Martin	18	76.3	3	12.7	8	33.9	4	16.9	0	0.0	33	139.8
McDowell	27	59.3	5	11.0	13	28.6	8	17.6	2	4.4	55	120.9
Mecklenburg	320	30.4	81	7.7	209	19.8	107	10.2	15	1.4	732	69.5
Mitchell	14	91.7	0	0.0	4	26.2	5	32.8	0	0.0	23	150.7
Montgomery	10	36.0	4	14.4	6	21.6	5	18.0	0	0.0	25	90.0
Moore	59	61.4	6	6.2	41	42.7	14	14.6	3	3.1	123	128.0
Nash	60	63.5	8	8.5	65	68.8	12	12.7	2	2.1	147	155.7
New Hanover	122	54.6	12	5.4	68	30.4	32	14.3	5	2.2	239	106.9

County of Residence	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Northampton	14	67.3	3	14.4	8	38.5	1	4.8	0	0.0	26	125.1
Onslow	72	37.1	12	6.2	63	32.5	33	17.0	5	2.6	185	95.4
Orange	46	32.7	4	2.8	35	24.8	15	10.6	3	2.1	103	73.1
Pamlico	9	67.5	0	0.0	11	82.5	5	37.5	0	0.0	25	187.5
Pasquotank	12	29.8	3	7.4	29	72.0	8	19.9	2	5.0	54	134.0
Pender	39	65.6	0	0.0	20	33.6	16	26.9	4	6.7	79	132.9
Perquimans	5	36.9	1	7.4	6	44.2	1	7.4	0	0.0	13	95.9
Person	16	40.3	3	7.6	9	22.7	5	12.6	1	2.5	34	85.6
Pitt	92	52.3	14	8.0	81	46.1	13	7.4	3	1.7	203	115.4
Polk	11	52.3	1	4.8	13	61.8	10	47.6	0	0.0	35	166.4
Randolph	89	61.9	3	2.1	87	60.5	25	17.4	6	4.2	210	146.1
Richmond	21	46.8	5	11.1	37	82.4	9	20.0	0	0.0	72	160.3
Robeson	86	64.8	35	26.4	29	21.9	9	6.8	3	2.3	162	122.1
Rockingham	60	65.3	11	12.0	36	39.2	11	12.0	4	4.4	122	132.8
Rowan	111	78.7	18	12.8	80	56.7	27	19.2	5	3.5	241	171.0
Rutherford	38	56.1	3	4.4	24	35.4	6	8.9	2	3.0	73	107.8
Sampson	46	72.4	3	4.7	26	40.9	6	9.4	2	3.1	83	130.7
Scotland	17	47.5	6	16.8	14	39.1	4	11.2	0	0.0	41	114.6
Stanly	28	45.3	1	1.6	15	24.3	8	13.0	1	1.6	53	85.8
Stokes	35	74.9	2	4.3	23	49.2	14	29.9	3	6.4	77	164.7
Surry	43	59.0	6	8.2	27	37.1	18	24.7	2	2.7	96	131.8
Swain	6	40.4	0	0.0	7	47.1	2	13.5	1	6.7	16	107.7

County of Residence	Accident		Homicide		Natural		Suicide		Undetermined		TOTAL	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Transylvania	22	64.4	0	0.0	18	52.7	13	38.1	0	0.0	53	155.2
Tyrrell	3	72.5	0	0.0	3	72.5	0	0.0	0	0.0	6	145.1
Union	71	31.7	9	4.0	36	16.1	26	11.6	2	0.9	144	64.3
Vance	30	66.7	9	20.0	18	40.0	5	11.1	1	2.2	63	140.2
Wake	350	34.1	33	3.2	194	18.9	96	9.3	8	0.8	681	66.3
Warren	10	49.7	3	14.9	11	54.7	3	14.9	0	0.0	27	134.2
Washington	8	64.4	0	0.0	10	80.5	0	0.0	0	0.0	18	144.9
Watauga	17	30.9	1	1.8	18	32.7	2	3.6	1	1.8	39	70.9
Wayne	69	55.3	17	13.6	56	44.9	12	9.6	1	0.8	155	124.2
Wilkes	62	88.5	4	5.7	68	97.1	10	14.3	3	4.3	147	209.9
Wilson	39	47.7	10	12.2	57	69.7	7	8.6	1	1.2	114	139.4
Yadkin	17	45.1	1	2.7	8	21.2	3	8.0	3	8.0	32	84.8
Yancey	8	44.1	0	0.0	9	49.6	4	22.0	0	0.0	21	115.8
Subtotal	5023	49.5	712	7.0	3847	37.9	1329	13.1	209	2.1	11120	109.5
OUT OF STATE	326	ND	23	ND	277	ND	42	ND	6	ND	674	ND
Subtotal	326	ND	23	ND	277	ND	42	ND	6	ND	674	ND
TOTAL	5349	52.7	735	7.2	4124	40.6	1371	13.5	215	2.1	11794	116.1

Table 9 Number of Deaths by Gender, Age Group, and Manner of Death, 2016

Gender	Age Group	Accident	Homicide	Natural	Suicide	Undetermined	Total
Female	<1	17	4	19	0	54	94
	1-4	14	4	5	0	1	24
	5-9	9	4	2	0	0	15
	10-14	14	4	3	6	0	27
	15-19	50	10	9	13	2	84
	20-24	94	20	11	18	3	146
	25-34	241	31	53	42	7	374
	35-44	247	29	142	76	11	505
	45-54	256	15	238	79	10	598
	55-64	206	21	325	67	7	626
	65-74	172	10	284	39	1	506
	75-84	236	7	149	15	3	410
	85+	438	3	104	6	0	551
	Subtotal		1994	162	1344	361	99
Male	<1	23	3	21	0	47	94
	1-4	22	6	8	0	3	39
	5-9	22	3	10	0	0	35
	10-14	23	1	8	12	1	45
	15-19	105	56	13	47	1	222
	20-24	245	88	18	86	7	444
	25-34	596	155	94	151	8	1004
	35-44	559	119	274	172	12	1136
	45-54	502	58	523	159	10	1252
	55-64	438	45	917	185	18	1603
	65-74	306	25	585	106	4	1026
	75-84	265	10	212	66	3	556
	85+	249	2	96	26	2	375
	Subtotal		3355	571	2779	1010	116
Unknown	<1	0	2	1	0	0	3
	Subtotal	0	2	1	0	0	3
TOTAL		5349	735	4124	1371	215	11794

Table 10 Number and Rate of Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	3960	33.6%	75.9
Male	7831	66.4%	158.6
Unknown	3	0.0%	ND
TOTAL	11794	100%	116.1

Table 11 Number and Percentage of Deaths by Gender and Manner of Death, 2016

Gender	Accident	Homicide	Natural	Suicide	Undetermined	Total
Female	1994 (37.3%)	162 (22.0%)	1344 (32.6%)	361 (26.3%)	99 (46.0%)	3960 (33.6%)
Male	3355 (62.7%)	571 (77.7%)	2779 (67.4%)	1010 (73.7%)	116 (54.0%)	7831 (66.4%)
Unknown	0 (0.0%)	2 (0.3%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	3 (0.0%)
TOTAL	5349 (45.4%)	735 (6.2%)	4124 (35.0%)	1371 (11.6%)	215 (1.8%)	11794

Figure 4 Number and Rate of Deaths by Gender and Manner of Death, 2016

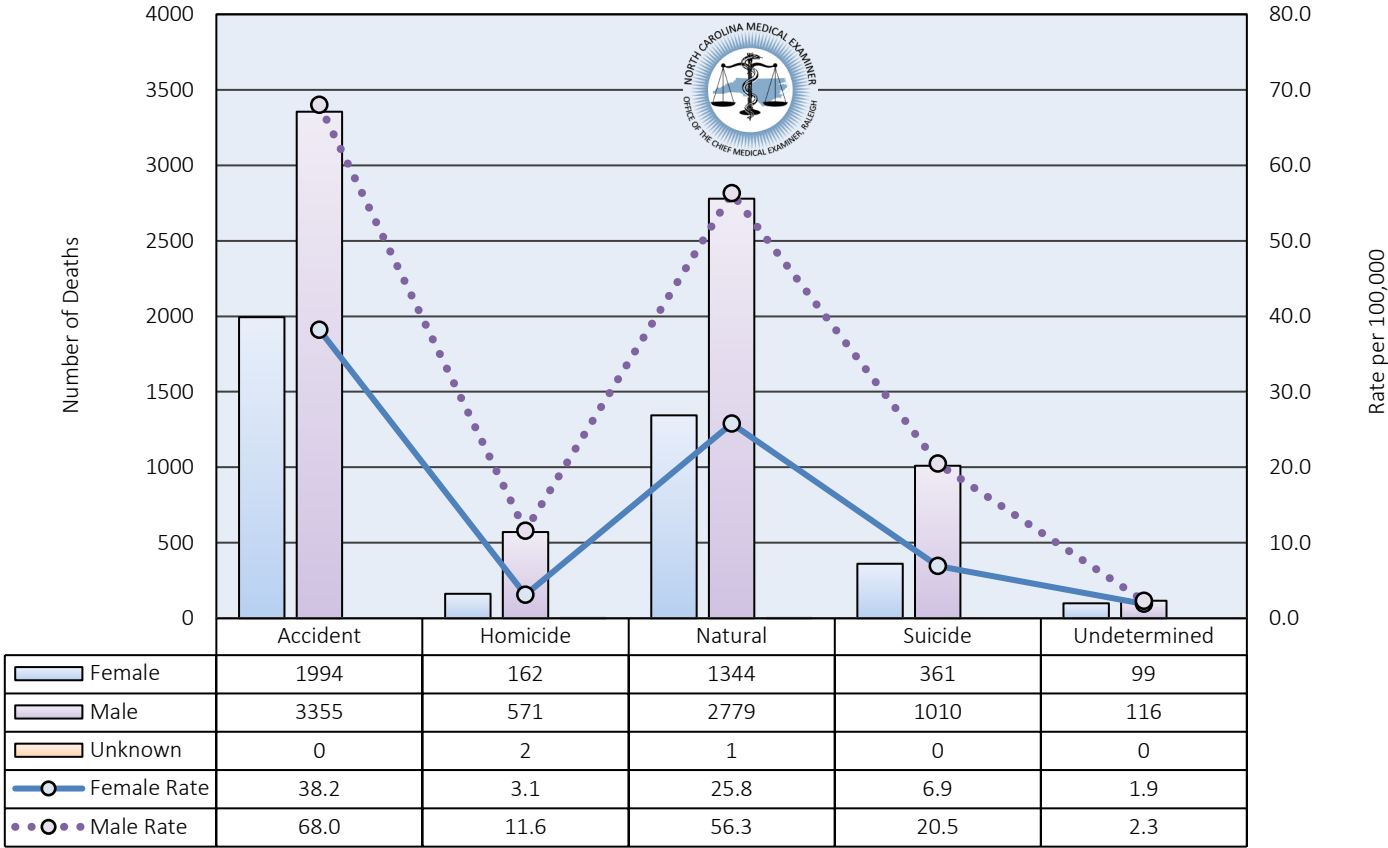


Table 12 Number and Rate of Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
White	8633	73.2%	119.6
Black	2606	22.1%	116.3
Unknown	402	0.7%	ND
American Indian	78	0.6%	45.5
Asian	75	3.4%	26.1
TOTAL	11974	100%	116.1

Table 13 Number and Percentage of Deaths by Race and Manner of Death, 2016

Race/Ethnicity	Accident	Homicide	Natural	Suicide	Undetermined	Total
White	4186 (78.3%)	261 (35.5%)	2839 (68.8%)	1198 (87.4%)	149 (69.3%)	8633 (73.2%)
Black	896 (16.8%)	413 (56.2%)	1141 (27.7%)	100 (7.3%)	56 (26.0%)	2606 (22.1%)
Unknown	200 (3.7%)	45 (6.1%)	105 (2.5%)	44 (3.2%)	8 (3.7%)	402 (3.4%)
American Indian	35 (0.7%)	11 (1.5%)	23 (0.6%)	8 (0.6%)	1 (0.5%)	78 (0.7%)
Asian	32 (0.6%)	5 (0.7%)	16 (0.4%)	21 (1.5%)	1 (0.5%)	75 (0.6%)
TOTAL	5349 (45.4%)	735 (6.2%)	4124 (35.0%)	1371 (11.6%)	215 (1.8%)	11794

Figure 5 Number of Deaths by Race and Manner of Death, 2016

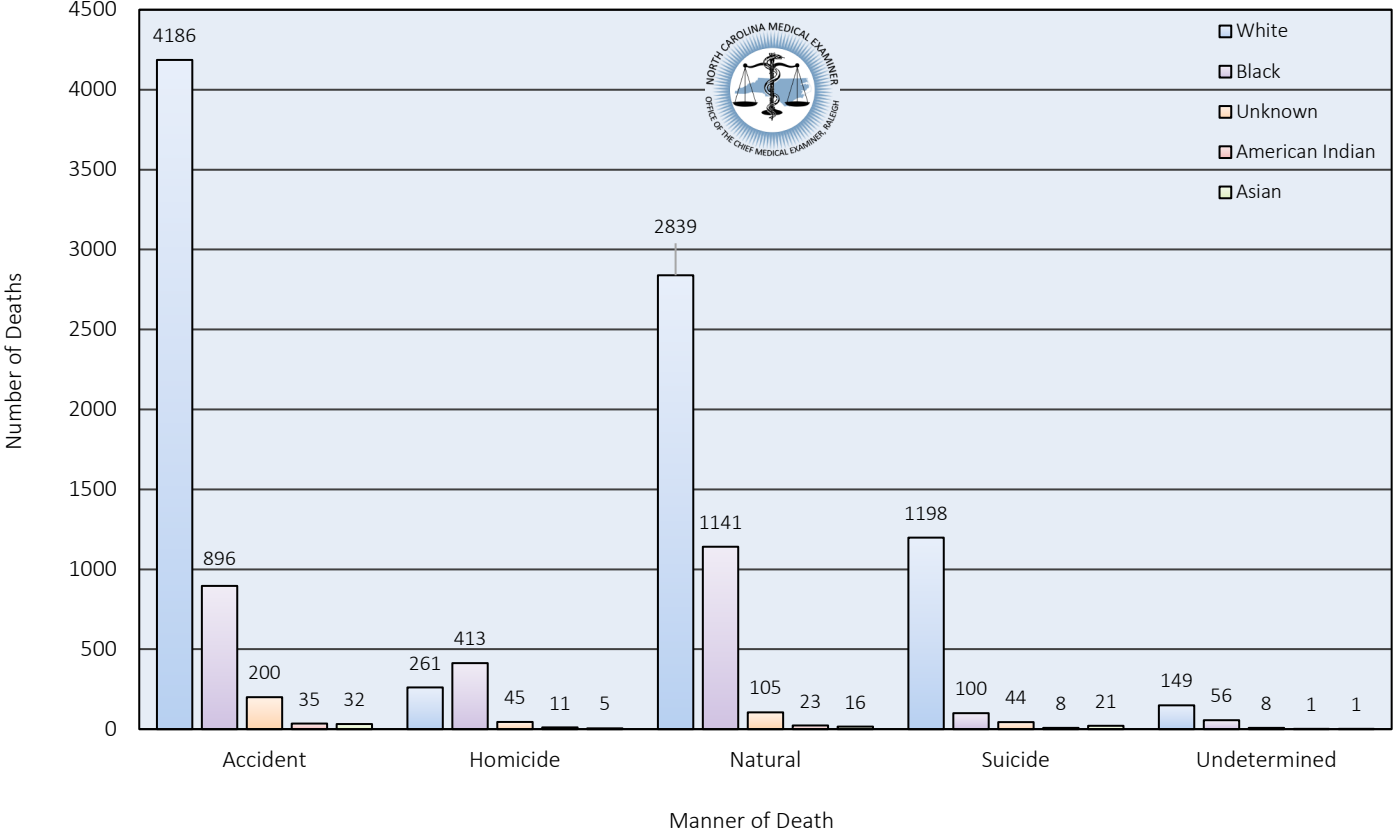


Table 14 Number and Rate of Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	191	1.6%	158.5
1-4	63	0.5%	13.1
5-9	50	0.4%	7.8
10-14	72	0.6%	10.9
15-19	306	2.6%	44.3
20-24	590	5.0%	82.3
25-34	1378	11.7%	105.4
35-44	1641	13.9%	125.5
45-54	1850	15.7%	133.6
55-64	2229	18.9%	173.7
65-74	1532	13.0%	164.1
75-84	966	8.2%	214.6
85+	926	7.9%	521.8
TOTAL	11794	100%	116.1

Figure 6 Number and Rate of Deaths by Age Group, 2016

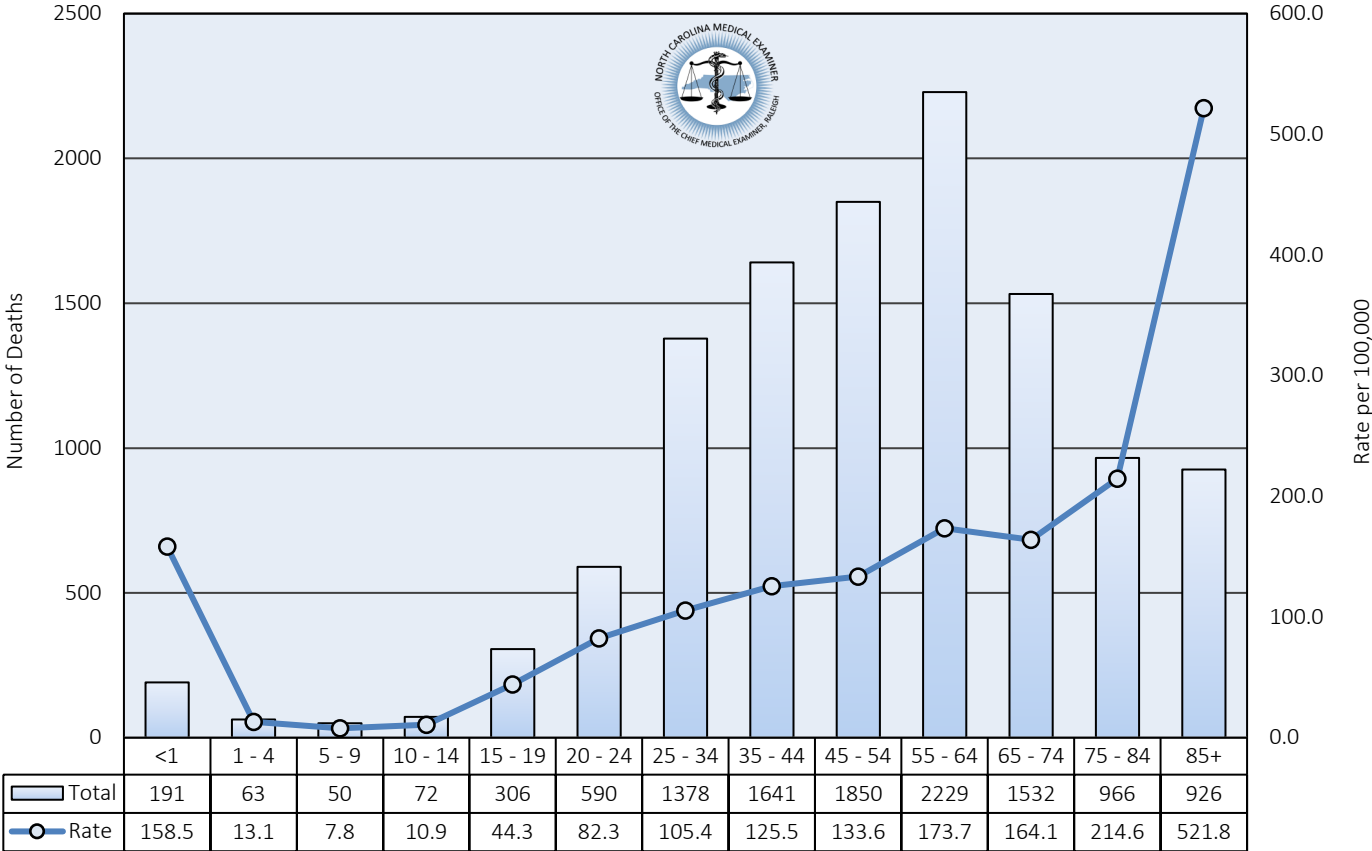


Table 15 Number of Deaths by Age Group and Manner of Death, 2016

Age Group	Accident	Homicide	Natural	Suicide	Undetermined	Total
<1	40	9	41	0	101	191
1-4	36	10	13	0	4	63
5-9	31	7	12	0	0	50
10-14	37	5	11	18	1	72
15-19	155	66	22	60	3	306
20-24	339	108	29	104	10	590
25-34	837	186	147	193	15	1378
35-44	806	148	416	248	23	1641
45-54	758	73	761	238	20	1850
55-64	644	66	1242	252	25	2229
65-74	478	35	869	145	5	1532
75-84	501	17	361	81	6	966
85+	687	5	200	32	2	926
TOTAL	5349	735	4124	1371	215	11794

Figure 7 Number of Deaths by Age Group and Manner of Death, 2016

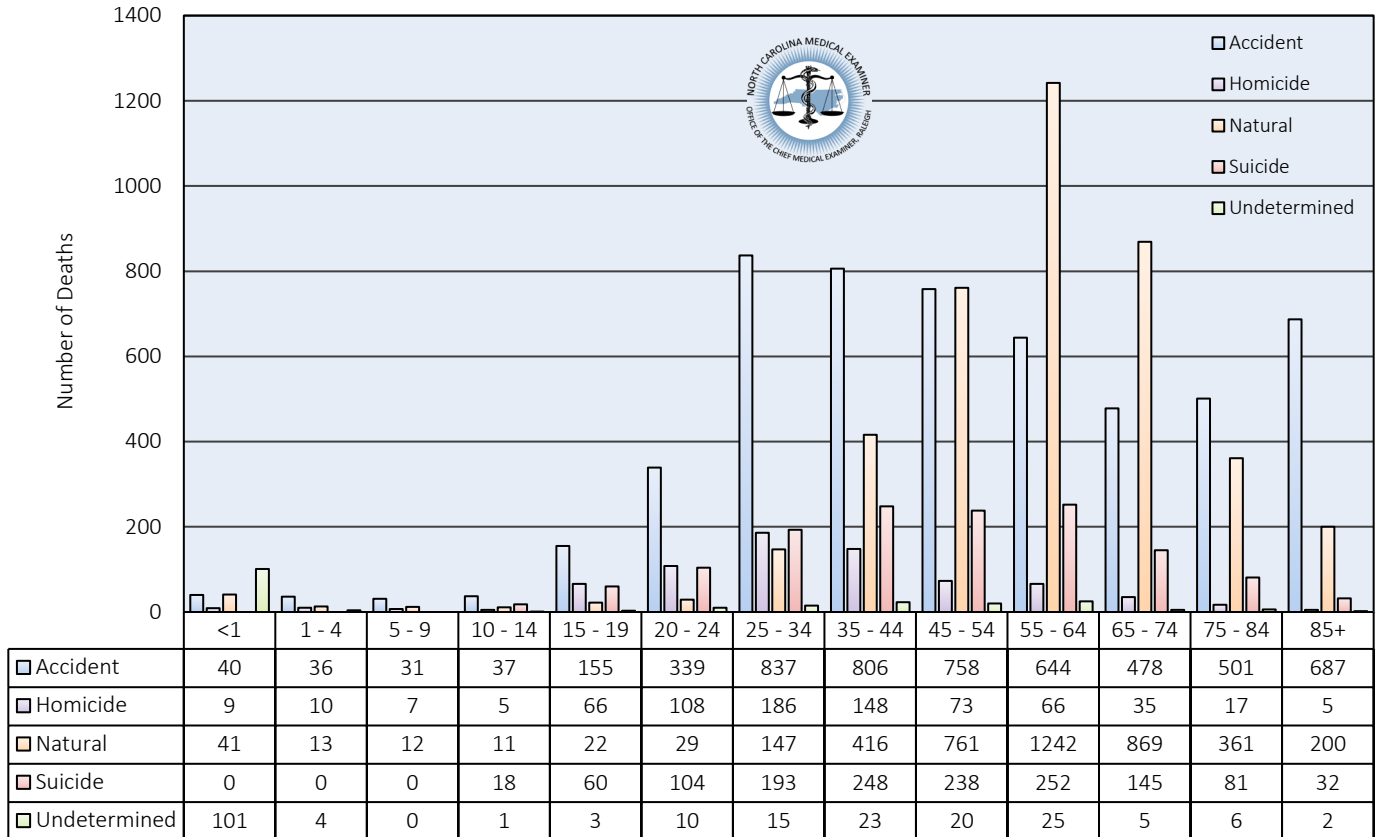


Table 16 Number and Rate of Deaths by Age Group and Gender, 2016

Age Group	Female			Male			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
<1	94	2.4	159.9	94	1.2	152.3	3	100%	ND
1-4	24	0.6	10.2	39	0.5	15.9	0	0.0%	ND
5-9	15	0.4	4.8	35	0.4	10.7	0	0.0%	ND
10-14	27	0.7	8.3	45	0.6	13.3	0	0.0%	ND
15-19	84	2.1	24.8	222	2.8	62.9	0	0.0%	ND
20-24	146	3.7	42.2	444	5.7	119.7	0	0.0%	ND
25-34	374	9.4	56.1	1004	12.8	156.6	0	0.0%	ND
35-44	505	12.8	75.1	1136	14.5	178.7	0	0.0%	ND
45-54	598	15.1	84.4	1252	16.0	185.3	0	0.0%	ND
55-64	626	15.8	92.7	1603	20.5	263.7	0	0.0%	ND
65-74	506	12.8	100.6	1026	13.1	238.3	0	0.0%	ND
75-84	410	10.4	158.6	556	7.1	290.3	0	0.0%	ND
85+	551	13.9	464.2	375	4.8	638.3	0	0.0%	ND
TOTAL	3960	33.6%	75.9	7831	66.4%	158.6	3	0.0%	ND

Figure 8 Number and Rate of Deaths by Age Group and Gender, 2016

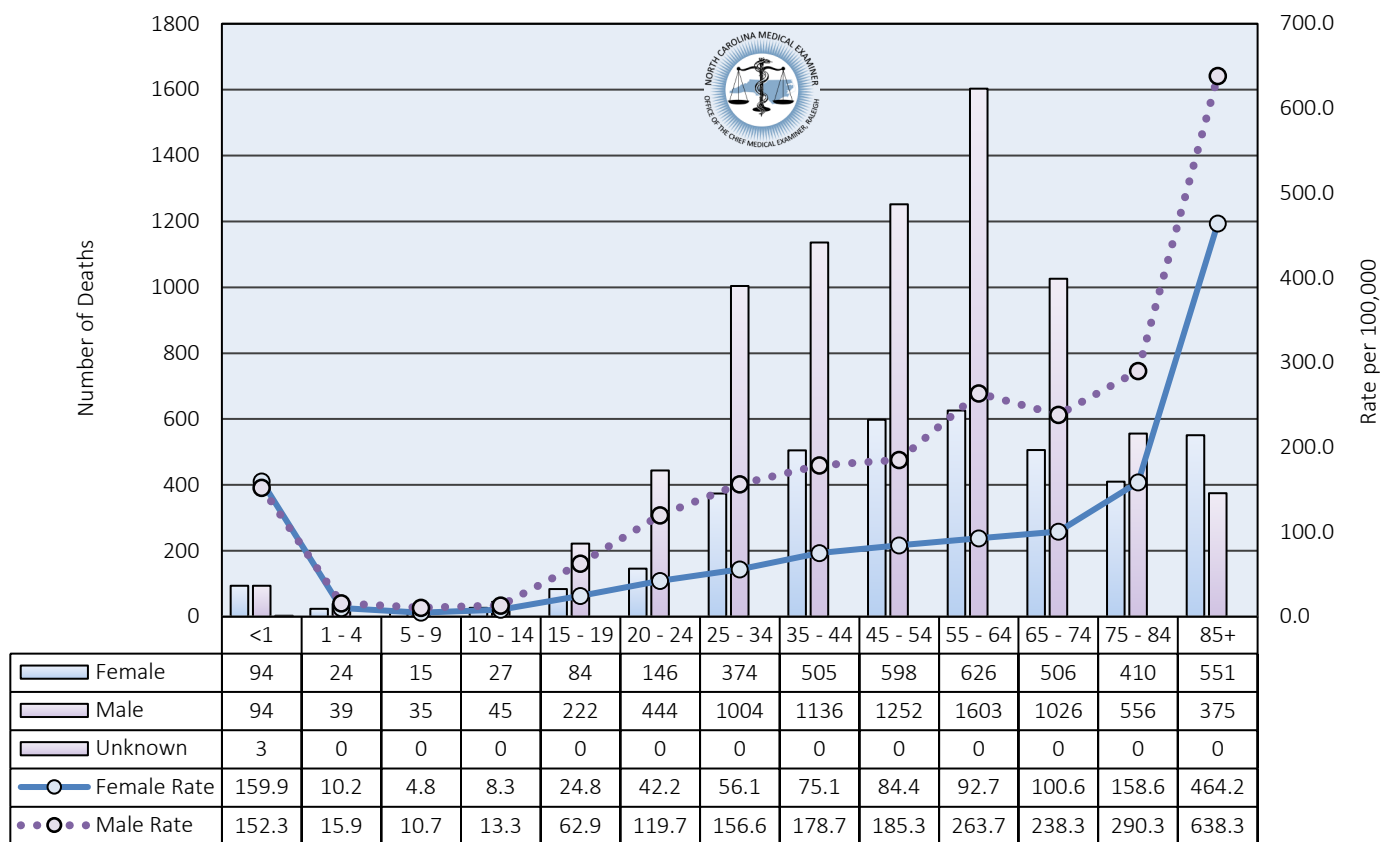


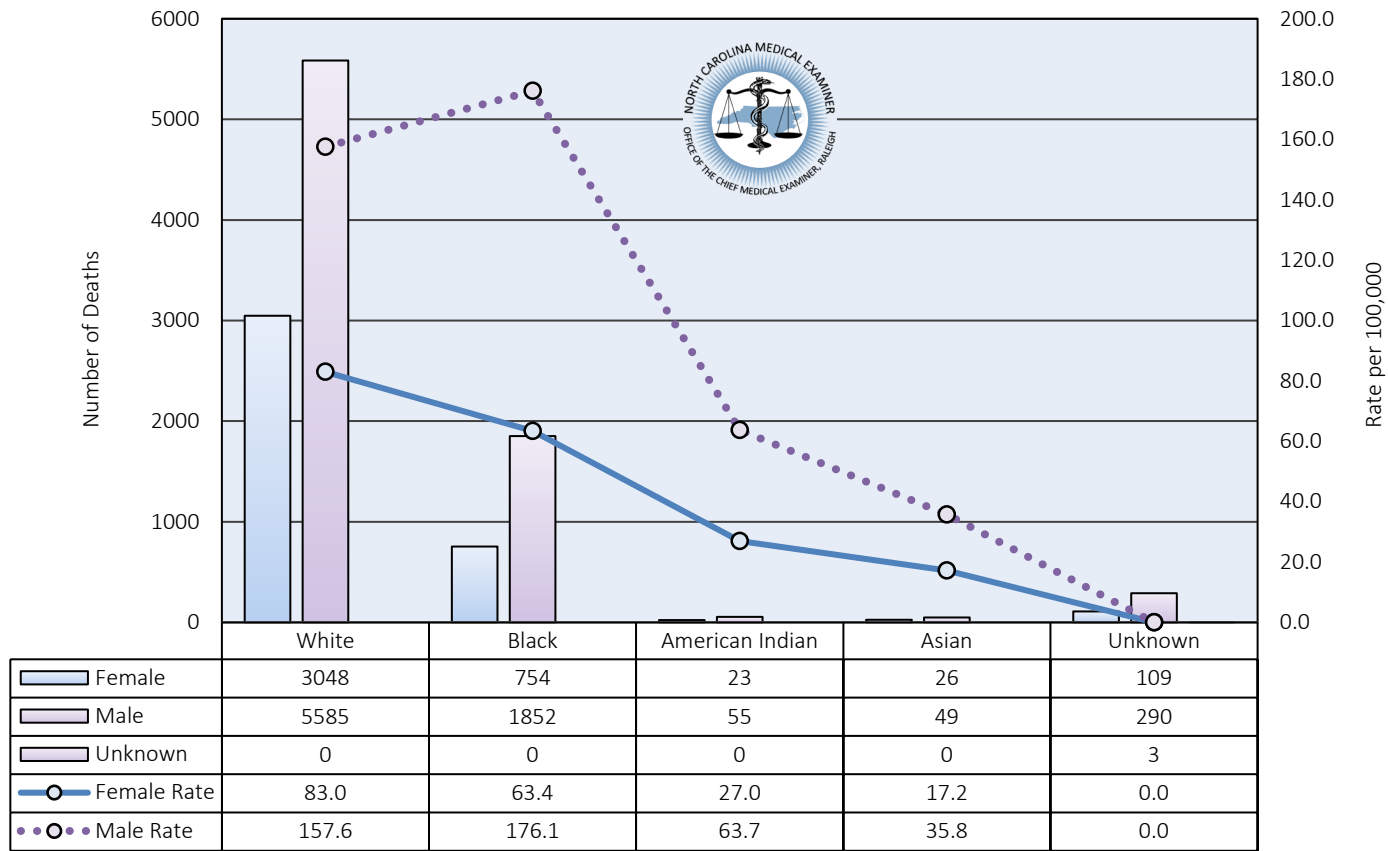
Table 17 Number of Deaths by Gender, Race, and Manner of Death, 2016

Gender	Race	Accident	Homicide	Natural	Suicide	Undetermined	Total
Female	White	1639	88	929	320	72	3048
	Black	270	60	379	25	20	754
	American Indian	11	2	7	2	1	23
	Asian	12	3	5	5	1	26
	Unknown	62	9	24	9	5	109
	Subtotal		1994	162	1344	361	99
Gender	Race	Accident	Homicide	Natural	Suicide	Undetermined	Total
Male	White	2547	173	1910	878	77	5585
	Black	626	353	762	75	36	1852
	American Indian	24	9	16	6	0	55
	Asian	20	2	11	16	0	49
	Unknown	138	34	80	35	3	290
	Subtotal		3355	571	2779	1010	116
Gender	Race	Accident	Homicide	Natural	Suicide	Undetermined	Total
Unknown	Unknown	0	2	1	0	0	3
	Subtotal	0	2	1	0	0	3
TOTAL		5349	735	4124	1371	215	11794

Table 18 Number and Rate of Deaths by Gender and Race, 2016

Gender	White			Black			American Indian			Asian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	3048	35.3%	83.0	754	28.9%	63.4	23	29.5%	27.0	26	34.7%	17.2	109	27.1%	ND
Male	5585	64.7%	157.6	1852	71.1%	176.1	55	70.5%	63.7	49	65.3%	35.8	290	72.1%	ND
Unknown	0	0.0%	ND	0	0.0%	ND	0	0.0%	ND	0	0.0%	ND	3	0.0%	ND
TOTAL	8633	73.2%	119.6	2606	22.1%	116.3	78	0.7%	45.5	75	0.6%	26.1	402	3.4%	ND

Figure 9 Number and Rate of Deaths by Gender and Race, 2016



*Pending cases (n = 239) have been excluded from Figures 1 – 9 and Tables 1 – 18.

CHAPTER 2

Accidental Deaths

SUMMARY

45.4% ($n = 5,349$) of deaths investigated by the medical examiner system were certified as accidental deaths.

62.7% ($n = 3,355$) were male. Overall, males had the highest rate with 68.0 per 100,000. Males over 85 years of age had the highest rate with 496.3 per 100,000.

78.3% ($n = 4,186$) were white. Overall, whites had the highest rate with 58.0 per 100,000. White males over 85 years of age had the highest rate of any age group with 454.5 per 100,000.

15.6% ($n = 837$) were between 25 and 34 years of age. Individuals over 85 years of age had the highest rate with 387.1 per 100,000.

35.0% ($n = 1,872$) were unintentional poisonings. 64.5% ($n = 1,207$) were male, 83.1% ($n = 1,555$) were white, and 27.6% ($n = 517$) were between 25 and 34 years of age.

30.0% ($n = 1,607$) were transportation-related accidents. 71.9% ($n = 1,156$) were male, 66.9% ($n = 1,075$) were white, and 16.5% ($n = 265$) were between 25 and 34 years of age.

Mecklenburg County had the highest number of accidental deaths based on county of death ($n = 494$), but Pitt County had the highest rate with 121.0 per 100,000.

Table 19 Number and Rate of Accidental Deaths by Means of Death, 2016

Means of Death	Total	% Total	Rate
Poisoning	1872	35.0%	18.4
Transportation	1607	30.0%	15.8
Fall/Jump	1354	25.3%	13.3
Drowning	150	2.8%	1.5
Asphyxia	122	2.3%	1.2
Fire/Burn Injuries	106	2.0%	1.0
Environmental Exposure	45	0.8%	0.4
Other or Unknown Blunt Instrument	38	0.7%	0.4
Firearms	13	0.2%	0.1
Sharp Trauma	11	0.2%	0.1
Electrocution	6	0.1%	0.1
Other	25	0.5%	0.2
TOTAL	5349	100%	52.7

Table 20 Number of Accidental Deaths by Means of Death, 2016

Means of Death	Total
Asphyxia	122
Choking	50
Hanging	3
Mechanical	24
Positional	13
Suffocation/Smothering	23
Inhalation	1
Other	8
Drowning	150
Bathtub	13
Freshwater	71
Pool	17
Saltwater	18
Natural Disaster-Related	23
Other	8
Electrocution	6
High Voltage	1
Low Voltage	3
Lightning	2
Environmental Exposure	45
Hyperthermia	13
Hypothermia	26
Anaphylaxis/Anaphylactoid Reaction	6
Fire/Burn Injuries	106
Thermal Injuries	39
Inhalation of Combustion Products	25
Thermal Injuries + Inhalation of Combustion Products	42
Firearms	13
Handgun	7
Rifle	3

Means of Death	Total
Unknown Firearm	3
Blunt Trauma	2999
Aircraft	3
Bicycle	28
Motorcycle	156
Pedestrian	209
Train	21
Motor Vehicle	1089
Other Vehicle ¹	98
Watercraft	3
Other Blunt Instrument	32
Unknown	6
Fall/Jump	1354
Sharp Trauma	11
Animals	3
Other Sharp Instrument	8
Poisoning	1872
Ethanol	45
Prescription or Illicit Opioid Drugs ²	437
Non-Opioid Prescription Drugs	10
Non-Opioid Illicit Drugs	222
Over-the-Counter (OTC) Drugs	5
Ethylene Glycol	1
Carbon Monoxide	31
Multiple Categories	1104
Other	17
Other	25
TOTAL	5349

¹This category includes all-terrain vehicles, mopeds, tractors, etc.

² This category also includes loperamide.

Table 21 Number and Rate of Accidental Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Mecklenburg	494	46.9
Wake	431	42.0
Forsyth	373	101.0
Guilford	322	61.9
Buncombe	247	95.6

Table 22 Number and Rate of Accidental Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Pitt	213	121.1
Forsyth	373	101.0
Mitchell	15	98.3
Buncombe	247	95.6
Haywood	55	89.0

Table 23 Number and Rate of Accidental Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Wake	350	34.1
Mecklenburg	320	30.4
Guilford	266	51.1
Forsyth	180	48.8
Cumberland	154	46.7

Table 24 Number and Rate of Accidental Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Davie	40	94.8
Mitchell	14	91.7
Caswell	21	88.6
Wilkes	62	88.5
Macon	31	88.5

Table 25 Number and Rate of Accidental Deaths by County of Death, 2016

County of Death	Total	Rate
Alamance	67	42.1
Alexander	10	26.1
Alleghany	8	71.4
Anson	6	23.4
Ashe	9	32.9
Avery	13	71.8
Beaufort	23	48.3
Bertie	11	55.4
Bladen	18	51.9
Brunswick	57	44.6
Buncombe	247	95.6
Burke	48	53.4
Cabarrus	117	58.3
Caldwell	31	37.4
Camden	2	19.4
Carteret	46	65.8
Caswell	13	54.9
Catawba	71	45.4
Chatham	14	19.1
Cherokee	12	42.0
Chowan	9	62.5
Clay	5	44.2
Cleveland	83	84.5
Columbus	47	82.2
Craven	68	65.6
Cumberland	160	48.5
Currituck	14	53.6
Dare	16	44.0
Davidson	69	41.5
Davie	21	49.8
Duplin	13	21.8

County of Death	Total	Rate
Durham	180	59.7
Edgecombe	20	37.4
Forsyth	373	101.0
Franklin	18	27.5
Gaston	113	52.4
Gates	7	58.9
Graham	7	79.2
Granville	21	35.3
Greene	4	18.7
Guilford	322	61.9
Halifax	22	42.2
Harnett	41	31.8
Haywood	55	89.0
Henderson	74	64.7
Hertford	10	41.6
Hoke	11	21.1
Hyde	4	71.2
Iredell	74	42.7
Jackson	20	47.0
Johnston	60	31.7
Jones	6	57.9
Lee	20	33.8
Lenoir	17	29.5
Lincoln	23	28.0
Macon	25	71.3
Madison	7	31.8
Martin	11	46.6
McDowell	23	50.5
Mecklenburg	494	46.9
Mitchell	15	98.3
Montgomery	10	36.0

County of Death	Total	Rate
Moore	62	64.5
Nash	51	54.0
New Hanover	174	77.8
Northampton	9	43.3
Onslow	47	24.2
Orange	114	80.9
Pamlico	8	60.0
Pasquotank	18	44.7
Pender	37	62.2
Perquimans	3	22.1
Person	9	22.7
Pitt	213	121.1
Polk	10	47.6
Randolph	47	32.7
Richmond	27	60.1
Robeson	77	58.0
Rockingham	47	51.1
Rowan	89	63.1
Rutherford	38	56.1
Sampson	33	52.0
Scotland	15	41.9
Stanly	19	30.8
Stokes	19	40.6
Surry	35	48.0
Swain	10	67.3
Transylvania	24	70.3
Tyrrell	1	24.2
Union	59	26.3
Vance	21	46.7
Wake	431	42.0
Warren	10	49.7
Washington	6	48.3

County of Death	Total	Rate
Watauga	14	25.5
Wayne	61	48.9
Wilkes	44	62.8
Wilson	32	39.1
Yadkin	12	31.8
Yancey	4	22.0
Subtotal	5345	52.6
OUT OF STATE	4	ND
Subtotal	4	ND
TOTAL	5349	52.7

Table 26 Number and Rate of Accidental Deaths by County of Residence, 2016

County of Death	Total	Rate
Alamance	78	49.0
Alexander	16	41.8
Alleghany	9	80.3
Anson	6	23.4
Ashe	12	43.9
Avery	11	60.8
Beaufort	34	71.4
Bertie	12	60.5
Bladen	28	80.8
Brunswick	64	50.1
Buncombe	153	59.2
Burke	61	67.9
Cabarrus	106	52.8
Caldwell	48	58.0
Camden	3	29.2
Carteret	52	74.4
Caswell	21	88.6
Catawba	81	51.8
Chatham	29	39.6
Cherokee	13	45.5
Chowan	11	76.3
Clay	9	79.5
Cleveland	79	80.4
Columbus	47	82.2
Craven	72	69.4
Cumberland	154	46.7
Currituck	8	30.7
Dare	9	24.7
Davidson	98	59.0
Davie	40	94.8
Duplin	25	41.9

County of Death	Total	Rate
Durham	113	37.5
Edgecombe	38	71.0
Forsyth	180	48.8
Franklin	36	55.0
Gaston	129	59.9
Gates	8	67.3
Graham	5	56.6
Granville	26	43.7
Greene	13	60.7
Guilford	266	51.1
Halifax	32	61.3
Harnett	66	51.2
Haywood	49	79.3
Henderson	83	72.6
Hertford	11	45.8
Hoke	19	36.4
Hyde	1	17.8
Iredell	85	49.0
Jackson	29	68.1
Johnston	76	40.1
Jones	6	57.9
Lee	25	42.2
Lenoir	28	48.6
Lincoln	41	50.0
Macon	31	88.5
Madison	6	27.3
Martin	18	76.3
McDowell	27	59.3
Mecklenburg	320	30.4
Mitchell	14	91.7
Montgomery	10	36.0

County of Death	Total	Rate
Moore	59	61.4
Nash	60	63.5
New Hanover	122	54.6
Northampton	14	67.3
Onslow	72	37.1
Orange	46	32.7
Pamlico	9	67.5
Pasquotank	12	29.8
Pender	39	65.6
Perquimans	5	36.9
Person	16	40.3
Pitt	92	52.3
Polk	11	52.3
Randolph	89	61.9
Richmond	21	46.8
Robeson	86	64.8
Rockingham	60	65.3
Rowan	111	78.7
Rutherford	38	56.1
Sampson	46	72.4
Scotland	17	47.5
Stanly	28	45.3
Stokes	35	74.9
Surry	43	59.0
Swain	6	40.4
Transylvania	22	64.4
Tyrrell	3	72.5
Union	71	31.7
Vance	30	66.7
Wake	350	34.1
Warren	10	49.7
Washington	8	64.4

County of Death	Total	Rate
Watauga	17	30.9
Wayne	69	55.3
Wilkes	62	88.5
Wilson	39	47.7
Yadkin	17	45.1
Yancey	8	44.1
Subtotal	5023	49.5
OUT OF STATE	326	ND
Subtotal	326	ND
TOTAL	5349	52.7

Table 27 Number of Accidental Deaths by Gender, Age Group, and Race, 2016

Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Female	<1	9	6			2	17
	1-4	9	3			2	14
	5-9	2	3			4	9
	10-14	8	6				14
	15-19	32	15			3	50
	20-24	68	19	1	1	5	94
	25-34	184	35	3	3	16	241
	35-44	199	41	3		4	247
	45-54	215	32	1		8	256
	55-64	162	35		1	8	206
	65-74	141	26	2	2	1	172
	75-84	209	19	1	3	4	236
	85+	401	30		2	5	438
	<i>Subtotal</i>		1639	270	11	12	62
Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Male	<1	12	10	1			23
	1-4	11	9		1	1	22
	5-9	14	6	1		1	22
	10-14	12	7		1	3	23
	15-19	70	23	2	2	8	105
	20-24	172	52	1	2	18	245
	25-34	445	105	4	4	38	596
	35-44	417	107	2	2	31	559
	45-54	373	101	6	3	19	502
	55-64	303	115	5	2	13	438
	65-74	251	48	1	2	4	306
	75-84	239	25		1		265
	85+	228	18	1		2	249
	<i>Subtotal</i>		2547	626	24	20	138
TOTAL		4186	896	35	32	200	5349

Table 28 Number and Rate of Accidental Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	1994	37.3%	38.2
Male	3355	62.7%	68.0
TOTAL	5349	100%	52.7

Table 29 Number and Rate of Accidental Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
White	4186	78.3%	58.0
Black	896	16.8%	40.0
Unknown	200	3.7%	ND
American Indian	35	0.7%	20.4
Asian	32	0.6%	11.1
TOTAL	5349	100%	52.7

Figure 10 Number and Rate of Accidental Deaths by Race, 2016

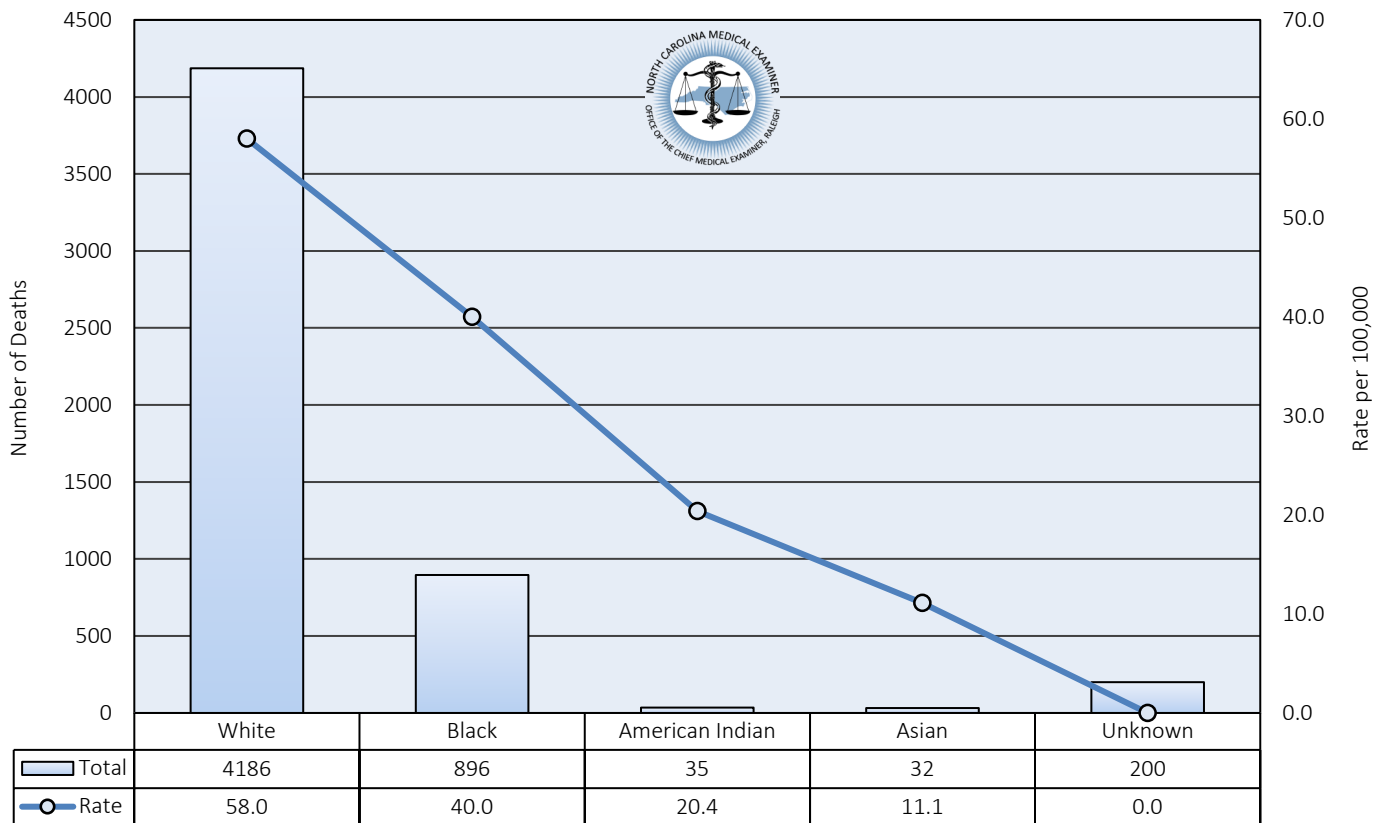


Table 30 Number and Rate of Accidental Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	40	0.7%	33.2
1-4	36	0.7%	7.5
5-9	31	0.6%	4.8
10-14	37	0.7%	5.6
15-19	155	2.9%	22.4
20-24	339	6.3%	47.3
25-34	837	15.6%	64.0
35-44	806	15.1%	61.6
45-54	758	14.2%	54.8
55-64	644	12.0%	50.2
65-74	478	8.9%	51.2
75-84	501	9.4%	111.3
85+	687	12.8%	387.2
TOTAL	5349	100%	52.7

Figure 11 Number and Rate of Accidental Deaths by Age Group, 2016

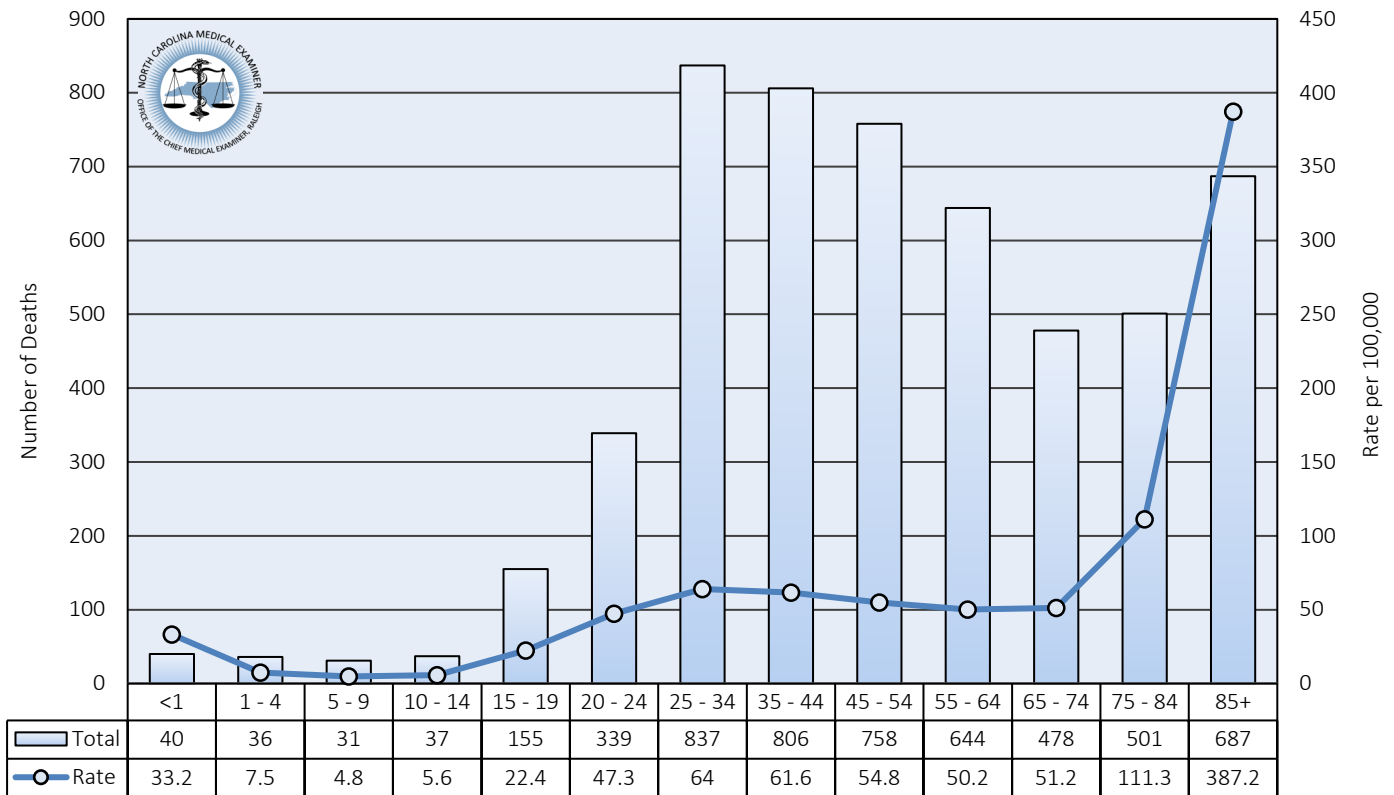


Table 31 Number and Rate of Accidental Deaths by Age Group and Gender, 2016

Age Group	Female			Male		
	Total	% Total	Rate	Total	% Total	Rate
<1	17	0.9%	28.9	23	0.7%	37.3
1-4	14	0.7%	5.9	22	0.7%	9.0
5-9	9	0.5%	2.9	22	0.7%	6.7
10-14	14	0.7%	4.3	23	0.7%	6.8
15-19	50	2.5%	14.8	105	3.1%	29.8
20-24	94	4.7%	27.2	245	7.3%	66.0
25-34	241	12.1%	36.2	596	17.8%	93.0
35-44	247	12.4%	36.8	559	16.7%	88.0
45-54	256	12.8%	36.1	502	15.0%	74.3
55-64	206	10.3%	30.5	438	13.1%	72.0
65-74	172	8.6%	34.2	306	9.1%	71.1
75-84	236	11.8%	91.3	265	7.9%	138.4
85+	438	22.0%	369.0	249	7.4%	423.9
TOTAL	1994	37.3%	38.2	3355	62.7%	68.0

Figure 12 Number and Rate of Accidental Deaths by Gender and Age Group, 2016

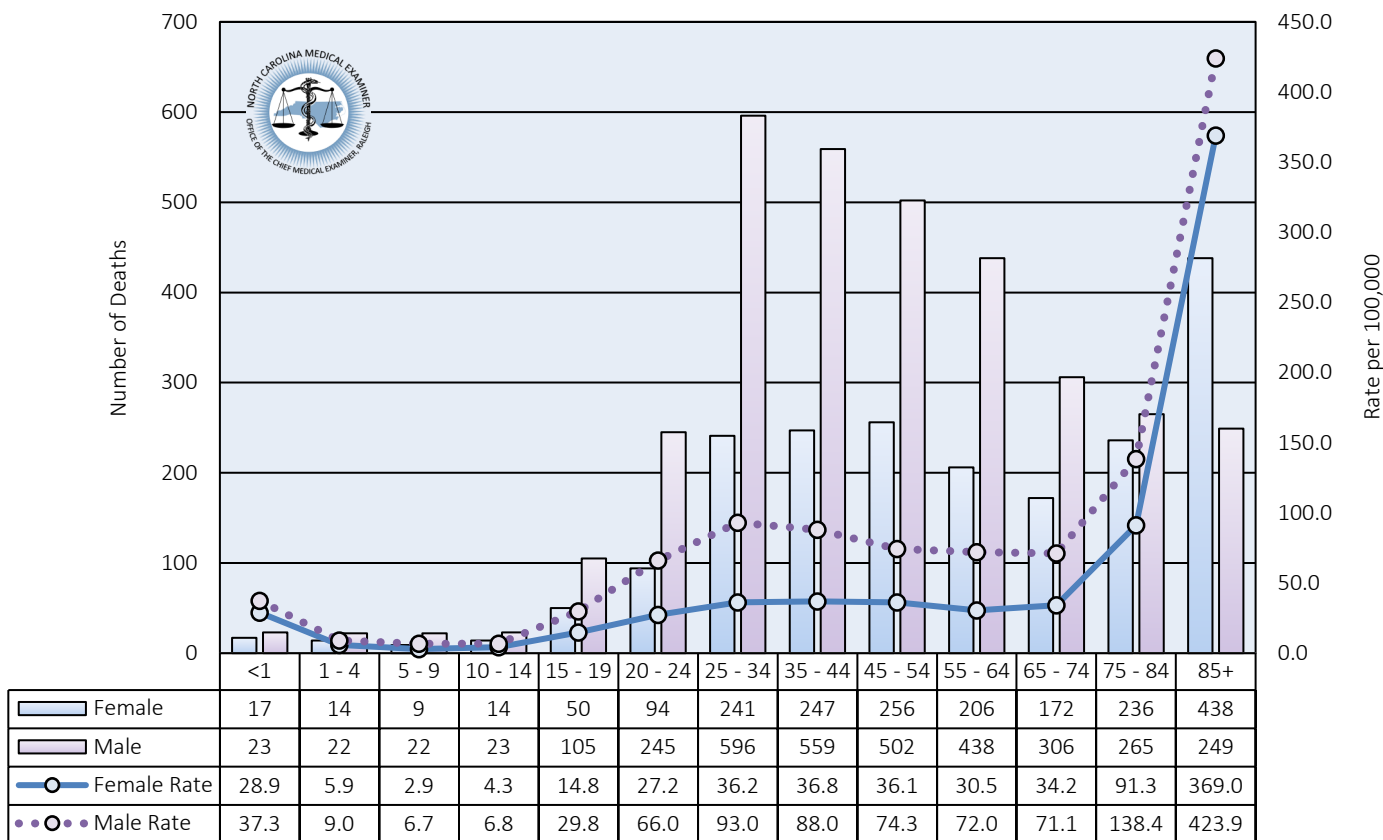
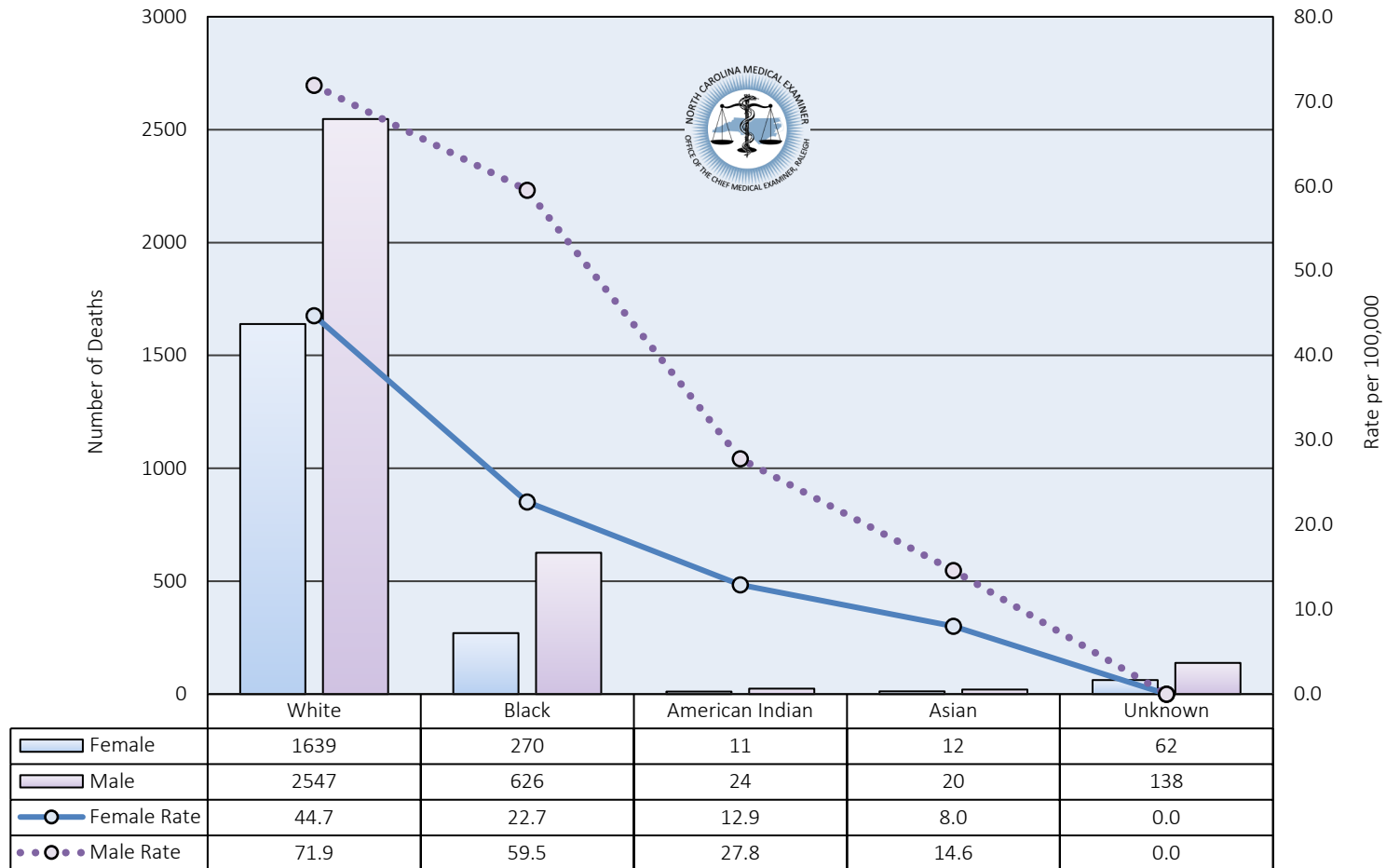


Table 32 Number and Rate of Accidental Deaths by Gender and Race, 2016

Gender	White			Black			American Indian			Asian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	1639	30.6%	44.7	270	5.0%	22.7	11	0.2%	12.9	12	0.2%	8.0	62	1.2%	ND
Male	2547	47.6%	71.9	626	11.7%	59.5	24	0.4%	27.8	20	0.4%	14.6	138	2.6%	ND
TOTAL	4186	78.3%	58.0	896	16.8%	40.0	35	0.7%	20.4	32	0.6%	11.1	200	3.7%	ND

Figure 13 Number and Rate of Accidental Deaths by Gender and Race, 2016



CHAPTER 3

Homicide Deaths

SUMMARY

6.1% ($n = 735$) of deaths investigated by the medical examiner system were certified as homicide deaths.

77.7% ($n = 571$) were male. Overall, males had the highest homicide rate with 11.6 per 100,000. Males between 25 and 34 years of age had the highest homicide rate of any age group with 24.2 per 100,000.

56.2% ($n = 413$) were black. Overall, blacks had the highest homicide rate with 18.4 per 100,000. Black males between 25 and 34 years of age had the highest homicide rate with 83.7 per 100,000.

25.3% ($n = 186$) were between 25 and 34 years of age. Individuals between 20 and 24 years of age had the highest homicide rate with 15.1 per 100,000.

76.7% ($n = 564$) were attributed to firearms. 82.4% ($n = 465$) of firearm-related homicides were male, 62.2% ($n = 351$) were black, and 29.4% ($n = 166$) were between 25 and 34 years of age.

9.7% ($n = 71$) were attributed to blunt force. 64.8% ($n = 46$) of blunt force-related homicides were male, 56.3% ($n = 40$) were white, and 15.5% ($n = 11$) were between 55 and 64 years of age.

Mecklenburg County had the highest number of homicides based on county of death ($n = 88$), but Bertie County had the highest homicide rate with 45.3 per 100,000.

Table 33 Number and Rate of Homicide Deaths by Means of Death, 2016

Means of Death	Total	% Total	Rate
Firearms	564	76.7	5.6
Blunt Trauma	71	9.7	0.7
Sharp Trauma	61	8.3	0.6
Multiple Means	17	2.3	0.2
Asphyxia	16	2.2	0.2
Fire/Burn Injuries	6	0.8	0.1
TOTAL	735	100%	7.2

Table 34 Number of Homicide Deaths by Means of Death, 2016

Means of Death	Total
Firearms	564
Handgun	406
Rifle	18
Shotgun	35
Other Firearm	1
Unknown Firearm	86
Law Enforcement Involved	13
Multiple Categories	5
Blunt Trauma	71
Bodily Force	23
Abuse	7
Pedestrian	6
Other Blunt Instrument	12
Unknown Blunt Instrument	23
Sharp Trauma	61
Knife	43
Other Sharp Instrument	5
Unknown Sharp Instrument	13
Asphyxia	16
Mechanical	1
Strangulation/Neck Compression	5
Suffocation/Smothering	4
Fire/Burn Injuries	6
Inhalation of Combustion Products	3
Thermal Injuries + Inhalation of Combustion Products	3
Multiple Means	17
TOTAL	735

Table 35 Number and Rate of Homicide Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Mecklenburg	88	8.4
Guilford	45	8.7
Durham	44	14.6
Forsyth	44	11.9
Cumberland	41	12.4

Table 36 Number and Rate of Homicide Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Bertie	9	45.3
Robeson	28	21.1
Vance	9	20.0
Scotland	7	19.6
Columbus	10	17.5

Table 37 Number and Rate of Homicide Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Mecklenburg	81	7.7
Durham	41	13.6
Guilford	41	7.9
Cumberland	35	10.6
Robeson	35	26.4

Table 38 Number and Rate of Homicide Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Bertie	7	35.3
Robeson	35	26.4
Vance	9	20.0
Bladen	6	17.4
Scotland	6	16.8

Table 39 Number and Rate of Homicide Deaths by County of Death, 2016

County of Death	Total	Rate
Alamance	10	6.3
Alexander	3	7.8
Alleghany	0	0.0
Anson	2	7.8
Ashe	0	0.0
Avery	0	0.0
Beaufort	2	4.2
Bertie	9	45.3
Bladen	4	11.5
Brunswick	6	4.7
Buncombe	17	6.6
Burke	4	4.5
Cabarrus	8	4.0
Caldwell	4	4.8
Camden	0	0.0
Carteret	1	1.4
Caswell	3	12.7
Catawba	11	7.0
Chatham	0	0.0
Cherokee	0	0.0
Chowan	2	13.9
Clay	0	0.0
Cleveland	7	7.1
Columbus	10	17.5
Craven	3	2.9
Cumberland	41	12.4
Currituck	0	0.0
Dare	0	0.0
Davidson	6	3.6
Davie	0	0.0
Duplin	4	6.7

County of Death	Total	Rate
Durham	44	14.6
Edgecombe	3	5.6
Forsyth	44	11.9
Franklin	3	4.6
Gaston	20	9.3
Gates	0	0.0
Graham	0	0.0
Granville	1	1.7
Greene	1	4.7
Guilford	45	8.7
Halifax	4	7.7
Harnett	7	5.4
Haywood	3	4.9
Henderson	3	2.6
Hertford	4	16.6
Hoke	5	9.6
Hyde	0	0.0
Iredell	8	4.6
Jackson	1	2.3
Johnston	6	3.2
Jones	0	0.0
Lee	8	13.5
Lenoir	7	12.2
Lincoln	1	1.2
Macon	1	2.9
Madison	1	4.5
Martin	3	12.7
McDowell	2	4.4
Mecklenburg	88	8.4
Mitchell	0	0.0
Montgomery	4	14.4

County of Death	Total	Rate
Moore	5	5.2
Nash	4	4.2
New Hanover	15	6.7
Northampton	3	14.4
Onslow	12	6.2
Orange	11	7.8
Pamlico	0	0.0
Pasquotank	4	9.9
Pender	0	0.0
Perquimans	0	0.0
Person	4	10.1
Pitt	25	14.2
Polk	2	9.5
Randolph	2	1.4
Richmond	5	11.1
Robeson	28	21.1
Rockingham	12	13.1
Rowan	15	10.6
Rutherford	3	4.4
Sampson	3	4.7
Scotland	7	19.6
Stanly	1	1.6
Stokes	2	4.3
Surry	6	8.2
Swain	0	0.0
Transylvania	0	0.0
Tyrrell	0	0.0
Union	8	3.6
Vance	9	20.0
Wake	40	3.9
Warren	0	0.0
Washington	1	8.0

County of Death	Total	Rate
Watauga	1	1.8
Wayne	15	12.0
Wilkes	3	4.3
Wilson	11	13.5
Yadkin	1	2.7
Yancey	0	0.0
Subtotal	732	7.2
OUT OF STATE	3	ND
Subtotal	3	ND
TOTAL	735	7.2

Table 40 Number and Rate of Homicide Deaths by County of Residence, 2016

County of Residence	Total	Rate
Alamance	12	7.5
Alexander	5	13.1
Alleghany	0	0.0
Anson	4	15.6
Ashe	0	0.0
Avery	0	0.0
Beaufort	2	4.2
Bertie	7	35.3
Bladen	6	17.3
Brunswick	8	6.3
Buncombe	12	4.6
Burke	4	4.5
Cabarrus	5	2.5
Caldwell	5	6.0
Camden	1	9.7
Carteret	1	1.4
Caswell	3	12.7
Catawba	12	7.7
Chatham	2	2.7
Cherokee	1	3.5
Chowan	1	6.9
Clay	0	0.0
Cleveland	8	8.1
Columbus	8	14.0
Craven	5	4.8
Cumberland	35	10.6
Currituck	0	0.0
Dare	0	0.0
Davidson	4	2.4
Davie	1	2.4
Duplin	5	8.4

County of Residence	Total	Rate
Durham	41	13.6
Edgecombe	7	13.1
Forsyth	27	7.3
Franklin	4	6.1
Gaston	20	9.3
Gates	0	0.0
Graham	0	0.0
Granville	1	1.7
Greene	1	4.7
Guilford	41	7.9
Halifax	5	9.6
Harnett	12	9.3
Haywood	3	4.9
Henderson	3	2.6
Hertford	4	16.6
Hoke	4	7.7
Hyde	0	0.0
Iredell	10	5.8
Jackson	1	2.3
Johnston	10	5.3
Jones	0	0.0
Lee	9	15.2
Lenoir	7	12.2
Lincoln	2	2.4
Macon	2	5.7
Madison	1	4.5
Martin	3	12.7
McDowell	5	11.0
Mecklenburg	81	7.7
Mitchell	0	0.0
Montgomery	4	14.4

County of Residence	Total	Rate
Moore	6	6.2
Nash	8	8.5
New Hanover	12	5.4
Northampton	3	14.4
Onslow	12	6.2
Orange	4	2.8
Pamlico	0	0.0
Pasquotank	3	7.4
Pender	0	0.0
Perquimans	1	7.4
Person	3	7.6
Pitt	14	8.0
Polk	1	4.8
Randolph	3	2.1
Richmond	5	11.1
Robeson	35	26.4
Rockingham	11	12.0
Rowan	18	12.8
Rutherford	3	4.4
Sampson	3	4.7
Scotland	6	16.8
Stanly	1	1.6
Stokes	2	4.3
Surry	6	8.2
Swain	0	0.0
Transylvania	0	0.0
Tyrrell	0	0.0
Union	9	4.0
Vance	9	20.0
Wake	33	3.2
Warren	3	14.9
Washington	0	0.0

County of Residence	Total	Rate
Watauga	1	1.8
Wayne	17	13.6
Wilkes	4	5.7
Wilson	10	12.2
Yadkin	1	2.7
Yancey	0	0.0
Subtotal	712	7.0
OUT OF STATE	23	ND
Subtotal	23	ND
TOTAL	735	7.2

Table 41 Number of Homicide Deaths by Gender, Age Group, and Race, 2016

Gender	Age Group	Black	White	American Indian	Asian	Unknown	Total
Female	<1	4					4
	1-4	2	2				4
	5-9	3	1				4
	10-14	2	2				4
	15-19	5	3			2	10
	20-24	6	9	1	1	3	20
	25-34	13	16		1	1	31
	35-44	7	20	1		1	29
	45-54	7	6			2	15
	55-64	8	12		1		21
	65-74	2	8				10
	75-84	1	6				7
	85+		3				3
	<i>Subtotal</i>		60	88	2	3	9
Gender	Age Group	Black	White	American Indian	Asian	Unknown	Total
Male	<1		3				3
	1-4	2	4				6
	5-9	2	1				3
	10-14	1					1
	15-19	46	7			3	56
	20-24	66	15			7	88
	25-34	115	30	3		7	155
	35-44	70	35	2	1	11	119
	45-54	26	27	1		4	58
	55-64	15	24	3	1	2	45
	65-74	7	18				25
	75-84	3	7				10
	85+		2				2
	<i>Subtotal</i>		353	173	9	2	34
Unknown	<1					2	2
	<i>Subtotal</i>	0	0	0	0	2	2
TOTAL		413	261	11	5	45	735

Table 42 Number and Rate of Homicide Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	162	22.0%	3.1
Male	571	77.7%	11.6
Unknown	2	0.3%	ND
TOTAL	735	100%	7.2

Table 43 Number and Rate of Homicide Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
Black	413	56.2%	18.4
White	261	35.5%	3.6
Unknown	45	6.1%	ND
American Indian	11	1.5%	6.4
Asian	5	0.7%	1.7
TOTAL	735	100%	7.2

Figure 14 Number and Rate of Homicide Deaths by Race, 2016

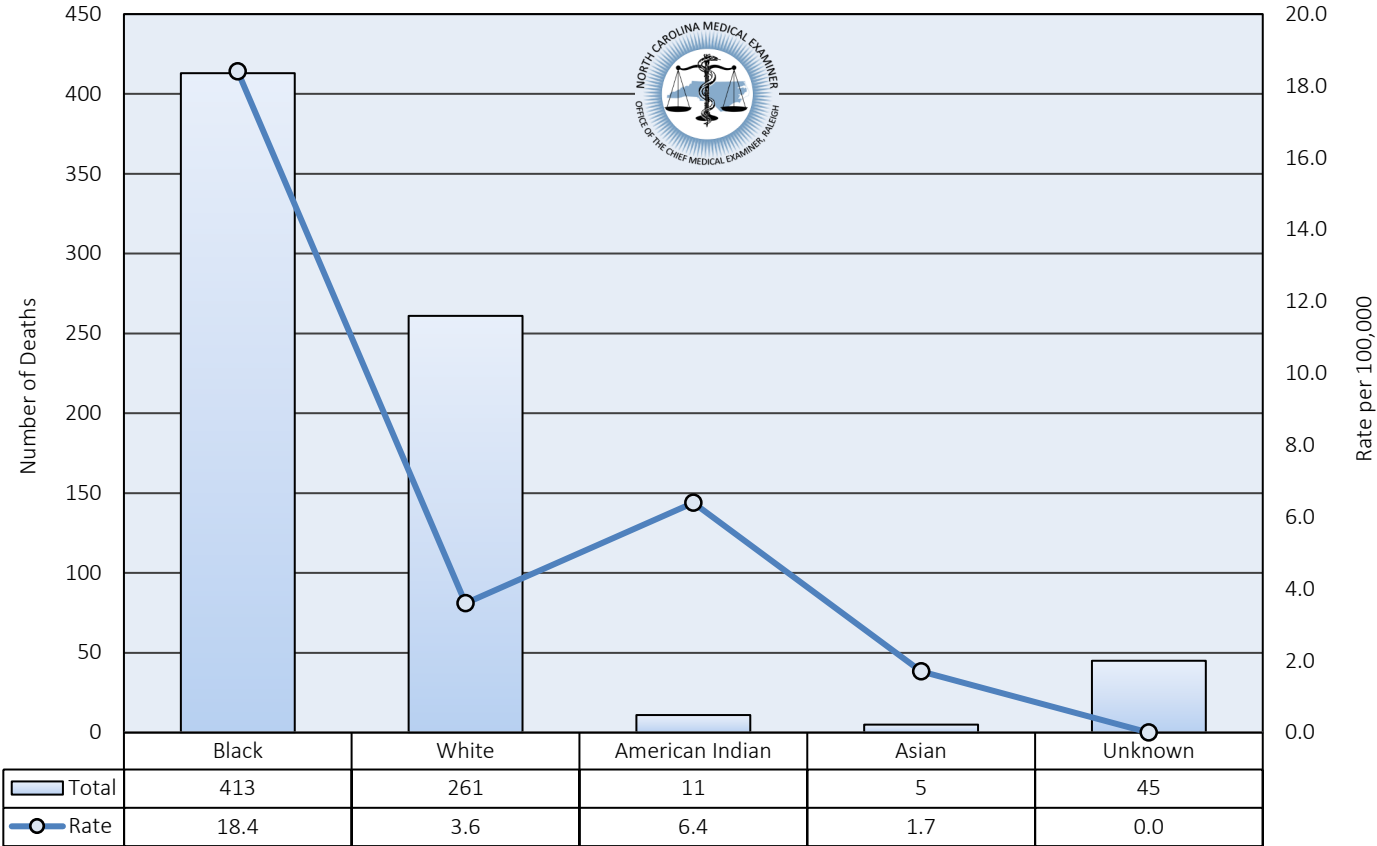


Table 44 Number and Rate of Homicide Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	9	1.2%	7.5
1-4	10	1.4%	2.1
5-9	7	1.0%	1.1
10-14	5	0.7%	0.8
15-19	66	9.0%	9.6
20-24	108	14.7%	15.1
25-34	186	25.3%	14.2
35-44	148	20.1%	11.3
45-54	73	9.9%	5.3
55-64	66	9.0%	5.1
65-74	35	4.8%	3.8
75-84	17	2.3%	3.8
85+	5	0.7%	2.8
TOTAL	735	100%	7.2

Figure 15 Number and Rate of Homicide Deaths by Age Group, 2016

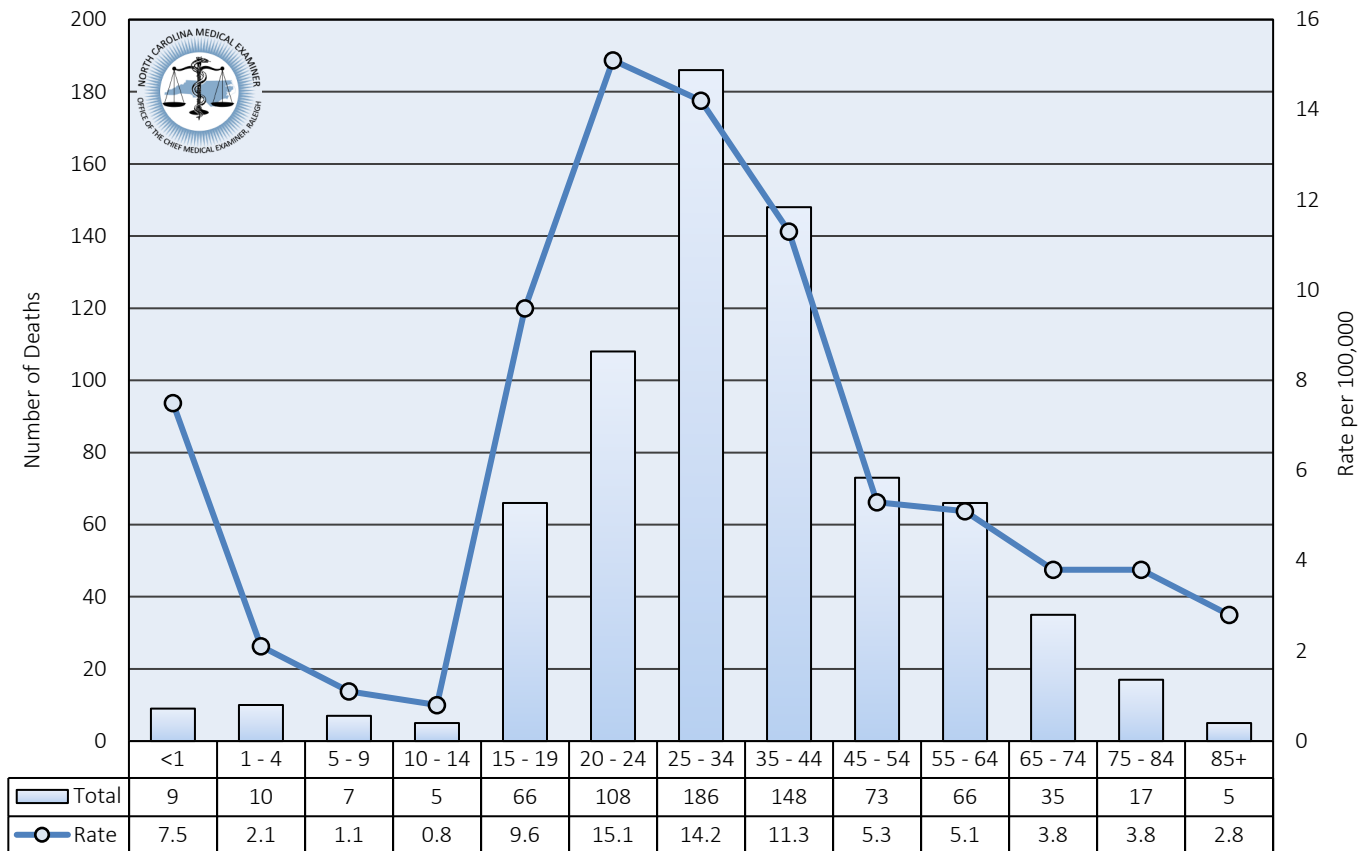


Table 45 Number and Rate of Homicide Deaths by Age Group and Gender, 2016

Age Group	Female			Male			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
<1	4	2.5%	6.8	3	0.5%	4.9	2	0.3%	ND
1-4	4	2.5%	1.7	6	1.1%	2.5	0	0.0%	ND
5-9	4	2.5%	1.3	3	0.5%	0.9	0	0.0%	ND
10-14	4	2.5%	1.2	1	0.2%	0.3	0	0.0%	ND
15-19	10	6.2%	3.0	56	9.8%	15.9	0	0.0%	ND
20-24	20	12.3%	5.8	88	15.4%	23.7	0	0.0%	ND
25-34	31	19.1%	4.7	155	27.1%	24.2	0	0.0%	ND
35-44	29	17.9%	4.3	119	20.8%	18.7	0	0.0%	ND
45-54	15	9.3%	2.1	58	10.2%	8.9	0	0.0%	ND
55-64	21	13.0%	3.1	45	7.9%	7.4	0	0.0%	ND
65-74	10	6.2%	2.0	25	4.4%	5.8	0	0.0%	ND
75-84	7	4.3%	2.7	10	1.8%	5.2	0	0.0%	ND
85+	3	1.9%	2.5	2	0.4%	3.4	0	0.0%	ND
TOTAL	162	22.0%	3.1	571	77.7%	11.6	2	0.3%	ND

Figure 16 Number and Rate of Homicide Deaths by Gender and Age Group, 2016

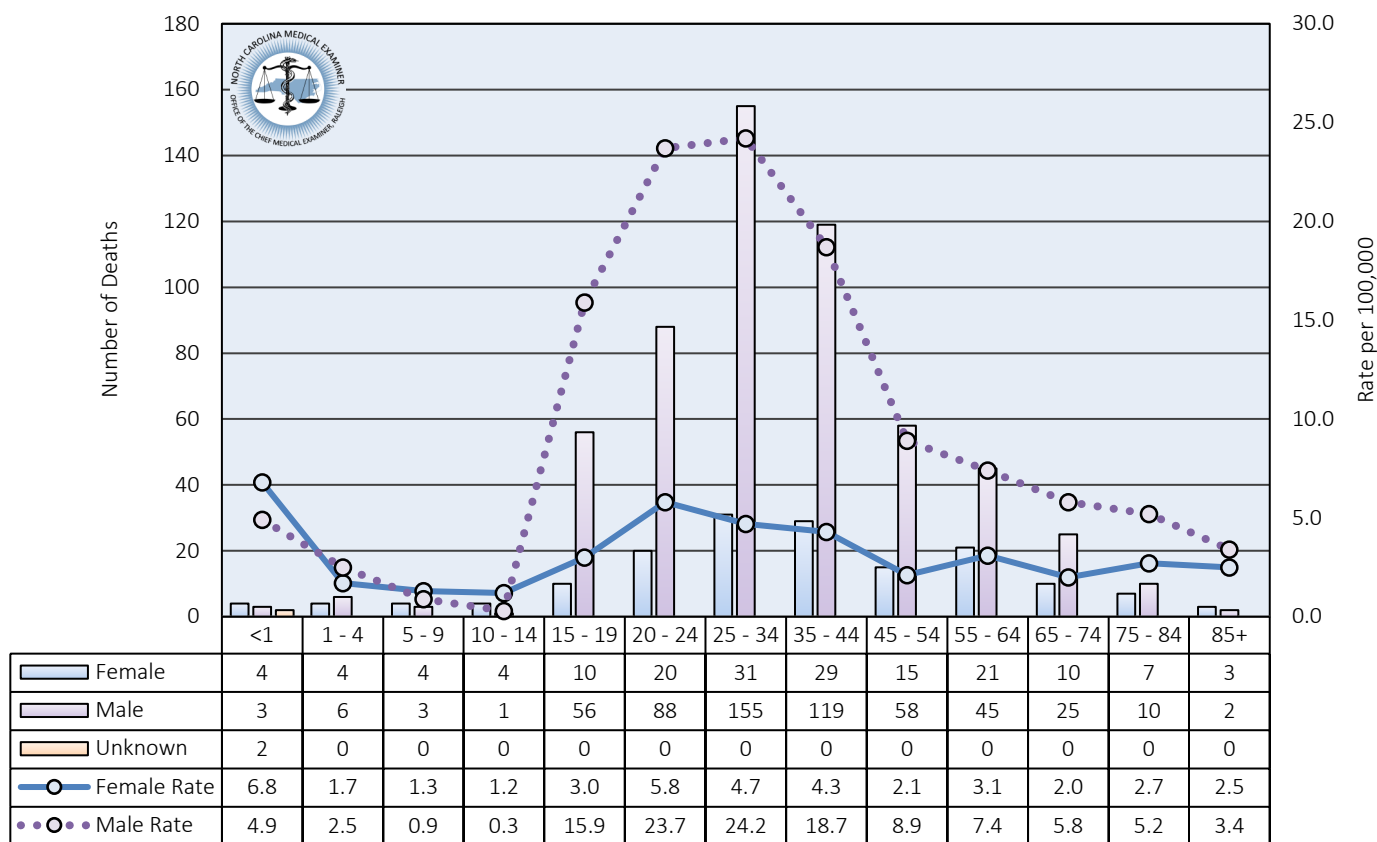
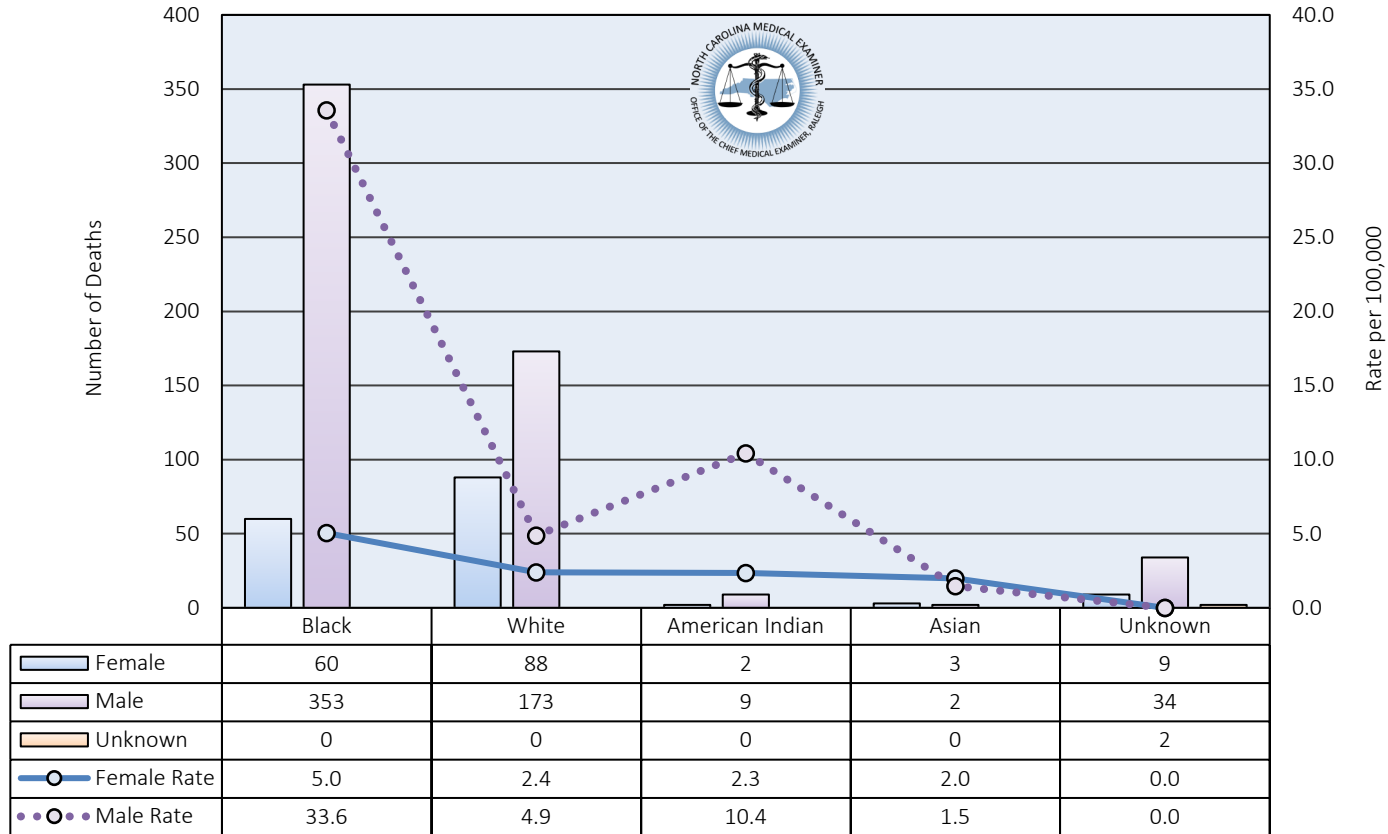


Table 46 Number and Rate of Homicide Deaths by Gender and Race, 2016

Gender	Black			White			American Indian			Asian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	60	14.5%	5.0	88	33.7%	2.4	2	18.2%	2.3	3	60.0%	2.0	9	20.0%	ND
Male	353	85.5%	33.6	173	66.3%	4.9	9	81.8%	10.4	2	40.0%	1.5	34	75.6%	ND
Unknown	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	2	4.4%	ND
TOTAL	413	56.2%	18.4	261	35.5%	3.6	11	1.5%	6.4	5	0.7%	1.7	45	6.1%	ND

Figure 17 Number and Rate of Homicide Deaths by Gender and Race, 2016



CHAPTER 4

Natural Deaths

SUMMARY

34.5% ($n = 4,124$) of deaths investigated by the medical examiner system were certified as natural deaths.

67.4% ($n = 2,779$) were male. Overall, males had the highest rate with 56.3 per 100,000. Males over 85 years of age had the highest rate of any age group with 163.4 per 100,000.

68.8% ($n = 2,839$) were white. Overall, blacks had the highest rate with 50.9 per 100,000. Black males between 75 and 84 years of age had the highest rate with 184.6 per 100,000.

30.1% ($n = 1,242$) were between 55 and 64 years of age. Individuals over 85 years of age had the highest rate with 112.7 per 100,000.

67.1% ($n = 2,767$) were caused by diseases of the circulatory system. 69.0% ($n = 1,909$) of these deaths were male, 69.8% ($n = 1,932$) were white, and 32.1% ($n = 889$) were between 55 and 64 years of age.

12.6% ($n = 519$) were caused by systemic diseases. 64.0% ($n = 332$) of deaths were male, 71.1% ($n = 369$) were white, and 27.6% ($n = 143$) were between 55 and 64 years of age.

Cumberland County had the highest number of natural deaths based on county of death ($n = 245$), but Haywood County had the highest rate with 160.3 per 100,000.

Table 47 Number and Rate of Natural Deaths by Cause of Death, 2016

Cause of Death	Total	% Total	Rate
Cardiovascular Diseases/Disorders	2767	67.1%	27.2
Systemic Diseases/Disorders	519	12.6%	5.1
Pulmonary Diseases/Disorders	378	9.2%	3.7
Gastrointestinal Diseases/Disorders	193	4.7%	1.9
Central Nervous System Diseases/Disorders	146	3.5%	1.4
Other Natural Deaths/Disorders	59	1.4%	0.6
Genitourinary Diseases/Disorders	41	1.0%	0.4
Perinatal and Pediatric Diseases/Disorders	21	0.5%	0.2
TOTAL	4124	100%	40.6

Table 48 Number of Natural Deaths by Cause of Death, 2016

Cause of Death	Total
Central Nervous System Diseases/Disorders	146
Seizure Disorder	58
Vascular Malformation/Aneurysm	20
Degenerative Disease	34
Malignancy	3
Other Central Nervous System Disease/Disorder	31
Cardiovascular Diseases/Disorders	2767
Atherosclerosis	1096
Hypertension	395
Hypertension and Atherosclerosis	1112
Congenital Anomaly	12
Vascular Dissection/Rupture	22
Valvular Heart Disease	9
Myocarditis	13
Cardiac Arrhythmia of Unknown Etiology	15
Cardiomyopathy, Not Otherwise Specified	46
Myocardial Rupture	5
Other Cardiovascular Disease/Disorder	42
Gastrointestinal Diseases/Disorders	193
Gastrointestinal Hemorrhage	47
Cirrhosis, Not Otherwise Specified	34
Malignancy	62
Other Gastrointestinal Disease/Disorder	50
Genitourinary Diseases/Disorders	41
Renal Disease, Not Otherwise Specified	12
Malignancy	23
Other Genitourinary Disease/Disorder	6
Perinatal and Pediatric Diseases/Disorders	21
Maternal Complications	2
Fetal Complications	1

Cause of Death	Total
Sudden Infant Death Syndrome	11
Other Perinatal and Pediatric Disease/Disorder	7
Pulmonary Diseases/Disorders	378
Asthma	25
COPD/Emphysema	97
Thromboemboli	91
Pneumonia	96
Malignancy	52
Other Pulmonary Disease/Disorder	17
Systemic Diseases/Disorders	519
Blood Disorders	3
Diabetes Mellitus	124
HIV/AIDS	5
Sepsis	37
Other Infectious Disease	8
Morbid Obesity	52
Dehydration	4
Chronic Ethanolism	237
Chronic Drug Abuse	13
Metastatic Malignancy	8
Other Systemic Disease/Disorder	28
Other Natural Deaths/Disorders	59
Other Malignancy	41
Other Natural Disease/Disorder	18
TOTAL	4124

Table 49 Number and Rate of Natural Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Cumberland	245	74.3
Wake	240	23.4
Mecklenburg	237	22.5
Guilford	190	36.5
Durham	164	54.4

Table 50 Number and Rate of Natural Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Haywood	99	160.3
Columbus	65	113.7
Beaufort	46	96.6
Gates	11	92.5
Pasquotank	36	89.4

Table 51 Number and Rate of Natural Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Cumberland	233	70.6
Mecklenburg	209	19.8
Wake	194	18.9
Guilford	163	31.3
Forsyth	107	29.0

Table 52 Number and Rate of Natural Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Haywood	99	160.3
Columbus	63	110.2
Greene	22	102.7
Gates	12	100.9
Beaufort	48	100.8

Table 53 Number and Rate of Natural Deaths by County of Death, 2016

County of Death	Total	Rate
Alamance	75	47.2
Alexander	5	13.1
Alleghany	6	53.6
Anson	16	62.4
Ashe	8	29.3
Avery	8	44.2
Beaufort	46	96.6
Bertie	13	65.5
Bladen	22	63.5
Brunswick	83	65.0
Buncombe	104	40.2
Burke	55	61.2
Cabarrus	55	27.4
Caldwell	29	35.0
Camden	4	38.9
Carteret	44	63.0
Caswell	13	54.9
Catawba	57	36.4
Chatham	15	20.5
Cherokee	19	66.5
Chowan	10	69.4
Clay	2	17.7
Cleveland	36	36.6
Columbus	65	113.7
Craven	62	59.8
Cumberland	245	74.3
Currituck	23	88.1
Dare	19	52.2
Davidson	23	13.8
Davie	14	33.2
Duplin	20	33.6

County of Death	Total	Rate
Durham	164	54.4
Edgecombe	34	63.5
Forsyth	130	35.2
Franklin	25	38.2
Gaston	82	38.1
Gates	11	92.5
Graham	4	45.3
Granville	36	60.6
Greene	19	88.7
Guilford	190	36.5
Halifax	24	46.0
Harnett	49	38.0
Haywood	99	160.3
Henderson	66	57.7
Hertford	9	37.4
Hoke	17	32.6
Hyde	1	17.8
Iredell	59	34.0
Jackson	22	51.7
Johnston	67	35.4
Jones	4	38.6
Lee	22	37.1
Lenoir	29	50.4
Lincoln	26	31.7
Macon	23	65.6
Madison	10	45.5
Martin	8	33.9
McDowell	14	30.8
Mecklenburg	237	22.5
Mitchell	3	19.7
Montgomery	5	18.0

County of Death	Total	Rate
Moore	41	42.7
Nash	71	75.2
New Hanover	78	34.9
Northampton	7	33.7
Onslow	61	31.5
Orange	54	38.3
Pamlico	9	67.5
Pasquotank	36	89.4
Pender	26	43.7
Perquimans	1	7.4
Person	12	30.2
Pitt	98	55.7
Polk	13	61.8
Randolph	75	52.2
Richmond	35	77.9
Robeson	17	12.8
Rockingham	28	30.5
Rowan	88	62.4
Rutherford	25	36.9
Sampson	25	39.4
Scotland	19	53.1
Stanly	9	14.6
Stokes	20	42.8
Surry	29	39.8
Swain	9	60.6
Transylvania	21	61.5
Tyrrell	3	72.5
Union	40	17.9
Vance	14	31.1
Wake	240	23.4
Warren	8	39.8
Washington	9	72.4

County of Death	Total	Rate
Watauga	17	30.9
Wayne	55	44.1
Wilkes	62	88.5
Wilson	68	83.2
Yadkin	5	13.3
Yancey	11	60.6
Subtotal	4124	40.6
OUT OF STATE	0	ND
Subtotal	0	ND
TOTAL	4124	40.6

Table 54 Number and Rate of Natural Deaths by County of Residence, 2016

County of Residence	Total	Rate
Alamance	74	46.5
Alexander	9	23.5
Alleghany	6	53.6
Anson	15	58.5
Ashe	9	32.9
Avery	5	27.6
Beaufort	48	100.8
Bertie	15	75.6
Bladen	24	69.2
Brunswick	73	57.1
Buncombe	84	32.5
Burke	52	57.9
Cabarrus	51	25.4
Caldwell	35	42.3
Camden	4	38.9
Carteret	40	57.2
Caswell	14	59.1
Catawba	53	33.9
Chatham	16	21.8
Cherokee	15	52.5
Chowan	9	62.5
Clay	2	17.7
Cleveland	33	33.6
Columbus	63	110.2
Craven	60	57.8
Cumberland	233	70.6
Currituck	19	72.8
Dare	14	38.5
Davidson	34	20.5
Davie	16	37.9
Duplin	23	38.6

County of Residence	Total	Rate
Durham	63	20.9
Edgecombe	40	74.8
Forsyth	107	29.0
Franklin	29	44.3
Gaston	88	40.8
Gates	12	100.9
Graham	4	45.3
Granville	37	62.3
Greene	22	102.7
Guilford	163	31.3
Halifax	27	51.8
Harnett	53	41.2
Haywood	99	160.3
Henderson	62	54.2
Hertford	7	29.1
Hoke	19	36.4
Hyde	1	17.8
Iredell	62	35.8
Jackson	18	42.3
Johnston	70	36.9
Jones	5	48.3
Lee	28	47.3
Lenoir	28	48.6
Lincoln	25	30.5
Macon	19	54.2
Madison	11	50.0
Martin	8	33.9
McDowell	13	28.6
Mecklenburg	209	19.8
Mitchell	4	26.2
Montgomery	6	21.6

County of Residence	Total	Rate
Moore	41	42.7
Nash	65	68.8
New Hanover	68	30.4
Northampton	8	38.5
Onslow	63	32.5
Orange	35	24.8
Pamlico	11	82.5
Pasquotank	29	72.0
Pender	20	33.6
Perquimans	6	44.2
Person	9	22.7
Pitt	81	46.1
Polk	13	61.8
Randolph	87	60.5
Richmond	37	82.4
Robeson	29	21.9
Rockingham	36	39.2
Rowan	80	56.7
Rutherford	24	35.4
Sampson	26	40.9
Scotland	14	39.1
Stanly	15	24.3
Stokes	23	49.2
Surry	27	37.1
Swain	7	47.1
Transylvania	18	52.7
Tyrrell	3	72.5
Union	36	16.1
Vance	18	40.0
Wake	194	18.9
Warren	11	54.7
Washington	10	80.5

County of Residence	Total	Rate
Watauga	18	32.7
Wayne	56	44.9
Wilkes	68	97.1
Wilson	57	69.7
Yadkin	8	21.2
Yancey	9	49.6
Subtotal	3847	37.9
OUT OF STATE	277	ND
Subtotal	277	ND
TOTAL	4124	40.6

Table 55 Number of Natural Deaths by Gender, Age Group, and Race, 2016

Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Female	<1	10	7		1	1	19
	1-4	2	3				5
	5-9	1				1	2
	10-14	2	1				3
	15-19	5	3			1	9
	20-24	7	4				11
	25-34	26	24			3	53
	35-44	80	55	2	1	4	142
	45-54	163	70	1		4	238
	55-64	237	80	3	1	4	325
	65-74	203	77	1		3	284
	75-84	111	35		1	2	149
	85+	82	20		1	1	104
	<i>Subtotal</i>		929	379	7	5	24
Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Male	<1	11	7			3	21
	1-4	2	6				8
	5-9	4	3			3	10
	10-14	3	4			1	8
	15-19	5	8				13
	20-24	7	9			2	18
	25-34	46	40	1	2	5	94
	35-44	156	103	2		13	274
	45-54	364	134	7	3	15	523
	55-64	646	245	3	1	22	917
	65-74	435	137	2	2	9	585
	75-84	156	48	1	2	5	212
	85+	75	18		1	2	96
	<i>Subtotal</i>		1910	762	16	11	80
Unknown	<1					1	1
	<i>Subtotal</i>	0	0	0	0	1	1
TOTAL		2839	1141	23	16	105	4124

Table 56 Number and Rate of Natural Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	1344	32.6%	25.8
Male	2779	67.4%	56.3
Unknown	1	0.0%	ND
TOTAL	4124	100%	40.6

Table 57 Number and Rate of Natural Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
White	2839	68.8%	39.3
Black	1141	27.7%	50.9
Unknown	105	2.6%	ND
American Indian	23	0.6%	13.4
Asian	16	0.4%	5.6
TOTAL	4124	100%	40.6

Figure 18 Number and Rate of Natural Deaths by Race, 2016

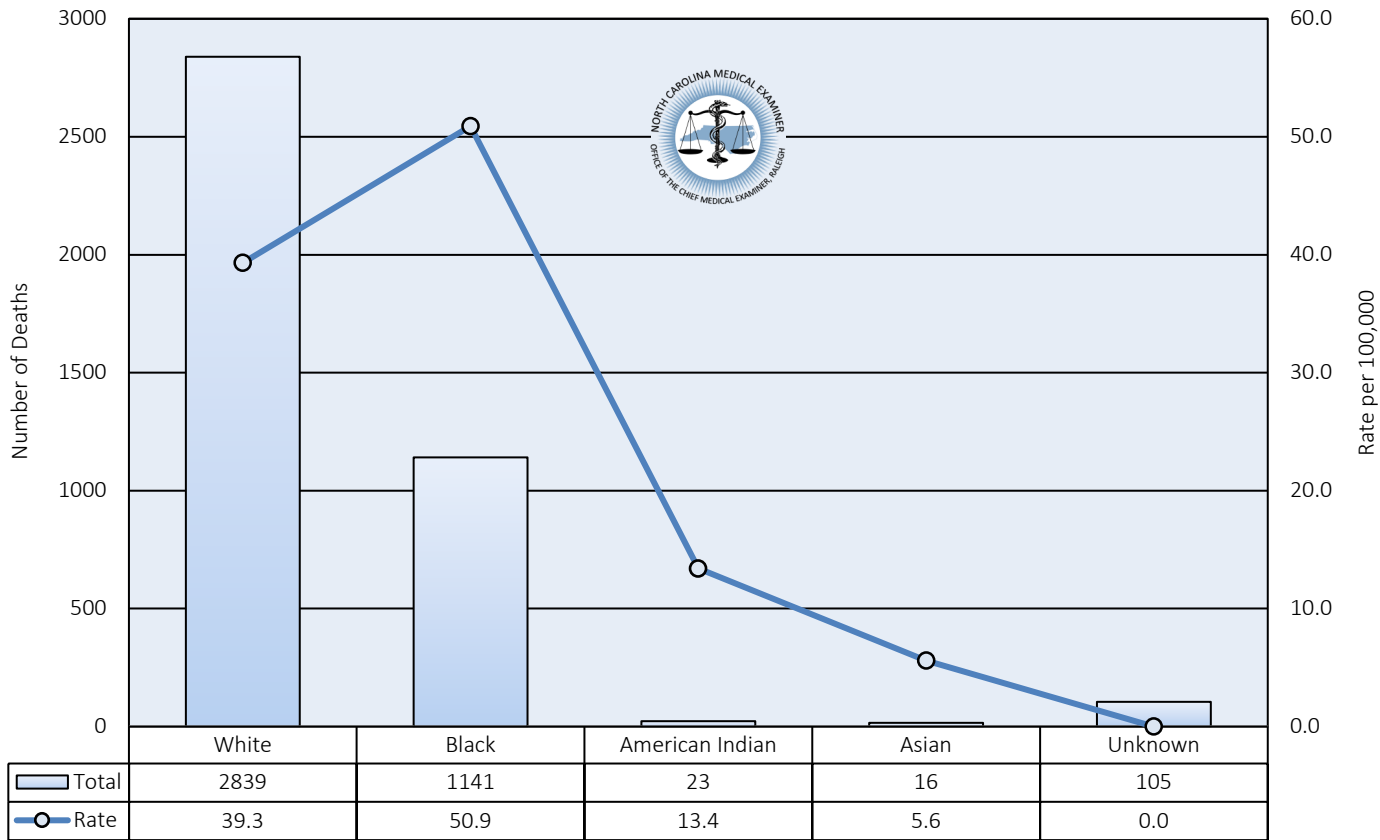


Table 58 Number and Rate of Natural Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	41	1.0%	34.0
1-4	13	0.3%	2.7
5-9	12	0.3%	1.9
10-14	11	0.3%	1.7
15-19	22	0.5%	3.2
20-24	29	0.7%	4.1
25-34	147	3.6%	11.2
35-44	416	10.1%	31.8
45-54	761	18.5%	54.9
55-64	1242	30.1%	96.8
65-74	869	21.1%	93.1
75-84	361	8.8%	80.2
85+	200	4.9%	112.7
TOTAL	4124	100%	40.6

Figure 19 Number and Rate of Natural Deaths by Age Group, 2016

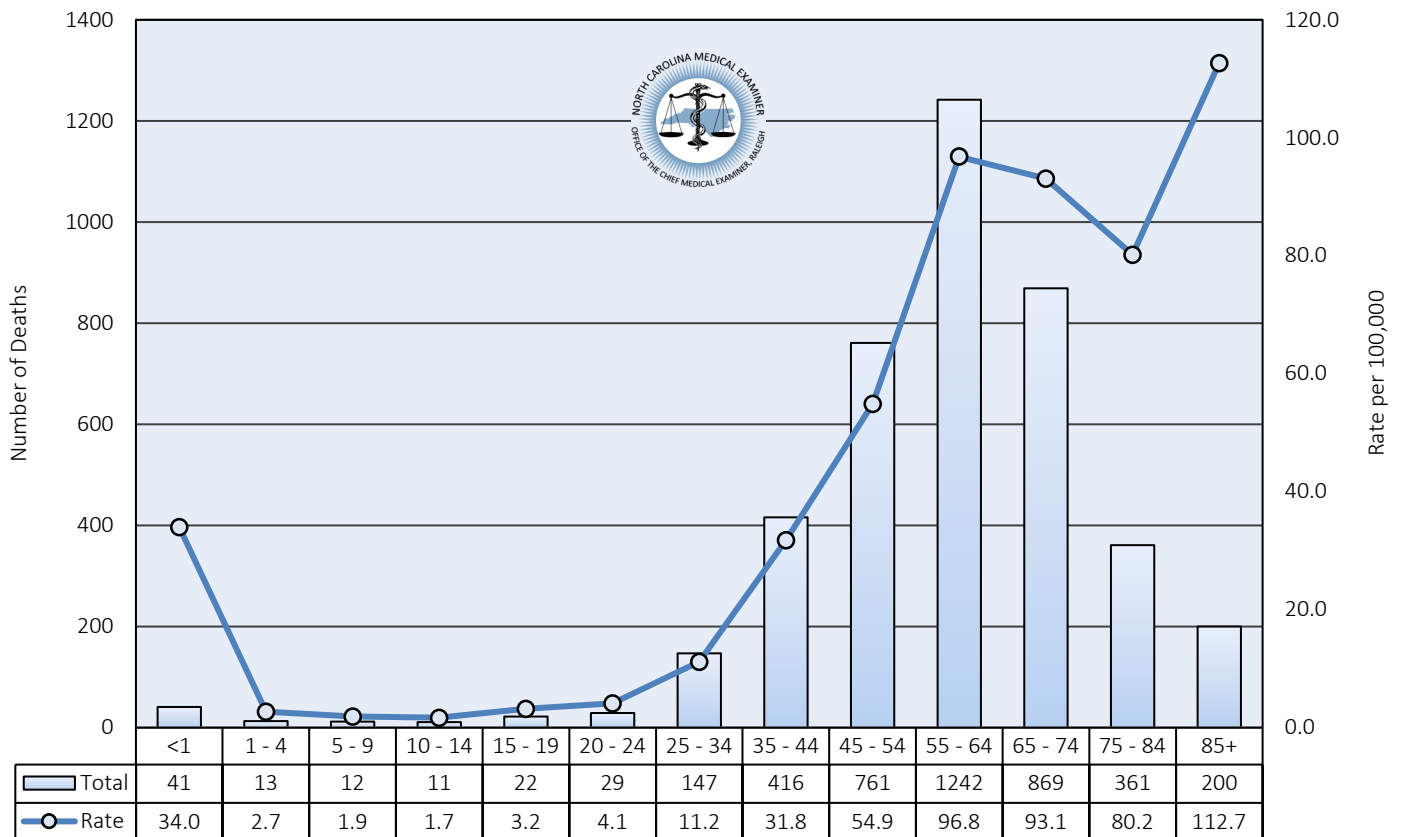


Figure 20 Number and Rate of Natural Deaths by Age Group and Gender, 2016

Age Group	Female			Male			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
<1	19	1.4	32.3	21	0.8	34.0	1	100%	ND
1-4	5	0.4	2.1	8	0.3	3.3	0	0.0%	ND
5-9	2	0.1	0.6	10	0.4	3.1	0	0.0%	ND
10-14	3	0.2	0.9	8	0.3	2.4	0	0.0%	ND
15-19	9	0.7	2.7	13	0.5	3.7	0	0.0%	ND
20-24	11	0.8	3.2	18	0.6	4.9	0	0.0%	ND
25-34	53	3.9	8.0	94	3.4	14.7	0	0.0%	ND
35-44	142	10.6	21.1	274	9.9	43.1	0	0.0%	ND
45-54	238	17.7	33.6	523	18.8	77.4	0	0.0%	ND
55-64	325	24.2	48.1	917	33.0	150.8	0	0.0%	ND
65-74	284	21.1	56.5	585	21.1	135.9	0	0.0%	ND
75-84	149	11.1	57.6	212	7.6	110.7	0	0.0%	ND
85+	104	7.7	87.6	96	3.5	163.4	0	0.0%	ND
TOTAL	1344	32.6%	25.7	2779	67.4%	56.3	1	0.0%	ND

Figure 21 Number and Rate of Natural Deaths by Age Group and Gender, 2016

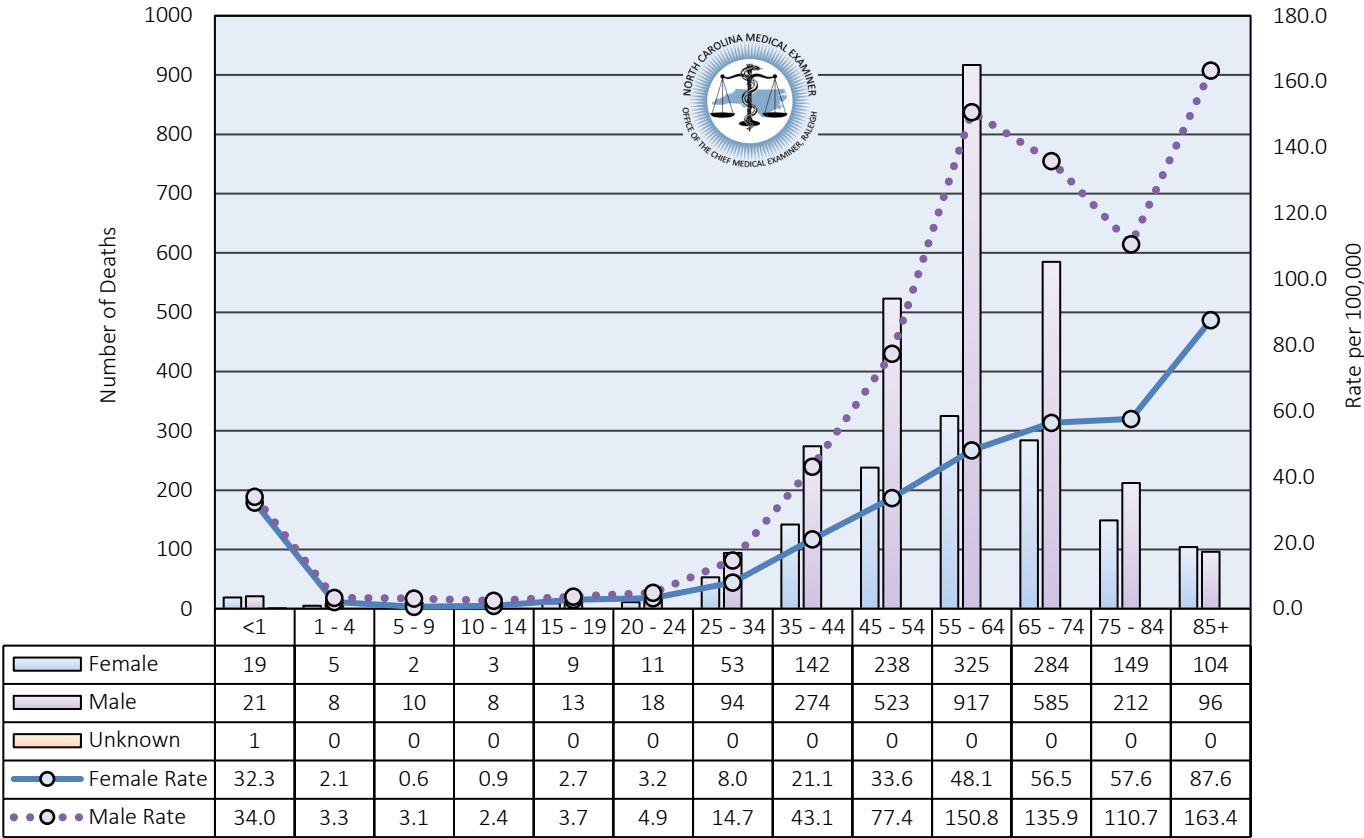
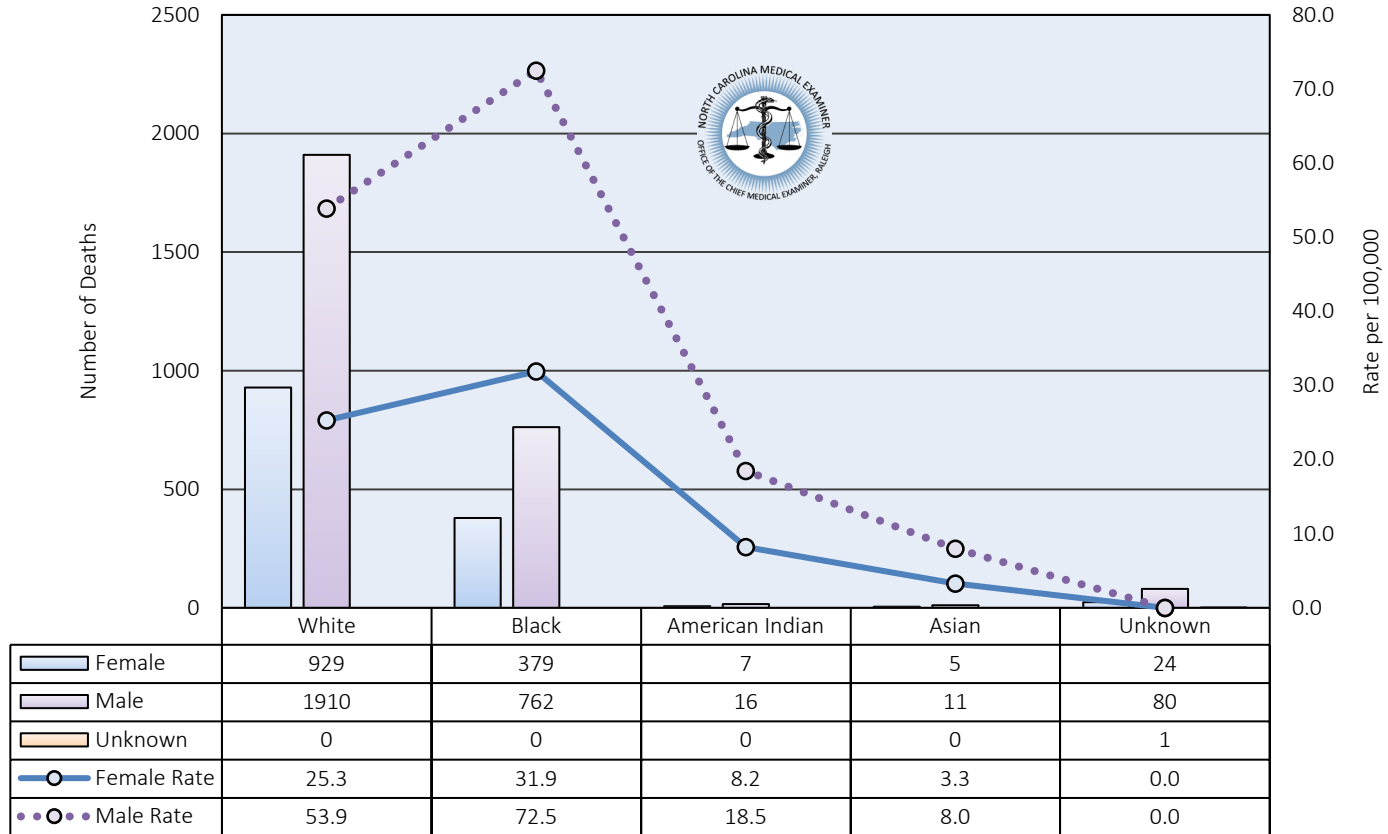


Table 59 Number and Rate of Natural Deaths by Gender and Race, 2016

Gender	White			Black			American Indian			Asian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	929	32.7%	25.3	379	33.2%	31.9	7	30.4%	8.2	5	31.3%	3.3	24	22.9%	ND
Male	1910	67.3%	53.9	762	66.8%	72.5	16	69.6%	18.5	11	68.8%	8.0	80	76.2%	ND
Unknown	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	1	0.9%	ND
TOTAL	2839	68.8%	39.3	1141	27.7%	50.9	23	0.6%	13.4	16	0.4%	5.6	105	2.6%	ND

Figure 22 Number and Rate of Natural Deaths by Gender and Race, 2016



CHAPTER 5

Suicide Deaths

SUMMARY

11.4% ($n = 1,371$) of deaths investigated by the medical examiner system were certified as suicide deaths.

73.7% ($n = 1,010$) were male. Overall, males had the highest rate with 20.5 per 100,000. Males over 85 years of age had the highest rate of any age group with 44.3 per 100,000.

87.4% ($n = 1,198$) were white. Overall, whites had the highest rate with 16.6 per 100,000. White males had the highest rate with 24.8 per 100,000.

18.4% ($n = 252$) were between 55 and 64 years of age. Individuals between 55 and 64 years of age also had the highest rate with 19.6 per 100,000.

57.7% ($n = 791$) were attributed to firearms. 81.9% ($n = 648$) of firearm-related suicide deaths were male, 89.1% ($n = 705$) were white, and 14.6% ($n = 18.5$) were between 55 and 64 years of age.

19.1% ($n = 262$) were attributed to hanging. 79.6% ($n = 230$) of suicide deaths caused by hanging were male, 82.7% ($n = 239$) were white, and 21.8% ($n = 63$) were between 35 and 44 years of age.

Mecklenburg County had the highest number of suicide deaths based on county of death ($n = 130$), but Pamlico County had the highest rate with 45.0 per 100,000.

Table 60 Number and Rate of Suicide Deaths by Means of Death, 2016

Means of Death	Total	% Total	Rate
Firearms	791	57.7%	7.8
Hanging	262	19.1%	2.6
Poisoning	224	16.3%	2.2
Blunt Trauma	34	2.5%	0.3
Other Asphyxia	27	2.0%	0.3
Sharp Trauma	18	1.3%	0.2
Drowning	8	0.6%	0.1
Fire/Burn Injuries	5	0.4%	0.0
Other	2	0.1%	0.0
TOTAL	1371	100%	13.5

Table 61 Number of Suicide Deaths by Means of Death, 2016

Means of Death	Total
Hanging	262
Belt	55
Bedding	17
Chain	1
Rope	90
Other Ligature	96
Unknown Ligature	3
Other Asphyxia	27
Strangulation/Neck Compression	2
Suffocation/Smothering	10
Helium or Other Gases	15
Drowning	8
Freshwater	6
Pool	1
Unknown	1
Fire/Burn Injuries	5
Thermal Injuries	2
Inhalation of Combustion Products	1
Thermal Injuries + Inhalation of Combustion Products	2
Firearms	791
Handgun	611
Rifle	63
Shotgun	109
Other Firearm	2
Unknown Firearm	6
Blunt Trauma	34
Fall/Jump	17
Pedestrian	5
Motor Vehicle	5
Train	7

Means of Death	Total
Sharp Trauma	18
Knife	11
Other Sharp Instrument	7
Poisoning	224
Prescription or Illicit Opioid Drugs	15
Non-Opioid Prescription Drugs	63
Non-Opioid Illicit Drugs	1
Over-the-Counter (OTC) Drugs	10
Ethylene Glycol	2
Carbon Monoxide	20
Multiple Categories	107
Other	6
Other	2
TOTAL	1371

Table 62 Number and Rate of Suicide Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Mecklenburg	130	12.3
Wake	97	9.4
Forsyth	65	17.6
Guilford	61	11.7
Buncombe	57	22.1

Table 63 Number and Rate of Suicide Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Pamlico	6	45.0
Polk	8	38.0
Mitchell	5	32.8
Transylvania	11	32.2
Camden	3	29.2

Table 64 Number and Rate of Suicide Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Mecklenburg	107	10.2
Wake	96	9.3
Guilford	60	11.5
Buncombe	44	17.0
Cumberland	42	12.7

Table 65 Number and Rate of Suicide Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Polk	10	47.6
Transylvania	13	38.1
Pamlico	5	37.5
Mitchell	5	32.8
Stokes	14	29.9

Table 66 Number and Rate of Suicide Deaths by County of Death, 2016

County of Death	Total	Rate
Alamance	23	14.5
Alexander	10	26.1
Alleghany	1	8.9
Anson	4	15.6
Ashe	7	25.6
Avery	2	11.1
Beaufort	8	16.8
Bertie	2	10.1
Bladen	3	8.7
Brunswick	12	9.4
Buncombe	57	22.1
Burke	21	23.4
Cabarrus	17	8.5
Caldwell	14	16.9
Camden	3	29.2
Carteret	15	21.5
Caswell	2	8.4
Catawba	32	20.5
Chatham	12	16.4
Cherokee	4	14.0
Chowan	1	6.9
Clay	0	0.0
Cleveland	19	19.3
Columbus	9	15.7
Craven	13	12.5
Cumberland	43	13.0
Currituck	3	11.5
Dare	3	8.2
Davidson	23	13.8
Davie	6	14.2
Duplin	6	10.1

County of Death	Total	Rate
Durham	22	7.3
Edgecombe	5	9.3
Forsyth	65	17.6
Franklin	7	10.7
Gaston	33	15.3
Gates	1	8.4
Graham	1	11.3
Granville	8	13.5
Greene	6	28.0
Guilford	61	11.7
Halifax	4	7.7
Harnett	10	7.8
Haywood	9	14.6
Henderson	13	11.4
Hertford	7	29.1
Hoke	6	11.5
Hyde	1	17.8
Iredell	32	18.5
Jackson	7	16.4
Johnston	25	13.2
Jones	0	0.0
Lee	9	15.2
Lenoir	6	10.4
Lincoln	10	12.2
Macon	7	20.0
Madison	2	9.1
Martin	5	21.2
McDowell	8	17.6
Mecklenburg	130	12.3
Mitchell	5	32.8
Montgomery	5	18.0

County of Death	Total	Rate
Moore	13	13.5
Nash	14	14.8
New Hanover	41	18.3
Northampton	0	0.0
Onslow	28	14.4
Orange	24	17.0
Pamlico	6	45.0
Pasquotank	10	24.8
Pender	13	21.9
Perquimans	1	7.4
Person	4	10.1
Pitt	15	8.5
Polk	8	38.0
Randolph	24	16.7
Richmond	10	22.3
Robeson	9	6.8
Rockingham	12	13.1
Rowan	25	17.7
Rutherford	6	8.9
Sampson	4	6.3
Scotland	4	11.2
Stanly	7	11.3
Stokes	11	23.5
Surry	16	22.0
Swain	3	20.2
Transylvania	11	32.2
Tyrrell	0	0.0
Union	24	10.7
Vance	6	13.3
Wake	97	9.4
Warren	2	9.9
Washington	0	0.0

County of Death	Total	Rate
Watauga	4	7.3
Wayne	12	9.6
Wilkes	8	11.4
Wilson	5	6.1
Yadkin	3	8.0
Yancey	4	22.0
Subtotal	1369	13.5
OUT OF STATE	2	ND
Subtotal	2	ND
TOTAL	1371	13.5

Table 67 Number and Rate of Suicide Deaths by County of Residence, 2016

County of Residence	Total	Rate
Alamance	23	14.5
Alexander	10	26.1
Alleghany	1	8.9
Anson	4	15.6
Ashe	7	25.6
Avery	2	11.1
Beaufort	8	16.8
Bertie	2	10.1
Bladen	3	8.7
Brunswick	13	10.2
Buncombe	44	17.0
Burke	24	26.7
Cabarrus	19	9.5
Caldwell	16	19.3
Camden	3	29.2
Carteret	15	21.5
Caswell	3	12.7
Catawba	32	20.5
Chatham	11	15.0
Cherokee	4	14.0
Chowan	1	6.9
Clay	0	0.0
Cleveland	18	18.3
Columbus	8	14.0
Craven	12	11.6
Cumberland	42	12.7
Currituck	3	11.5
Dare	2	5.5
Davidson	31	18.7
Davie	10	23.7
Duplin	5	8.4

County of Residence	Total	Rate
Durham	22	7.3
Edgecombe	5	9.3
Forsyth	42	11.4
Franklin	7	10.7
Gaston	37	17.2
Gates	1	8.4
Graham	1	11.3
Granville	6	10.1
Greene	5	23.3
Guilford	60	11.5
Halifax	5	9.6
Harnett	9	7.0
Haywood	11	17.8
Henderson	13	11.4
Hertford	6	25.0
Hoke	8	15.3
Hyde	0	0.0
Iredell	29	16.7
Jackson	9	21.1
Johnston	24	12.7
Jones	0	0.0
Lee	10	16.9
Lenoir	5	8.7
Lincoln	14	17.1
Macon	7	20.0
Madison	3	13.6
Martin	4	16.9
McDowell	8	17.6
Mecklenburg	107	10.2
Mitchell	5	32.8
Montgomery	5	18.0

County of Residence	Total	Rate
Moore	14	14.6
Nash	12	12.7
New Hanover	32	14.3
Northampton	1	4.8
Onslow	33	17.0
Orange	15	10.6
Pamlico	5	37.5
Pasquotank	8	19.9
Pender	16	26.9
Perquimans	1	7.4
Person	5	12.6
Pitt	13	7.4
Polk	10	47.6
Randolph	25	17.4
Richmond	9	20.0
Robeson	9	6.8
Rockingham	11	12.0
Rowan	27	19.2
Rutherford	6	8.9
Sampson	6	9.4
Scotland	4	11.2
Stanly	8	13.0
Stokes	14	29.9
Surry	18	24.7
Swain	2	13.5
Transylvania	13	38.1
Tyrrell	0	0.0
Union	26	11.6
Vance	5	11.1
Wake	96	9.3
Warren	3	14.9
Washington	0	0.0

County of Residence	Total	Rate
Watauga	2	3.6
Wayne	12	9.6
Wilkes	10	14.3
Wilson	7	8.6
Yadkin	3	8.0
Yancey	4	22.0
Subtotal	1329	13.1
OUT OF STATE	42	ND
Subtotal	42	ND
TOTAL	1371	13.5

Table 68 Number of Suicide Deaths by Gender, Age Group, and Race, 2016

Gender	Age Group	White	Black	Asian	American Indian	Unknown	Total
Female	<1						0
	1-4						0
	5-9						0
	10-14	4	1			1	6
	15-19	9	2			2	13
	20-24	14	1	2		1	18
	25-34	33	7			2	42
	35-44	70	5		1		76
	45-54	73	4			2	79
	55-64	63	3	1			67
	65-74	33	2	2	1	1	39
	75-84	15					15
	85+	6					6
	<i>Subtotal</i>		320	25	5	2	9
Gender	Age Group	White	Black	Asian	American Indian	Unknown	Total
Male	<1						0
	1-4						0
	5-9						0
	10-14	9	2			1	12
	15-19	36	8		1	2	47
	20-24	62	9	5	2	8	86
	25-34	116	22	3	1	9	151
	35-44	151	14	1		6	172
	45-54	143	8	3	1	4	159
	55-64	173	6	3	1	2	185
	65-74	99	5	1		1	106
	75-84	64	1			1	66
	85+	25				1	26
	<i>Subtotal</i>		878	75	16	6	35
TOTAL		1198	100	21	8	44	1371

Table 69 Number and Rate of Suicide Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	361	26.3%	6.9
Male	1010	73.7%	20.5
TOTAL	1371	100%	13.5%

Table 70 Number and Rate of Suicide Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
White	1198	87.4%	16.6
Black	100	7.3%	4.5
Asian	21	1.5%	7.3
American Indian	8	0.6%	4.7
Unknown	44	3.2%	ND
TOTAL	1371	100%	13.5

Figure 23 Number and Rate of Suicide Deaths by Race, 2016

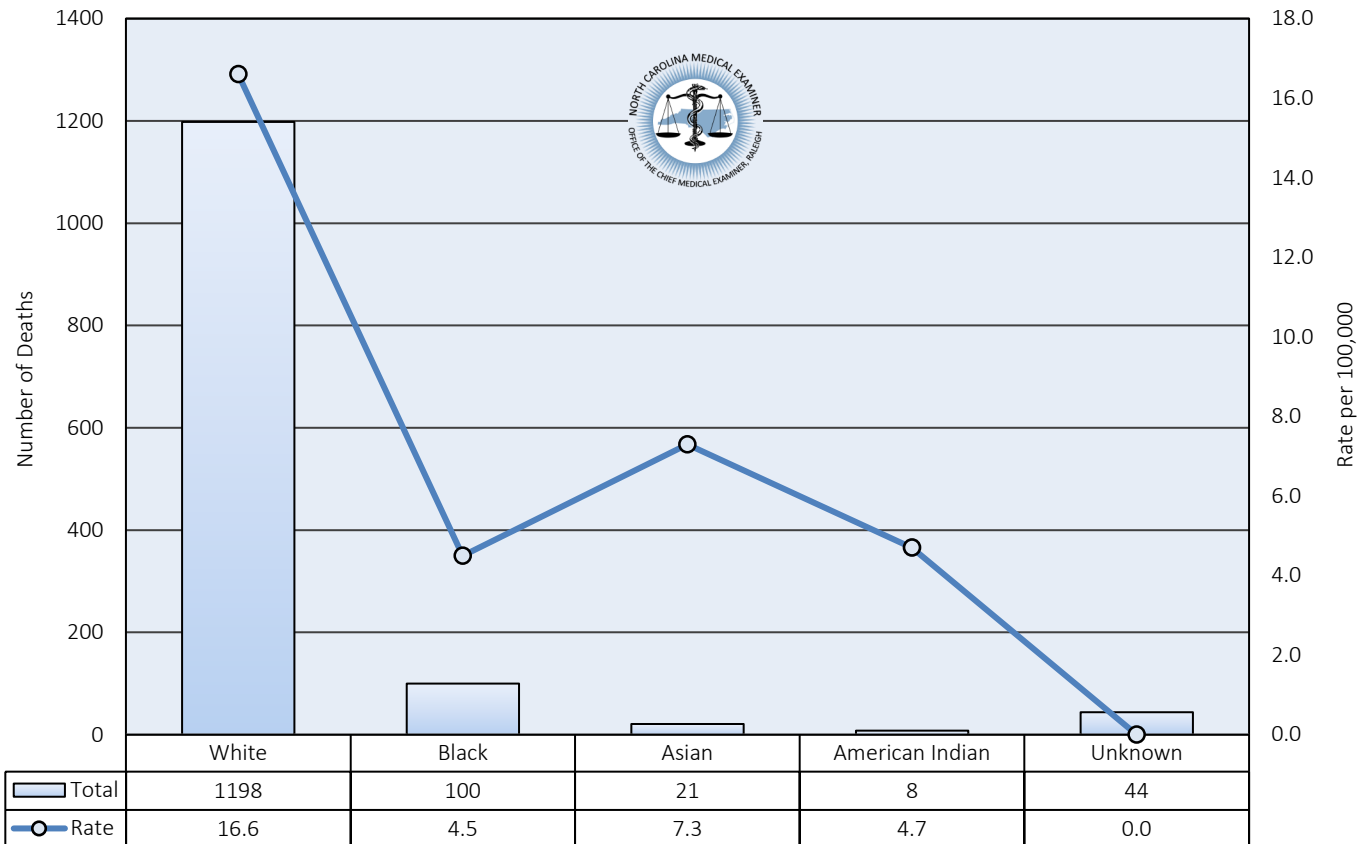


Table 71 Number and Rate of Suicide Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	0	0.0%	0.0
1-4	0	0.0%	0.0
5-9	0	0.0%	0.0
10-14	18	1.3%	2.7
15-19	60	4.4%	8.7
20-24	104	7.6%	14.5
25-34	193	14.1%	14.8
35-44	248	18.1%	19.0
45-54	238	17.4%	17.2
55-64	252	18.4%	19.6
65-74	145	10.6%	15.5
75-84	81	5.9%	18.0
85+	32	2.3%	18.0
TOTAL	1371	100%	13.5

Figure 24 Number and Rate of Suicide Deaths by Age Group, 2016

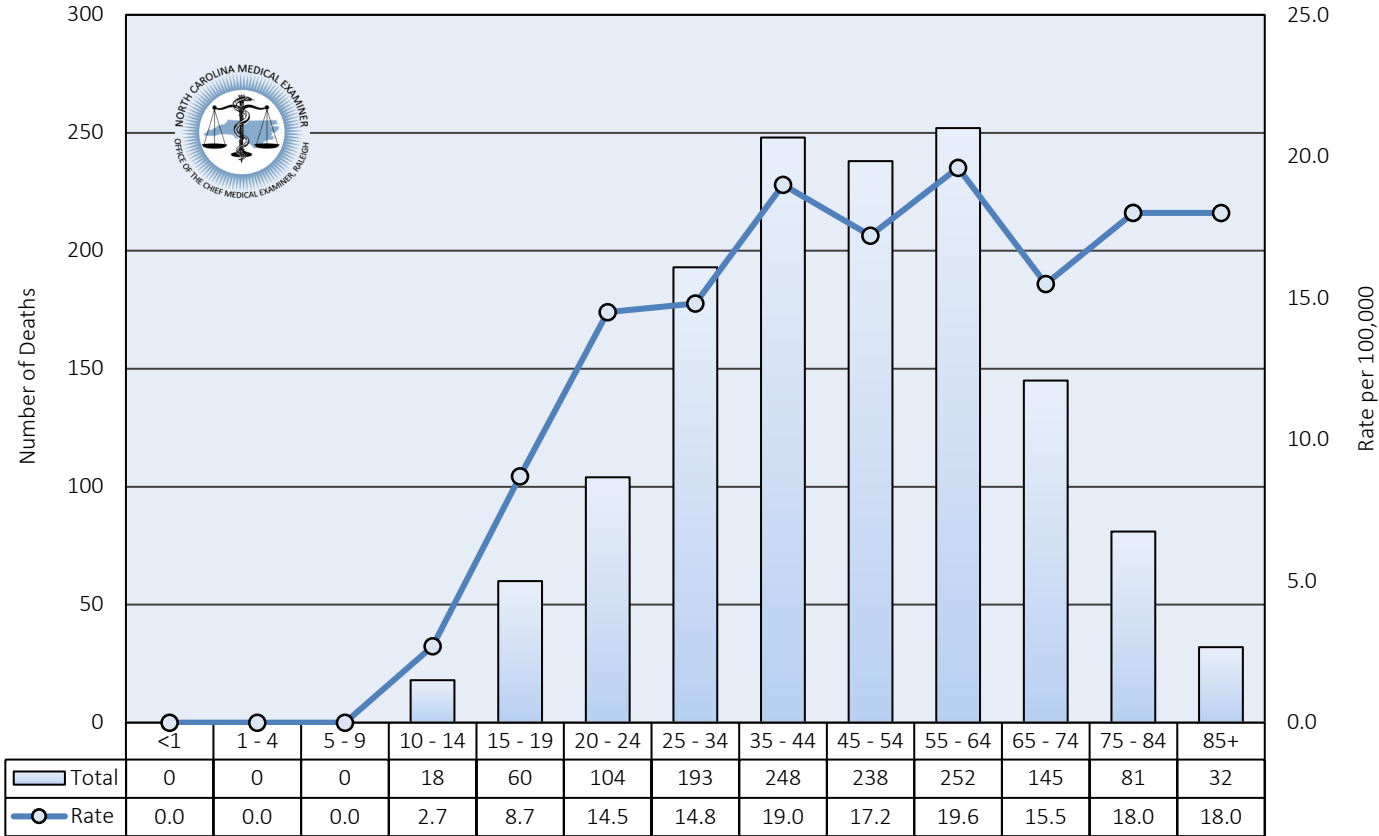


Table 72 Number and Rate of Suicide Deaths by Age Group and Gender, 2016

Age Group	Female			Male		
	Total	% Total	Rate	Total	% Total	Rate
<1	0	0.0%	0.0	0	0.0%	0.0
1-4	0	0.0%	0.0	0	0.0%	0.0
5-9	0	0.0%	0.0	0	0.0%	0.0
10-14	6	1.7%	1.9	12	1.2%	3.6
15-19	13	3.6%	3.8	47	4.7%	13.3
20-24	18	5.0%	5.2	86	8.5%	23.2
25-34	42	11.6%	6.3	151	15.0%	23.6
35-44	76	21.1%	11.3	172	17.0%	27.0
45-54	79	21.9%	11.1	159	15.7%	23.5
55-64	67	18.6%	9.9	185	18.3%	30.4
65-74	39	10.8%	7.8	106	10.5%	24.6
75-84	15	4.2%	5.8	66	6.5%	34.5
85+	6	1.7%	5.1	26	2.6%	44.3
TOTAL	361	26.3%	6.9	1010	73.7%	20.5

Figure 25 Number and Rate of Suicide Deaths by Age Group and Gender, 2016

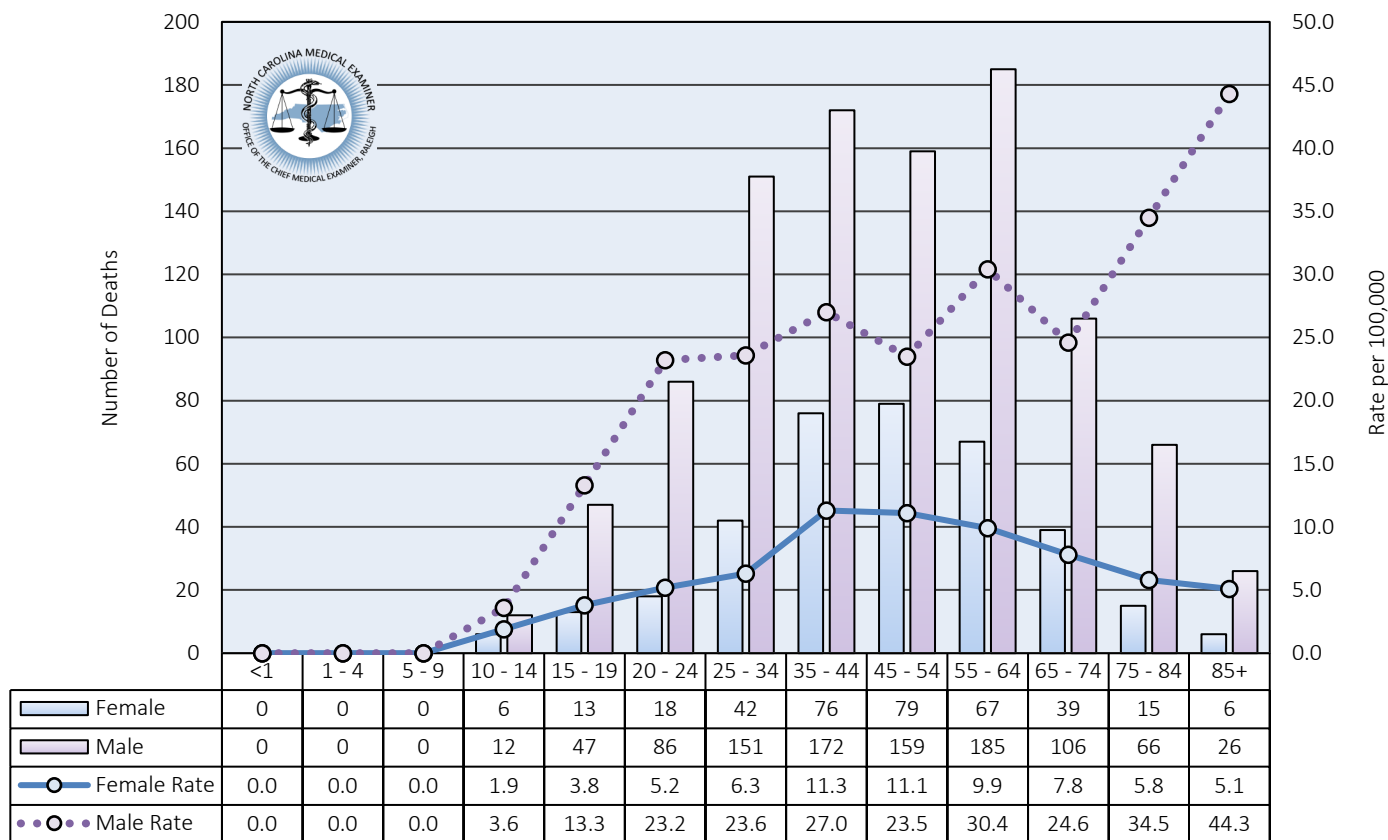
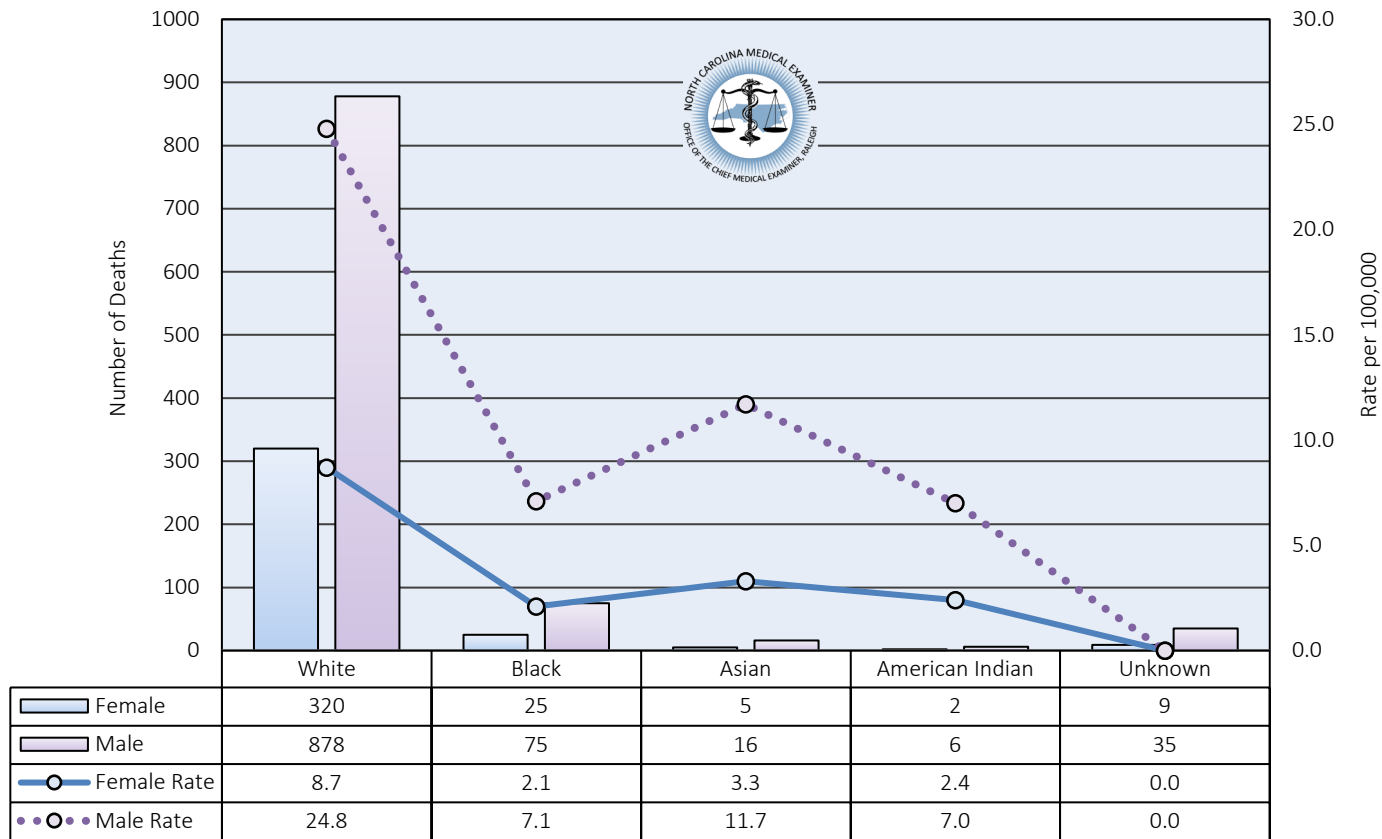


Table 73 Number and Rate of Suicide Deaths by Gender and Race, 2016

Gender	White			Black			Asian			American Indian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	320	26.7%	8.7	25	25.0%	2.1	5	23.8%	3.3	2	25.0%	2.4	9	20.5%	ND
Male	878	73.3%	24.8	75	75.0%	7.1	16	76.2%	11.7	6	75.0%	7.0	35	79.6%	ND
TOTAL	1198	87.4%	16.6	100	7.3%	4.5	21	1.5%	7.3	8	0.6%	4.7	44	3.2%	ND

Figure 26 Number and Rate of Suicide Deaths by Gender and Race, 2016



CHAPTER 6

Undetermined Deaths

SUMMARY

1.8% ($n = 215$) of deaths investigated by the medical examiner system were certified as undetermined deaths.

54.0% ($n = 116$) were male. Overall, males had the highest rate with 2.3 per 100,000.

69.3% ($n = 149$) were white. Overall, blacks had the highest rate with 2.5 per 100,000. Black males had the highest rate with 3.4 per 100,000.

47.0% ($n = 101$) were less than 1 year of age. Individuals less than 1 year of age had the highest rate with 83.8 per 100,000.

50.2% ($n = 108$) had an undetermined cause of death. 48.2% ($n = 52$) of these deaths were male, 56.5% ($n = 61$) were white, and 89.8% ($n = 97$) were less than 1 year of age.

18.6% ($n = 40$) were attributed to poisoning of undetermined intent. 52.5% ($n = 21$) of these deaths were male, 87.5% ($n = 35$) were white, and 22.5% ($n = 9$) were between 35 and 44 years of age.

Forsyth County had the highest number of undetermined deaths based on county of death ($n = 17$), but Swain County had the highest rate with 13.5 per 100,000.

Table 74 Number and Rate of Undetermined Deaths by Means of Death, 2016

Means of Death	Total	% Total	Rate
Undetermined	108	50.2%	1.1
Poisoning	40	18.6%	0.4
Other	36	16.7%	0.4
Blunt Trauma	18	8.4%	0.2
Firearms	6	2.8%	0.1
Drowning	4	1.9%	0.0
Fire/Burn Injuries	2	0.9%	0.0
Asphyxia	1	0.5%	0.0
TOTAL	215	100%	2.1

Table 75 Number of Undetermined Deaths by Means of Death, 2016

Means of Death	Total
Asphyxia	1
Belt	1
Blunt Trauma	18
Motor Vehicle	3
Pedestrian	3
Train	1
Fall	1
Other Blunt Instrument	1
Unknown Blunt Instrument	9
Drowning	4
Freshwater	3
Pool	1
Fire/Burn Injuries	2
Thermal Injuries + Inhalation of Combustion Products	2
Firearms	6
Handgun	5
Unknown Firearm	1
Poisoning	40
Prescription or Illicit Opioid Drugs	7
Non-Opioid Prescription Drugs	6
Non-Opioid Illicit Drugs	3
Over-the-Counter (OTC) Drugs	2
Carbon Monoxide	1
Multiple Categories	21
Undetermined	108
Infant	99
Skeletal/Mummified Remains	4
Decomposed Remains, Not Skeletal	5
Other	36
TOTAL	215

Table 76 Number and Rate of Undetermined Deaths by County of Death, Sorted by Highest Number

County of Death	Total	Rate
Forsyth	17	4.6
Mecklenburg	14	1.3
Buncombe	12	4.6
Guilford	11	2.1
Cumberland	9	2.7

Table 77 Number and Rate of Undetermined Deaths by County of Death, Sorted by Highest Rate

County of Death	Total	Rate
Swain	2	13.5
Macon	4	11.4
Haywood	7	11.3
Graham	1	11.3
Yadkin	3	8.0

Table 78 Number and Rate of Undetermined Deaths by County of Residence, Sorted by Highest Number

County of Residence	Total	Rate
Forsyth	16	4.3
Mecklenburg	15	1.4
Buncombe	11	4.3
Wake	8	0.8
Haywood	7	11.3

Table 79 Number and Rate of Undetermined Deaths by County of Residence, Sorted by Highest Rate

County of Residence	Total	Rate
Macon	4	11.4
Haywood	7	11.3
Madison	2	9.1
Yadkin	3	8.0
Chowan	1	6.9

Table 80 Number and Rate of Undetermined Deaths by County of Death, 2016

County of Death	Total	Rate
Alamance	2	1.3
Alexander	1	2.6
Alleghany	0	0.0
Anson	1	3.9
Ashe	0	0.0
Avery	0	0.0
Beaufort	1	2.1
Bertie	1	5.0
Bladen	1	2.9
Brunswick	1	0.8
Buncombe	12	4.6
Burke	3	3.3
Cabarrus	4	2.0
Caldwell	2	2.4
Camden	0	0.0
Carteret	2	2.9
Caswell	0	0.0
Catawba	3	1.9
Chatham	1	1.4
Cherokee	1	3.5
Chowan	0	0.0
Clay	0	0.0
Cleveland	1	1.0
Columbus	0	0.0
Craven	4	3.9
Cumberland	9	2.7
Currituck	0	0.0
Dare	1	2.7
Davidson	3	1.8
Davie	0	0.0
Duplin	1	1.7

County of Death	Total	Rate
Durham	2	0.7
Edgecombe	2	3.7
Forsyth	17	4.6
Franklin	0	0.0
Gaston	1	0.5
Gates	0	0.0
Graham	1	11.3
Granville	0	0.0
Greene	0	0.0
Guilford	11	2.1
Halifax	0	0.0
Harnett	3	2.3
Haywood	7	11.3
Henderson	1	0.9
Hertford	0	0.0
Hoke	0	0.0
Hyde	0	0.0
Iredell	4	2.3
Jackson	1	2.3
Johnston	1	0.5
Jones	0	0.0
Lee	2	3.4
Lenoir	2	3.5
Lincoln	3	3.7
Macon	4	11.4
Madison	1	4.5
Martin	1	4.2
McDowell	1	2.2
Mecklenburg	14	1.3
Mitchell	0	0.0
Montgomery	0	0.0

County of Death	Total	Rate
Moore	3	3.1
Nash	0	0.0
New Hanover	8	3.6
Northampton	0	0.0
Onslow	4	2.1
Orange	7	5.0
Pamlico	0	0.0
Pasquotank	2	5.0
Pender	3	5.0
Perquimans	0	0.0
Person	0	0.0
Pitt	7	4.0
Polk	0	0.0
Randolph	3	2.1
Richmond	0	0.0
Robeson	1	0.8
Rockingham	4	4.4
Rowan	4	2.8
Rutherford	1	1.5
Sampson	1	1.6
Scotland	1	2.8
Stanly	1	1.6
Stokes	3	6.4
Surry	3	4.1
Swain	2	13.5
Transylvania	0	0.0
Tyrrell	0	0.0
Union	4	1.8
Vance	0	0.0
Wake	8	0.8
Warren	0	0.0
Washington	0	0.0

County of Death	Total	Rate
Watauga	1	1.8
Wayne	1	0.8
Wilkes	3	4.3
Wilson	3	3.7
Yadkin	3	8.0
Yancey	0	0.0
Subtotal	215	2.1
OUT OF STATE	0	ND
Subtotal	0	ND
TOTAL	215	2.1

Table 81 Number and Rate of Undetermined Deaths by County of Residence, 2016

County of Residence	Total	Rate
Alamance	2	1.3
Alexander	1	2.6
Alleghany	0	0.0
Anson	1	3.9
Ashe	0	0.0
Avery	0	0.0
Beaufort	1	2.1
Bertie	0	0.0
Bladen	2	5.8
Brunswick	1	0.8
Buncombe	11	4.3
Burke	3	3.3
Cabarrus	4	2.0
Caldwell	2	2.4
Camden	0	0.0
Carteret	2	2.9
Caswell	0	0.0
Catawba	4	2.6
Chatham	2	2.7
Cherokee	1	3.5
Chowan	1	6.9
Clay	0	0.0
Cleveland	1	1.0
Columbus	0	0.0
Craven	5	4.8
Cumberland	6	1.8
Currituck	0	0.0
Dare	1	2.7
Davidson	4	2.4
Davie	0	0.0
Duplin	1	1.7

County of Residence	Total	Rate
Durham	2	0.7
Edgecombe	2	3.7
Forsyth	16	4.3
Franklin	0	0.0
Gaston	1	0.5
Gates	0	0.0
Graham	0	0.0
Granville	0	0.0
Greene	0	0.0
Guilford	6	1.2
Halifax	1	1.9
Harnett	3	2.3
Haywood	7	11.3
Henderson	0	0.0
Hertford	0	0.0
Hoke	0	0.0
Hyde	0	0.0
Iredell	4	2.3
Jackson	2	4.7
Johnston	2	1.1
Jones	0	0.0
Lee	2	3.4
Lenoir	3	5.2
Lincoln	2	2.4
Macon	4	11.4
Madison	2	9.1
Martin	0	0.0
McDowell	2	4.4
Mecklenburg	15	1.4
Mitchell	0	0.0
Montgomery	0	0.0

County of Residence	Total	Rate
Moore	3	3.1
Nash	2	2.1
New Hanover	5	2.2
Northampton	0	0.0
Onslow	5	2.6
Orange	3	2.1
Pamlico	0	0.0
Pasquotank	2	5.0
Pender	4	6.7
Perquimans	0	0.0
Person	1	2.5
Pitt	3	1.7
Polk	0	0.0
Randolph	6	4.2
Richmond	0	0.0
Robeson	3	2.3
Rockingham	4	4.4
Rowan	5	3.5
Rutherford	2	3.0
Sampson	2	3.1
Scotland	0	0.0
Stanly	1	1.6
Stokes	3	6.4
Surry	2	2.7
Swain	1	6.7
Transylvania	0	0.0
Tyrrell	0	0.0
Union	2	0.9
Vance	1	2.2
Wake	8	0.8
Warren	0	0.0
Washington	0	0.0

County of Residence	Total	Rate
Watauga	1	1.8
Wayne	1	0.8
Wilkes	3	4.3
Wilson	1	1.2
Yadkin	3	8.0
Yancey	0	0.0
Subtotal	209	2.1
OUT OF STATE	6	ND
Subtotal	6	ND
TOTAL	215	2.1

Table 82 Number of Undetermined Deaths by Gender, Age Group, and Race, 2016

Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Female	<1	31	17		1	5	54
	1-4	1					1
	5-9						0
	10-14						0
	15-19	2					2
	20-24	2		1			3
	25-34	7					7
	35-44	11					11
	45-54	8	2				10
	55-64	6	1				7
	65-74	1					1
	75-84	3					3
	85+						0
	<i>Subtotal</i>		72	20	1	1	5
Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Male	<1	25	22				47
	1-4	1	2				3
	5-9						0
	10-14	1					1
	15-19	1					1
	20-24	5	2				7
	25-34	7	1				8
	35-44	7	2			3	12
	45-54	8	2				10
	55-64	14	4				18
	65-74	3	1				4
	75-84	3					3
	85+	2					2
	<i>Subtotal</i>		77	36	0	0	3
TOTAL		149	56	1	1	8	215

Table 83 Number and Rate of Undetermined Deaths by Gender, 2016

Gender	Total	% Total	Rate
Female	99	46.0%	1.9
Male	116	54.0%	2.3
TOTAL	215	100%	2.1

Table 84 Number and Rate of Undetermined Deaths by Race, 2016

Race/Ethnicity	Total	% Total	Rate
White	149	69.3%	2.1
Black	56	26.0%	2.5
Unknown	8	3.7%	ND
American Indian	1	0.5%	0.6
Asian	1	0.5%	0.4
TOTAL	215	100%	2.1

Figure 27 Number and Rate of Undetermined Deaths by Race, 2016

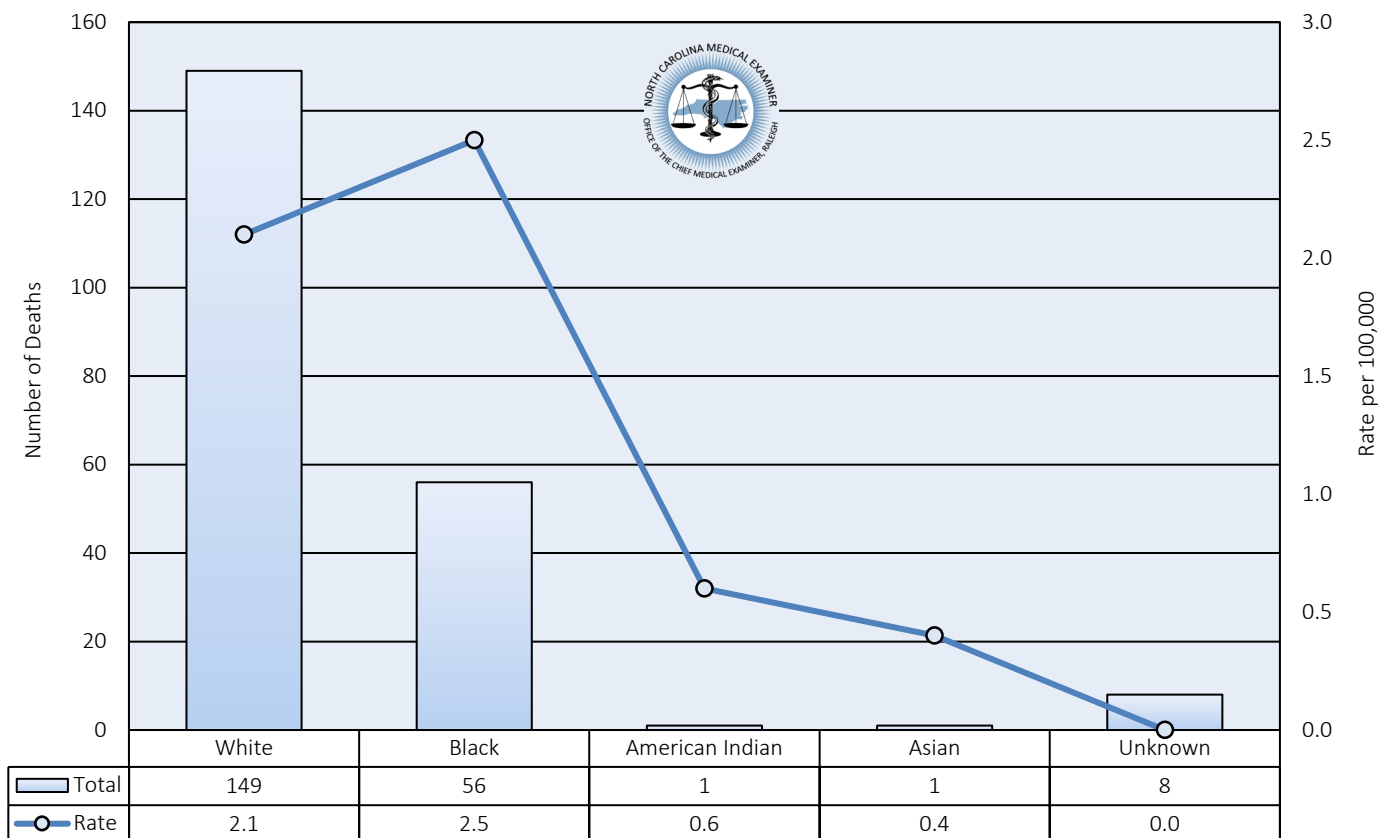


Table 85 Number and Rate of Undetermined Deaths by Age Group, 2016

Age Group	Total	% Total	Rate
<1	101	47.0%	83.8
1-4	4	1.9%	0.8
5-9	0	0.0%	0.0
10-14	1	0.5%	0.2
15-19	3	1.4%	0.4
20-24	10	4.7%	1.4
25-34	15	7.0%	1.1
35-44	23	10.7%	1.8
45-54	20	9.3%	1.4
55-64	25	11.6%	1.9
65-74	5	2.3%	0.5
75-84	6	2.8%	1.3
85+	2	0.9%	1.1
TOTAL	215	100%	2.1

Figure 28 Number and Rate of Undetermined Deaths by Age Group, 2016

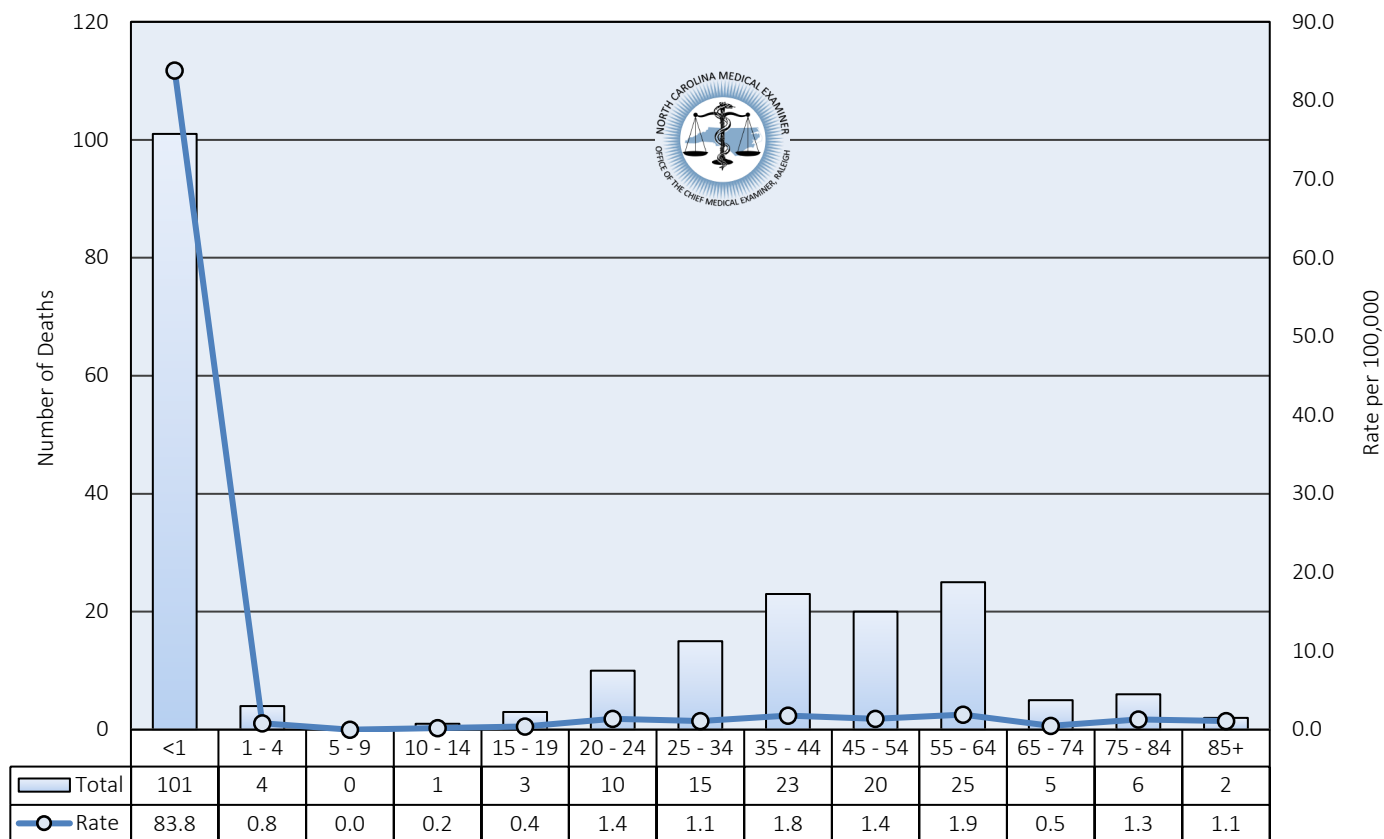


Table 86 Number and Rate of Undetermined Deaths by Age Group and Gender, 2016

Age Group	Female			Male		
	Total	% Total	Rate	Total	% Total	Rate
<1	54	54.5%	91.9	47	40.5%	76.1
1-4	1	1.0%	0.4	3	2.6%	1.2
5-9	0	0.0%	0.0	0	0.0%	0.0
10-14	0	0.0%	0.0	1	0.9%	0.3
15-19	2	2.0%	0.6	1	0.9%	0.3
20-24	3	3.0%	0.9	7	6.0%	1.9
25-34	7	7.1%	1.1	8	6.9%	1.2
35-44	11	11.1%	1.6	12	10.3%	1.9
45-54	10	10.1%	1.4	10	8.6%	1.5
55-64	7	7.1%	1.0	18	15.5%	3.0
65-74	1	1.0%	0.2	4	3.4%	0.9
75-84	3	3.0%	1.2	3	2.6%	1.6
85+	0	0.0%	0.0	2	1.7%	3.4
TOTAL	99	46.0%	1.9	116	54.0%	2.3

Figure 29 Number and Rate of Undetermined Deaths by Age Group and Gender, 2016

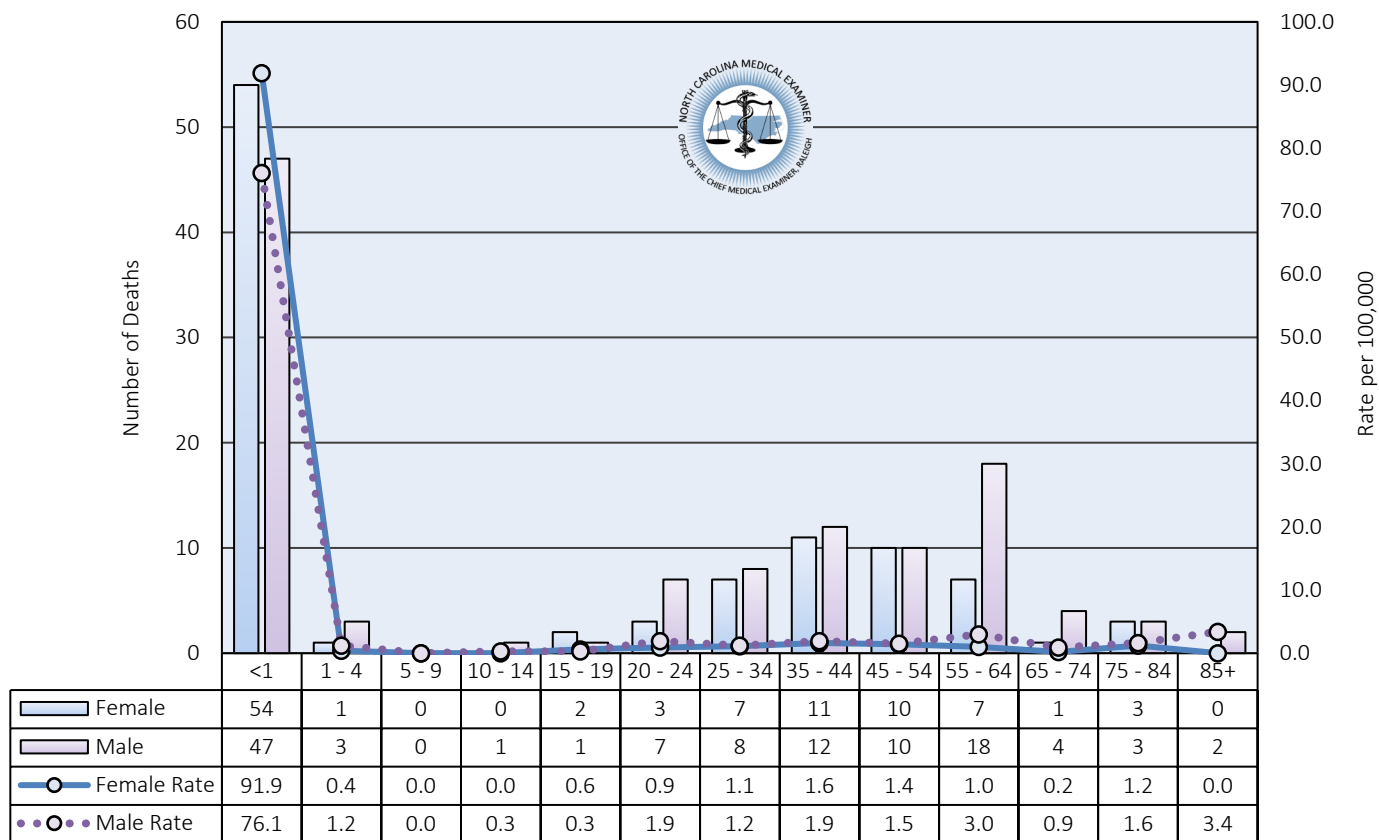
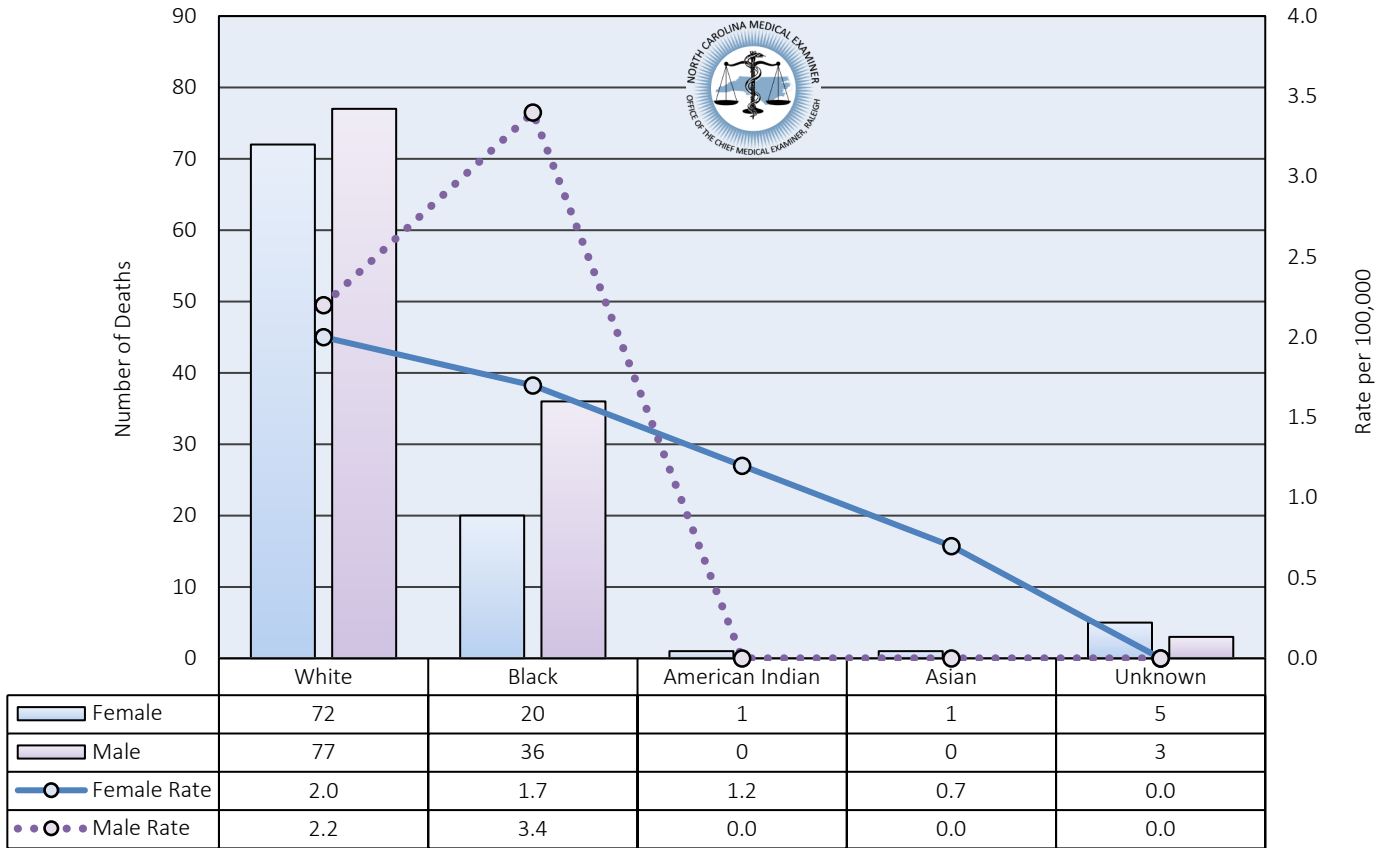


Table 87 Number and Rate of Undetermined Deaths by Gender and Race, 2016

Gender	White			Black			American Indian			Asian			Unknown		
	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate	Total	% Total	Rate
Female	72	48.3%	2.0	20	35.7%	1.7	1	100%	1.2	1	100%	0.7	5	62.5%	ND
Male	77	51.7%	2.2	36	64.3%	3.4	0	0.0%	0.0	0	0.0%	0.0	3	37.5%	ND
TOTAL	149	69.3%	2.1	56	26.0%	2.5	1	0.5%	0.6	1	0.5%	0.4	8	2.3%	ND

Figure 30 Number and Rate of Undetermined Deaths by Gender and Race, 2016



SPECIAL SECTION

Poisoning Deaths in North Carolina, 2006 – 2016

OVERVIEW

The Office of the Chief Medical Examiner (OCME) investigates all suspicious, violent, unexpected, and sudden deaths in North Carolina, including all suspected drug-related deaths. The OCME collects data from autopsy reports, death certificates, investigation reports, and toxicology reports on all deaths investigated by the medical examiner system in North Carolina. The data collected by the OCME can be used to identify trends relating to deaths in North Carolina, inform public health initiatives, and develop prevention strategies.

OCME TOXICOLOGY LABORATORY

The OCME Toxicology Laboratory is accredited by the American Board of Forensic Toxicology (ABFT) and performs toxicology testing on all drug-related deaths in North Carolina to assist the pathologist in determining cause and manner of death. The OCME Toxicology Laboratory screens for more than 600 compounds. The number of novel compounds detected during screening has risen dramatically in the last several years.

SUMMARY

There were 16,071 poisoning deaths in North Carolina from 2006 to 2016. In 2016, there were 2,136 poisoning deaths, representing an increase of 52.2% from 2006.

82.1% ($n = 13,188$) were accidental, 15.1% ($n = 2,421$) were suicides, 2.7% ($n = 437$) were undetermined, and 0.2% ($n = 25$) were homicides. In 2016, 87.6% ($n = 1,872$) were accidental, 10.5% ($n = 224$) were suicides, and 1.9% ($n = 40$) were undetermined.

60.8% ($n = 9,776$) were male, 85.5% ($n = 13,746$) were white, and 28.7% ($n = 4,613$) were between 45 and 54 years of age. In 2016, 61.5% ($n = 1,314$) were male, 84.0% ($n = 1,794$) were white, and 25.4% ($n = 543$) were between 25 and 34 years of age.

70.5% ($n = 11,331$) involved opioids. In 2016, 74.2% ($n = 1,584$) involved opioids, representing an increase of 77.3% from 2006. Of these, 61.2% ($n = 969$) were male, 88.9% ($n = 1,408$) were white, and 29.9% ($n = 473$) were between 25 and 34 years of age.

21.6% ($n = 3,473$) involved cocaine. In 2016, 27.5% ($n = 587$) involved cocaine, representing an increase of 26.1% from 2006. Of these, 68.5% ($n = 402$) were male, 67.6% ($n = 397$) were white, and 30.8% ($n = 181$) were between 25 and 34 years of age.

In 2016, the top five drugs involved in poisoning deaths were cocaine ($n = 587$), heroin ($n = 573$), fentanyl and/or fentanyl analogues ($n = 543$), oxycodone ($n = 396$), and hydrocodone ($n = 158$).^{3,4}

Mecklenburg County had the highest number of poisoning deaths based on county of death ($n = 193$) in 2016, but New Hanover and Wilkes Counties had the highest rate with 44.3 per 100,000.

³Categories are not mutually exclusive.

⁴Fentanyl analogues included: Acetyl fentanyl, Acrylfentanyl, Butyrylfentanyl, Carfentanil, Fluorofentanyl, Fluoroisobutyrylfentanyl, Furanylfentanyl.

Figure 31 Number and Rate of Poisoning Deaths in North Carolina, 2006 – 2016

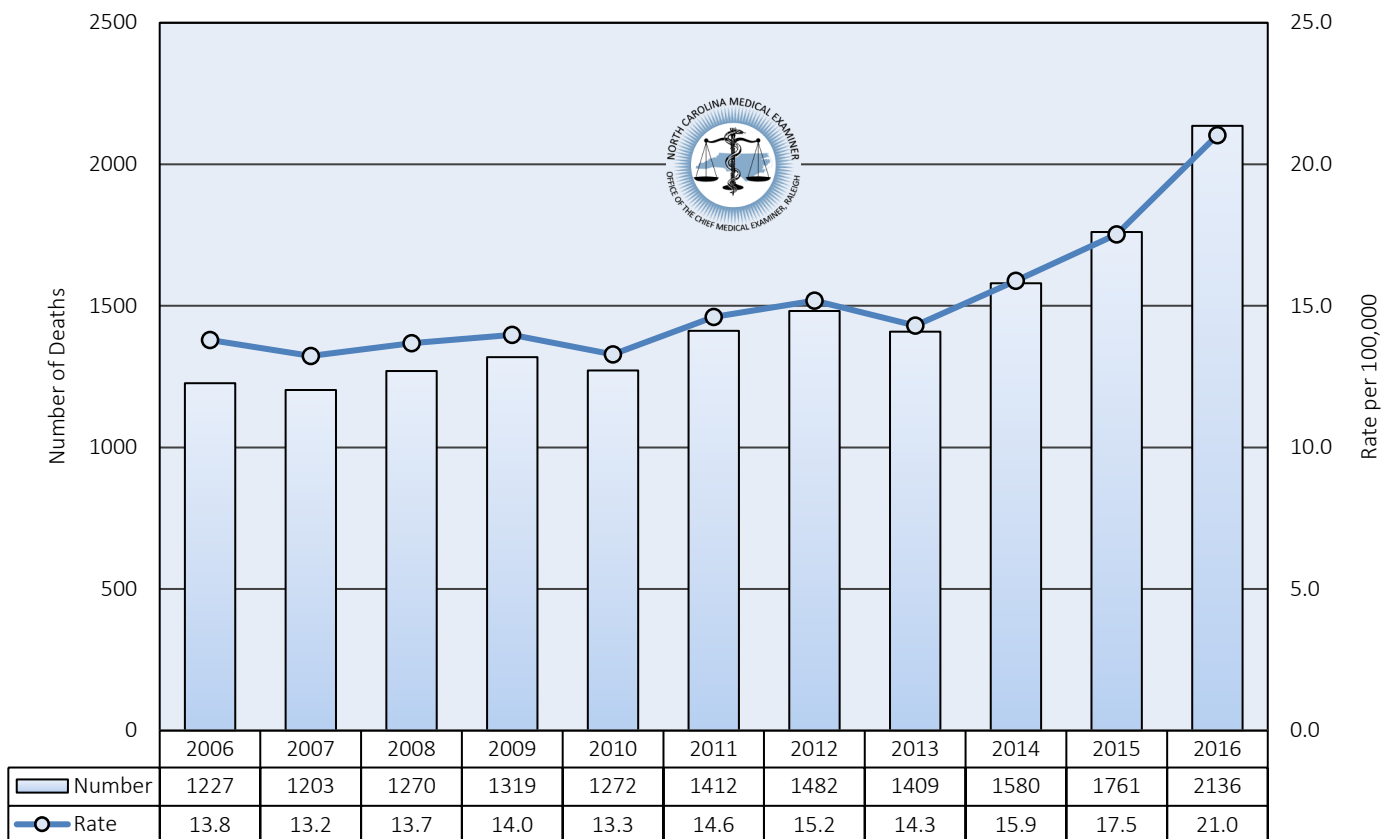


Figure 32 Poisoning Deaths in North Carolina by Manner of Death, 2006 – 2016

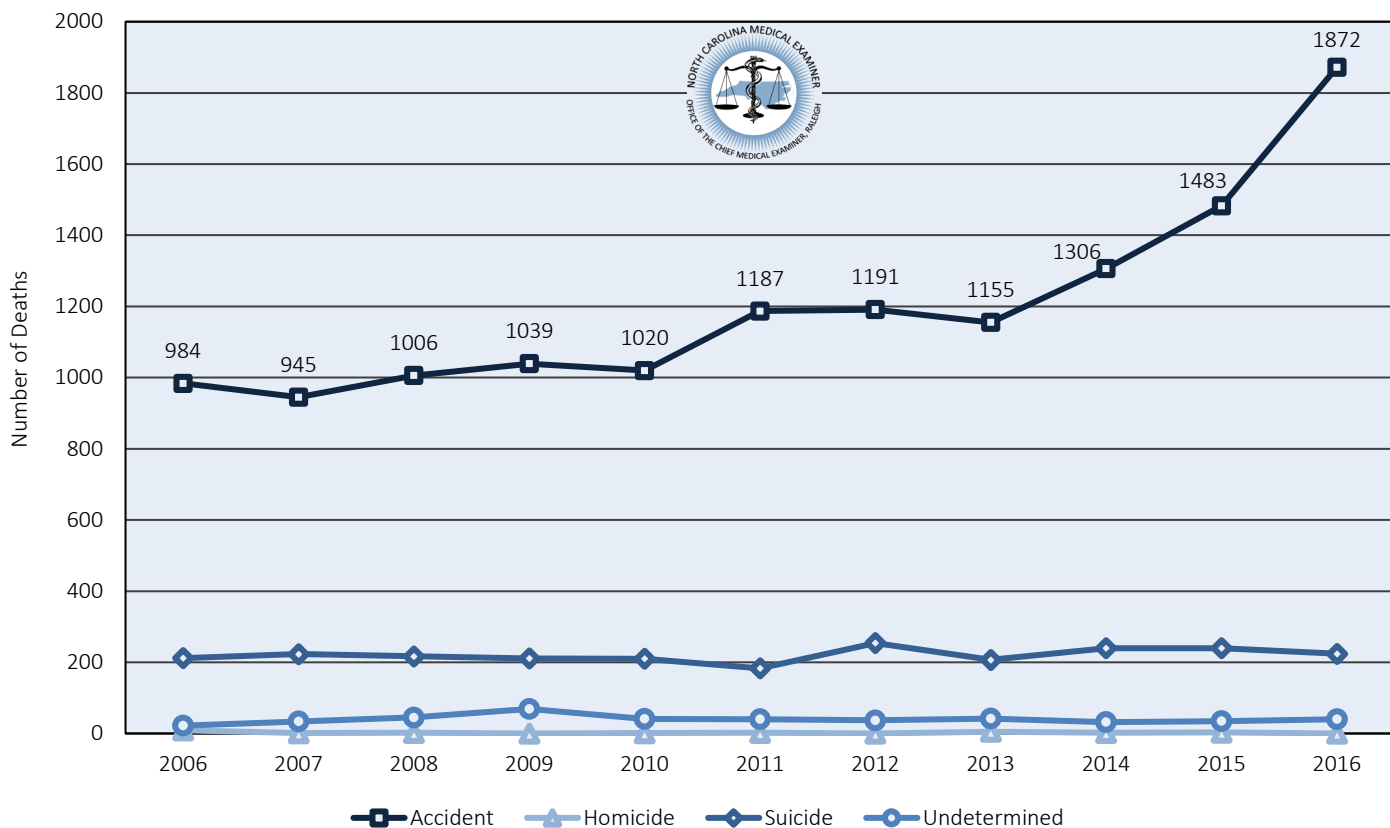


Table 88 Number of Poisoning Deaths in North Carolina by County of Death, 2006 – 2016

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Alamance	14	14	23	21	12	24	25	22	21	18	21	215
Alexander	7	4	5	10	7	5	4	10	9	7	7	75
Alleghany	2	1	1	2	3	1	2	0	2	4	4	22
Anson	6	3	6	3	3	3	2	0	3	4	2	35
Ashe	4	4	8	7	6	4	5	7	3	7	5	60
Avery	7	5	1	6	1	3	5	3	1	6	5	43
Beaufort	6	3	5	7	7	6	8	10	10	10	12	84
Bertie	0	0	1	1	2	0	1	2	0	2	6	15
Bladen	5	5	4	6	4	4	8	5	13	9	4	67
Brunswick	30	14	16	24	21	29	33	32	27	27	38	291
Buncombe	30	41	29	25	42	41	46	41	58	53	77	483
Burke	24	29	24	21	19	16	27	30	24	34	27	275
Cabarrus	23	19	28	33	26	23	24	34	28	35	51	324
Caldwell	17	16	18	22	13	11	18	10	15	33	22	195
Camden	3	2	1	1	1	1	1	0	0	5	2	17
Carteret	6	10	15	21	10	22	18	16	21	17	23	179
Caswell	1	1	2	2	4	3	4	1	1	1	3	23
Catawba	26	34	28	32	25	31	31	25	27	34	41	334
Chatham	6	3	3	3	5	6	6	6	9	2	5	54
Cherokee	6	11	10	9	11	15	6	6	6	4	4	88
Chowan	2	1	3	1	2	1	1	4	1	2	3	21
Clay	1	4	3	1	4	0	2	4	1	0	3	23

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Cleveland	17	14	21	18	19	15	18	15	16	26	22	201
Columbus	5	13	7	17	14	10	8	11	13	10	21	129
Craven	15	10	14	9	15	12	16	17	23	36	42	209
Cumberland	41	32	35	35	42	53	48	49	55	59	70	519
Currituck	5	2	4	1	2	4	7	0	1	10	6	42
Dare	4	6	4	7	5	13	7	4	17	8	6	81
Davidson	32	26	28	25	22	29	30	36	28	31	33	320
Davie	5	5	7	6	3	6	5	5	5	5	15	67
Duplin	7	3	3	5	1	3	6	4	8	5	3	48
Durham	34	30	35	29	34	37	34	34	44	36	48	395
Edgecombe	5	2	3	4	5	4	7	6	9	10	8	63
Forsyth	52	42	60	59	44	63	67	45	75	88	112	707
Franklin	6	5	6	8	6	8	11	6	6	9	8	79
Gaston	42	50	37	56	48	43	51	46	49	53	61	536
Gates	0	0	0	1	2	1	0	0	1	0	4	9
Graham	0	1	2	1	7	2	4	3	2	2	2	26
Granville	3	6	5	7	3	8	7	7	6	4	9	65
Greene	0	1	0	0	0	2	3	1	2	2	3	14
Guilford	53	57	45	57	54	68	75	49	68	77	118	721
Halifax	6	0	4	4	4	7	4	9	8	14	7	67
Harnett	11	12	13	10	17	11	20	16	15	17	16	158
Haywood	9	10	11	14	12	8	17	18	10	15	19	143
Henderson	19	15	17	14	24	16	14	27	22	26	19	213

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Hertford	2	5	4	0	1	1	4	2	3	1	3	26
Hoke	5	1	1	0	1	6	2	5	7	3	5	36
Hyde	1	1	0	0	0	0	1	1	0	0	2	6
Iredell	21	29	21	39	22	35	24	32	26	24	33	306
Jackson	12	6	9	5	7	7	5	6	8	6	12	83
Johnston	10	7	8	16	28	17	15	14	18	25	20	178
Jones	0	0	1	2	2	1	1	0	1	4	4	16
Lee	9	7	5	9	10	14	11	9	6	10	12	102
Lenoir	5	5	4	6	10	11	2	5	9	9	7	73
Lincoln	13	13	13	15	7	16	17	17	12	11	20	154
Macon	12	8	5	8	4	7	5	8	4	5	11	77
Madison	1	7	3	2	2	2	2	1	1	4	0	25
Martin	2	4	4	5	4	4	6	2	3	5	3	42
McDowell	7	19	12	5	7	8	11	5	8	10	18	110
Mecklenburg	96	90	96	94	98	120	116	97	139	152	193	1291
Mitchell	9	6	6	3	6	3	3	2	2	7	5	52
Montgomery	4	0	3	1	3	0	3	3	2	3	1	23
Moore	12	9	9	13	11	9	19	12	14	12	16	136
Nash	11	12	7	7	10	13	19	14	15	13	21	142
New Hanover	35	38	51	51	40	51	50	54	55	72	99	596
Northampton	0	0	0	4	0	1	0	1	0	3	3	12
Onslow	19	17	14	21	19	27	28	23	22	14	32	236
Orange	14	21	17	16	15	25	24	13	12	19	22	198

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Pamlico	2	1	2	2	1	2	1	0	3	2	5	21
Pasquotank	6	5	7	5	5	5	3	6	4	6	7	59
Pender	6	5	9	6	8	2	8	7	5	19	20	95
Perquimans	0	0	2	0	1	2	1	1	2	0	1	10
Person	4	8	6	3	4	7	6	7	3	5	2	55
Pitt	19	9	22	26	25	20	25	30	37	39	48	300
Polk	3	4	3	4	6	3	9	0	1	3	2	38
Randolph	16	21	20	18	19	24	18	20	22	34	27	239
Richmond	7	8	12	10	9	10	8	9	9	14	12	108
Robeson	11	7	11	16	12	17	26	19	21	18	23	181
Rockingham	16	23	23	14	18	16	17	15	9	18	25	194
Rowan	34	18	34	29	32	35	34	31	32	35	43	357
Rutherford	14	18	24	20	11	18	11	16	17	22	21	192
Sampson	8	13	14	8	8	9	7	8	19	6	8	108
Scotland	6	6	7	2	6	4	10	5	8	9	5	68
Stanly	9	13	5	14	15	8	9	11	6	11	10	111
Stokes	8	3	11	4	5	14	4	8	5	10	15	87
Surry	13	10	14	14	19	16	11	13	23	15	16	164
Swain	7	4	7	5	14	6	3	0	2	2	5	55
Transylvania	4	8	6	8	4	9	12	9	5	6	11	82
Tyrrell	0	0	0	0	0	1	1	0	0	2	1	5
Union	16	8	17	14	13	7	8	16	22	21	20	162
Vance	6	8	7	7	5	4	13	8	6	10	9	83

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Wake	59	64	67	52	59	64	75	101	114	114	161	930
Warren	1	0	0	1	1	0	1	2	0	1	0	7
Washington	1	2	0	1	1	0	0	0	2	1	2	10
Watauga	6	11	7	12	2	8	7	12	11	9	4	89
Wayne	5	18	9	9	13	21	10	13	13	15	21	147
Wilkes	19	22	23	29	21	11	20	20	28	26	31	250
Wilson	10	7	5	3	6	7	5	6	8	11	12	80
Yadkin	6	7	6	9	6	6	9	9	9	3	6	76
Yancey	7	1	2	4	5	5	5	4	3	5	2	43
Subtotal	1226	1203	1270	1316	1272	1411	1481	1408	1579	1761	2134	16061
OUT OF STATE	1	0	0	3	0	1	1	1	1	0	2	10
Subtotal	1	0	0	3	0	1	1	1	1	0	2	10
TOTAL	1227	1203	1270	1319	1272	1412	1482	1409	1580	1761	2136	16071

Table 89 Rate of Poisoning Deaths in North Carolina by County of Death, 2006 – 2016⁵

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alamance	10.0	9.8	15.7	14.1	7.9	15.8	16.3	14.3	13.5	11.4	13.2
Alexander	19.4	11.0	13.6	27.0	18.8	13.3	10.7	26.7	23.7	18.5	18.3
Alleghany	18.4	9.1	9.1	18.0	26.9	9.0	18.2	0.0	18.0	35.8	35.7
Anson	22.8	11.3	22.4	11.2	11.2	11.6	7.5	0.0	11.4	15.3	7.8
Ashe	15.4	15.2	29.9	25.9	22.1	14.6	18.3	25.6	10.9	25.7	18.3
Avery	39.1	27.9	5.6	33.6	5.6	16.7	28.1	16.8	5.6	33.7	27.6
Beaufort	13.1	6.5	10.7	14.8	14.6	12.5	16.7	20.9	20.9	20.9	25.2
Bertie	0.0	0.0	4.7	4.7	9.4	0.0	4.8	9.7	0.0	9.7	30.2
Bladen	14.5	14.4	11.4	17.1	11.4	11.4	22.7	14.2	37.0	25.7	11.5
Brunswick	32.0	14.2	15.6	22.8	19.4	26.3	29.3	27.7	22.6	21.9	29.7
Buncombe	13.3	17.9	12.5	10.6	17.6	16.8	18.8	16.5	23.1	20.8	29.8
Burke	27.1	32.6	26.7	23.2	21.0	17.7	30.1	33.6	27.0	38.2	30.1
Cabarrus	14.6	11.5	16.4	18.9	14.6	12.7	13.1	18.2	14.7	17.9	25.4
Caldwell	21.1	19.8	22.0	26.7	15.7	13.3	21.8	12.1	18.2	40.0	26.6
Camden	32.1	20.9	10.2	10.1	10.0	9.9	10.0	0.0	0.0	49.0	19.4
Carteret	9.4	15.6	23.2	31.9	15.0	32.5	26.3	23.1	30.2	24.4	32.9
Caswell	4.2	4.2	8.5	8.4	16.9	12.5	16.9	4.2	4.2	4.2	12.7
Catawba	17.5	22.6	18.4	20.8	16.2	20.0	19.9	16.1	17.3	21.8	26.2
Chatham	10.4	5.1	4.9	4.8	7.8	9.1	9.0	8.9	13.0	2.8	6.8
Cherokee	22.4	40.7	36.8	33.1	40.1	54.5	21.9	21.9	21.8	14.4	14.0
Chowan	13.5	6.7	20.0	6.7	13.6	6.8	6.8	27.0	6.8	13.8	20.8

⁵ Counties with highest rates of poisoning death based on county of death are in bold.

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Clay	10.0	39.2	29.1	9.5	37.8	0.0	18.6	36.8	9.2	0.0	26.5
Cleveland	17.8	14.6	21.7	18.4	19.4	15.3	18.4	15.4	16.4	26.6	22.4
Columbus	9.0	23.2	12.4	29.5	24.2	17.2	13.8	19.0	22.6	17.5	36.7
Craven	15.4	10.2	14.1	8.8	14.4	11.5	15.2	16.3	22.0	34.7	40.5
Cumberland	13.4	10.4	11.2	11.0	12.8	16.0	14.5	14.8	16.7	17.9	21.2
Currituck	21.6	8.5	17.0	4.3	8.5	16.7	29.0	0.0	4.0	39.1	23.0
Dare	11.6	17.5	11.7	20.6	14.7	38.0	20.1	11.4	47.8	22.3	16.5
Davidson	20.6	16.6	17.5	15.5	13.5	17.7	18.4	22.0	17.0	18.8	19.9
Davie	12.8	12.6	17.4	14.7	7.3	14.5	12.1	12.1	12.1	12.0	35.5
Duplin	12.7	5.4	5.3	8.7	1.7	5.1	10.0	6.7	13.4	8.4	5.0
Durham	13.8	11.9	13.5	11.0	12.5	13.4	12.1	11.9	15.1	12.1	15.9
Edgecombe	9.0	3.6	5.4	7.1	8.8	7.1	12.5	10.8	16.2	18.4	15.0
Forsyth	15.7	12.5	17.5	17.0	12.5	17.8	18.7	12.5	20.6	24.1	30.3
Franklin	10.8	8.8	10.3	13.4	9.9	13.0	17.8	9.6	9.5	14.0	12.2
Gaston	21.5	25.1	18.2	27.3	23.3	20.7	24.5	22.0	23.3	24.9	28.3
Gates	0.0	0.0	0.0	8.2	16.4	8.2	0.0	0.0	8.4	0.0	33.6
Graham	0.0	11.7	23.2	11.4	78.9	22.4	45.2	33.8	22.6	22.8	22.6
Granville	5.4	10.4	8.5	11.8	5.2	13.8	12.1	12.1	10.3	6.8	15.1
Greene	0.0	4.8	0.0	0.0	0.0	9.3	14.0	4.7	9.4	9.5	14.0
Guilford	11.7	12.3	9.5	11.8	11.0	13.7	14.9	9.7	13.3	14.9	22.7
Halifax	10.8	0.0	7.3	7.3	7.3	12.9	7.4	16.8	15.1	26.7	13.4
Harnett	10.7	11.4	12.0	8.9	14.7	9.3	16.5	13.0	11.9	13.4	12.4
Haywood	15.8	17.3	19.0	23.9	20.4	13.4	28.7	30.2	16.7	24.7	30.8

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Henderson	19.0	14.7	16.3	13.3	22.5	14.8	13.0	24.7	19.8	23.2	16.6
Hertford	8.4	20.9	16.6	0.0	4.0	4.1	16.3	8.1	12.2	4.1	12.5
Hoke	12.0	2.3	2.2	0.0	2.1	12.2	4.0	9.9	13.8	5.8	9.6
Hyde	17.3	17.3	0.0	0.0	0.0	0.0	17.4	17.2	0.0	0.0	35.6
Iredell	14.4	19.2	13.6	24.8	13.8	21.7	14.7	19.4	15.5	14.1	19.0
Jackson	31.7	15.7	23.3	12.7	17.3	17.3	12.3	14.7	19.4	14.4	28.2
Johnston	6.7	4.5	5.0	9.7	16.5	9.8	8.6	7.9	10.0	13.6	10.6
Jones	0.0	0.0	9.9	19.7	19.9	9.5	9.4	0.0	9.6	38.4	38.6
Lee	16.5	12.7	8.8	15.7	17.3	24.1	18.7	15.2	10.2	17.0	20.3
Lenoir	8.4	8.4	6.7	10.1	16.8	18.5	3.4	8.5	15.3	15.4	12.2
Lincoln	18.1	17.7	17.2	19.5	9.0	20.4	21.6	21.4	15.0	13.6	24.4
Macon	27.5	18.1	11.2	17.8	8.9	15.5	11.0	17.7	8.8	11.0	31.4
Madison	3.1	21.1	8.9	5.9	5.9	5.8	5.9	2.9	2.9	11.5	0.0
Martin	9.9	19.8	19.5	24.2	19.2	18.9	28.3	9.4	13.9	23.1	12.7
McDowell	28.4	77.9	49.0	20.4	28.6	33.1	45.9	21.1	33.8	42.1	39.6
Mecklenburg	11.5	10.3	10.8	10.4	10.6	12.8	12.1	9.8	13.7	14.7	18.3
Mitchell	57.8	38.7	38.5	19.2	38.6	19.4	19.5	13.0	13.0	45.8	32.8
Montgomery	14.7	0.0	10.8	3.6	10.7	0.0	10.8	10.8	7.2	10.8	3.6
Moore	14.6	10.7	10.5	14.9	12.4	10.1	20.9	13.1	15.0	12.7	16.6
Nash	12.1	13.0	7.5	7.4	10.4	13.6	19.9	14.8	15.9	13.8	22.2
New Hanover	18.4	19.6	25.8	25.5	19.7	24.7	23.8	25.3	25.3	32.7	44.3
Northampton	0.0	0.0	0.0	18.1	0.0	4.6	0.0	4.7	0.0	14.2	14.4
Onslow	11.5	10.1	8.0	11.5	10.2	14.5	14.6	11.9	11.4	7.2	16.5

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Orange	11.2	16.5	13.1	12.1	11.2	18.6	17.4	9.3	8.6	13.6	15.6
Pamlico	15.3	7.7	15.3	15.2	7.6	15.0	7.6	0.0	22.8	15.2	37.5
Pasquotank	15.3	12.5	17.3	12.3	12.3	12.4	7.5	15.2	10.1	15.1	17.4
Pender	12.7	10.2	18.0	11.7	15.3	3.7	14.8	12.6	8.8	32.8	33.6
Perquimans	0.0	0.0	15.1	0.0	7.4	14.8	7.3	7.3	14.7	0.0	7.4
Person	10.6	21.0	15.7	7.7	10.1	17.7	15.3	17.9	7.6	12.7	5.0
Pitt	12.6	5.8	13.7	15.8	14.8	11.8	14.5	17.3	21.2	22.2	27.3
Polk	15.3	20.2	15.0	19.7	29.3	14.6	44.3	0.0	4.8	14.4	9.5
Randolph	11.7	15.3	14.4	12.8	13.4	16.8	12.6	14.1	15.4	23.8	18.8
Richmond	15.2	17.2	25.7	21.4	19.3	21.5	17.3	19.6	19.8	30.9	26.7
Robeson	8.5	5.4	8.4	12.0	8.9	12.7	19.4	14.2	15.7	13.5	17.3
Rockingham	17.4	24.9	24.8	15.0	19.2	17.1	18.3	16.3	9.7	19.6	27.2
Rowan	25.7	13.4	24.9	21.1	23.1	25.3	24.6	22.4	23.0	25.0	30.5
Rutherford	21.5	27.5	36.0	29.8	16.2	26.4	16.2	23.6	25.2	32.5	31.0
Sampson	12.9	20.8	22.2	12.6	12.6	14.1	10.9	12.5	29.6	9.4	12.6
Scotland	16.6	16.5	19.2	5.5	16.6	11.0	27.5	13.8	22.2	25.1	14.0
Stanly	15.3	22.0	8.3	23.3	24.8	13.2	14.9	18.2	9.8	18.0	16.2
Stokes	17.2	6.5	23.5	8.5	10.6	29.5	8.5	17.1	10.7	21.4	32.1
Surry	18.0	13.8	19.2	19.1	25.8	21.8	14.9	17.8	31.2	20.5	22.0
Swain	50.2	29.0	50.5	36.1	100.0	42.2	20.7	0.0	13.5	13.4	33.7
Transylvania	12.7	25.0	18.5	24.4	12.1	27.1	36.4	27.2	15.0	17.8	32.2
Tyrrell	0.0	0.0	0.0	0.0	0.0	23.0	24.1	0.0	0.0	47.5	24.2
Union	9.3	4.4	8.8	7.1	6.4	3.4	3.9	7.6	10.2	9.6	8.9

County of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Vance	13.4	17.9	15.5	15.5	11.0	8.8	28.6	17.8	13.4	22.2	20.0
Wake	7.5	7.8	7.8	5.9	6.5	6.9	7.9	10.5	11.6	11.3	15.7
Warren	4.9	0.0	0.0	4.8	4.8	0.0	4.8	9.8	0.0	4.9	0.0
Washington	7.5	15.0	0.0	7.6	7.6	0.0	0.0	0.0	15.8	8.0	16.1
Watauga	12.8	22.8	14.1	23.9	3.9	15.4	13.3	22.8	20.8	16.8	7.3
Wayne	4.2	15.2	7.5	7.4	10.6	17.0	8.0	10.4	10.4	12.0	16.8
Wilkes	28.2	32.3	33.4	42.0	30.3	15.8	28.7	28.7	40.1	37.3	44.3
Wilson	12.9	8.9	6.3	3.7	7.4	8.6	6.1	7.4	9.8	13.5	14.7
Yadkin	16.0	18.5	15.7	23.5	15.6	15.6	23.5	23.6	23.8	8.0	15.9
Yancey	39.4	5.6	11.1	22.4	28.1	27.7	28.0	22.3	16.7	27.9	11.0
TOTAL	13.8	13.2	13.7	14.0	13.3	14.6	15.2	14.3	15.9	17.5	21.0

Table 90 Number of Poisoning Deaths in North Carolina by County of Residence, 2006 – 2016

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Alamance	15	15	26	21	13	23	25	22	24	20	21	225
Alexander	9	9	7	13	9	9	4	12	9	14	7	102
Alleghany	1	1	2	2	3	2	3	1	3	4	4	26
Anson	7	3	7	3	3	1	2	0	3	3	3	35
Ashe	4	5	8	5	6	4	5	8	4	5	5	59
Avery	8	6	1	5	1	2	5	3	1	5	5	42
Beaufort	5	3	4	6	8	6	10	13	10	11	14	90
Bertie	0	0	1	1	3	0	1	2	0	3	7	18
Bladen	6	4	4	5	4	4	7	6	10	9	5	64
Brunswick	24	12	19	27	22	28	33	35	30	28	39	297
Buncombe	24	36	27	20	29	35	35	29	43	43	60	381
Burke	25	29	26	24	21	18	30	29	28	37	27	294
Cabarrus	24	19	26	25	24	19	26	34	28	33	43	301
Caldwell	19	16	20	23	16	15	15	10	15	30	26	205
Camden	3	4	1	1	1	1	1	0	0	5	2	19
Carteret	7	10	13	20	12	22	18	14	21	19	24	180
Caswell	2	2	3	1	3	3	4	0	1	2	5	26
Catawba	22	34	27	34	23	32	32	23	32	30	44	333
Chatham	6	6	5	6	4	7	7	4	11	2	4	62
Cherokee	5	11	9	6	13	15	4	6	6	4	4	83
Chowan	2	0	3	1	0	0	0	5	1	3	3	18
Clay	1	5	3	2	4	0	2	4	1	0	3	25

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Cleveland	18	13	23	19	20	15	19	15	21	28	19	210
Columbus	5	12	9	18	16	13	10	11	13	10	21	138
Craven	15	10	16	11	15	11	13	17	20	34	41	203
Cumberland	35	30	35	37	42	50	51	43	49	58	66	496
Currituck	3	2	4	2	5	4	7	0	3	8	5	43
Dare	5	6	2	6	7	12	7	4	13	8	5	75
Davidson	31	25	31	28	23	37	34	37	35	34	42	357
Davie	7	6	7	5	4	6	6	4	7	4	20	76
Duplin	5	4	3	4	1	4	6	4	8	9	3	51
Durham	24	26	28	22	30	36	26	26	35	35	34	322
Edgecombe	5	3	6	4	6	6	11	10	12	9	12	84
Forsyth	48	40	48	48	33	52	54	44	58	67	79	571
Franklin	7	6	9	10	6	5	9	11	7	9	12	91
Gaston	43	51	40	60	48	44	52	46	46	46	66	542
Gates	0	0	0	1	1	1	2	0	1	1	4	11
Graham	0	1	2	1	6	2	5	3	2	2	1	25
Granville	5	5	5	9	3	7	9	10	9	6	12	80
Greene	2	1	0	2	1	3	2	1	3	2	4	21
Guilford	49	51	40	49	47	57	64	45	62	72	106	642
Halifax	5	0	4	5	4	5	6	8	7	13	10	67
Harnett	11	13	14	10	17	11	19	15	18	21	20	169
Haywood	9	9	12	12	12	6	18	19	11	15	18	141
Henderson	19	14	17	14	23	20	14	28	21	26	18	214

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Hertford	1	4	2	0	1	0	3	2	2	1	3	19
Hoke	6	2	2	3	4	9	2	5	7	4	5	49
Hyde	1	1	0	0	0	0	1	0	0	0	1	4
Iredell	17	28	18	33	21	34	22	26	25	23	34	281
Jackson	11	6	9	11	8	9	8	8	7	5	15	97
Johnston	8	12	11	18	30	20	21	21	18	31	23	213
Jones	0	0	1	2	2	1	1	0	1	4	4	16
Lee	7	9	5	10	9	14	11	8	7	11	8	99
Lenoir	6	5	4	6	10	14	2	7	10	14	7	85
Lincoln	15	15	15	17	8	15	18	20	13	13	22	171
Macon	14	7	4	7	3	7	5	5	5	6	10	73
Madison	0	8	1	1	3	2	2	1	4	8	1	31
Martin	2	4	5	6	4	4	6	3	4	5	4	47
McDowell	7	18	12	5	7	9	9	5	7	10	20	109
Mecklenburg	75	73	74	66	82	95	91	68	108	116	160	1008
Mitchell	8	3	5	3	5	2	5	2	2	7	4	46
Montgomery	5	0	3	3	5	0	4	4	2	3	2	31
Moore	12	8	10	14	10	9	16	8	12	15	17	131
Nash	10	12	5	4	7	12	17	13	12	16	27	135
New Hanover	33	31	41	44	34	44	45	40	49	55	81	497
Northampton	0	0	2	4	0	2	0	2	2	3	3	18
Onslow	19	17	14	23	19	23	26	20	25	18	40	244
Orange	8	17	10	14	11	13	17	9	8	12	18	137

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Pamlico	2	0	2	2	1	3	2	1	3	4	3	23
Pasquotank	6	3	7	5	3	5	3	5	3	4	6	50
Pender	7	7	10	5	10	5	8	8	6	18	20	104
Perquimans	0	1	2	1	0	2	1	1	2	1	1	12
Person	5	8	6	3	4	7	4	4	4	7	3	55
Pitt	16	8	21	22	24	11	22	18	30	20	33	225
Polk	3	5	4	3	5	3	9	1	1	4	3	41
Randolph	18	25	20	25	23	29	23	27	21	42	39	292
Richmond	8	8	12	14	9	13	11	12	12	13	10	122
Robeson	11	9	13	13	15	22	32	22	27	18	23	205
Rockingham	17	21	22	14	17	16	18	15	9	16	25	190
Rowan	32	20	33	33	33	37	34	34	34	37	49	376
Rutherford	13	19	22	18	12	16	9	16	17	21	19	182
Sampson	9	14	15	9	8	12	7	8	22	10	12	126
Scotland	5	5	7	2	3	2	8	5	6	9	6	58
Stanly	9	16	6	13	20	10	11	12	7	17	10	131
Stokes	11	5	13	5	5	15	4	9	7	14	20	108
Surry	14	10	12	15	19	16	17	13	21	14	16	167
Swain	7	4	5	2	13	2	3	1	2	2	2	43
Transylvania	4	8	6	8	4	9	10	10	7	6	8	80
Tyrrell	0	1	0	0	0	1	1	0	0	2	2	7
Union	22	4	19	17	13	9	12	23	25	27	25	196
Vance	6	8	7	6	4	4	12	7	6	8	8	76

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Wake	63	64	66	48	62	66	68	86	104	101	143	871
Warren	2	0	1	2	2	1	1	2	1	1	3	16
Washington	0	1	0	1	1	1	0	2	3	1	3	13
Watauga	5	9	6	10	3	7	8	7	7	7	6	75
Wayne	6	14	11	9	15	19	10	13	12	15	20	144
Wilkes	21	22	26	32	19	11	19	22	32	28	32	264
Wilson	9	5	4	3	2	8	5	10	9	12	14	81
Yadkin	8	6	7	7	7	8	9	8	12	6	6	84
Yancey	7	4	3	4	6	6	6	4	7	6	3	56
Subtotal	1181	1172	1238	1273	1237	1367	1432	1344	1531	1698	2055	15528
OUT OF STATE	46	31	32	46	35	45	50	65	49	63	81	543
Subtotal	46	31	32	46	35	45	50	65	49	63	81	543
TOTAL	1227	1203	1270	1319	1272	1412	1482	1409	1580	1761	2136	16071

Table 91 Rate of Poisoning Deaths in North Carolina by County of Residence, 2006 – 2016⁶

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alamance	10.7	10.5	17.7	14.1	8.6	15.1	16.3	14.3	15.4	12.7	13.2
Alexander	25.0	24.7	19.1	35.1	24.2	24.0	10.7	32.1	23.7	36.9	18.3
Alleghany	9.2	9.1	18.1	18.0	26.9	18.1	27.3	9.0	26.9	35.8	35.7
Anson	26.5	11.3	26.1	11.2	11.2	3.9	7.5	0.0	11.4	11.5	11.7
Ashe	15.4	19.0	29.9	18.5	22.1	14.6	18.3	29.2	14.6	18.3	18.3
Avery	44.7	33.4	5.6	28.0	5.6	11.1	28.1	16.8	5.6	28.1	27.6
Beaufort	10.9	6.5	8.6	12.7	16.7	12.5	20.9	27.2	20.9	23.0	29.4
Bertie	0.0	0.0	4.7	4.7	14.1	0.0	4.8	9.7	0.0	14.6	35.3
Bladen	17.4	11.6	11.4	14.3	11.4	11.4	19.9	17.1	28.5	25.7	14.4
Brunswick	25.6	12.2	18.6	25.7	20.4	25.4	29.3	30.3	25.1	22.7	30.5
Buncombe	10.7	15.7	11.6	8.5	12.1	14.4	14.3	11.7	17.1	16.9	23.2
Burke	28.2	32.6	28.9	26.5	23.2	19.9	33.4	32.5	31.5	41.6	30.1
Cabarrus	15.3	11.5	15.2	14.3	13.4	10.5	14.2	18.2	14.7	16.9	21.4
Caldwell	23.6	19.8	24.4	27.9	19.3	18.1	18.2	12.1	18.2	36.4	31.4
Camden	32.1	41.7	10.2	10.1	10.0	9.9	10.0	0.0	0.0	49.0	19.4
Carteret	10.9	15.6	20.1	30.4	18.0	32.5	26.3	20.2	30.2	27.2	34.3
Caswell	8.5	8.5	12.7	4.2	12.7	12.5	16.9	0.0	4.2	8.5	21.1
Catawba	14.8	22.6	17.7	22.2	14.9	20.6	20.6	14.8	20.6	19.2	28.1
Chatham	10.4	10.1	8.2	9.6	6.3	10.7	10.5	5.9	15.9	2.8	5.5
Cherokee	18.7	40.7	33.1	22.1	47.4	54.5	14.6	21.9	21.8	14.4	14.0
Chowan	13.5	0.0	20.0	6.7	0.0	0.0	0.0	33.8	6.8	20.7	20.8

⁶ Counties with highest rates of poisoning death based on county of residence are in bold.

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Clay	10.0	49.0	29.1	19.1	37.8	0.0	18.6	36.8	9.2	0.0	26.5
Cleveland	18.8	13.5	23.7	19.5	20.4	15.3	19.5	15.4	21.5	28.6	19.3
Columbus	9.0	21.5	15.9	31.2	27.6	22.4	17.2	19.0	22.6	17.5	36.7
Craven	15.4	10.2	16.1	10.7	14.4	10.5	12.4	16.3	19.2	32.8	39.5
Cumberland	11.5	9.7	11.2	11.6	12.8	15.1	15.4	13.0	14.9	17.6	20.0
Currituck	13.0	8.5	17.0	8.5	21.1	16.7	29.0	0.0	12.0	31.3	19.2
Dare	14.5	17.5	5.9	17.6	20.6	35.0	20.1	11.4	36.6	22.3	13.7
Davidson	20.0	16.0	19.4	17.4	14.1	22.6	20.8	22.6	21.3	20.6	25.3
Davie	17.9	15.1	17.4	12.2	9.7	14.5	14.5	9.7	16.9	9.6	47.4
Duplin	9.1	7.2	5.3	6.9	1.7	6.7	10.0	6.7	13.4	15.1	5.0
Durham	9.7	10.3	10.8	8.3	11.1	13.1	9.2	9.1	12.0	11.8	11.3
Edgecombe	9.0	5.4	10.8	7.1	10.6	10.7	19.6	18.0	21.7	16.6	22.4
Forsyth	14.5	11.9	14.0	13.8	9.4	14.7	15.1	12.2	16.0	18.3	21.4
Franklin	12.6	10.6	15.4	16.8	9.9	8.1	14.6	17.6	11.1	14.0	18.3
Gaston	22.1	25.6	19.7	29.2	23.3	21.2	24.9	22.0	21.9	21.7	30.6
Gates	0.0	0.0	0.0	8.2	8.2	8.2	16.5	0.0	8.4	8.5	33.6
Graham	0.0	11.7	23.2	11.4	67.7	22.4	56.5	33.8	22.6	22.8	11.3
Granville	9.0	8.7	8.5	15.1	5.2	12.0	15.6	17.3	15.5	10.3	20.2
Greene	9.8	4.8	0.0	9.4	4.7	13.9	9.4	4.7	14.1	9.5	18.7
Guilford	10.8	11.0	8.4	10.2	9.6	11.5	12.8	8.9	12.1	13.9	20.4
Halifax	9.0	0.0	7.3	9.1	7.3	9.2	11.1	14.9	13.2	24.8	19.2
Harnett	10.7	12.3	12.9	8.9	14.7	9.3	15.7	12.2	14.3	16.5	15.5
Haywood	15.8	15.6	20.7	20.4	20.4	10.1	30.4	31.9	18.3	24.7	29.1

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Henderson	19.0	13.7	16.3	13.3	21.5	18.5	13.0	25.7	18.9	23.2	15.7
Hertford	4.2	16.7	8.3	0.0	4.0	0.0	12.3	8.1	8.2	4.1	12.5
Hoke	14.4	4.7	4.5	6.5	8.4	18.3	4.0	9.9	13.8	7.7	9.6
Hyde	17.3	17.3	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	17.8
Iredell	11.7	18.6	11.6	21.0	13.1	21.1	13.5	15.8	14.9	13.5	19.6
Jackson	29.1	15.7	23.3	27.9	19.8	22.2	19.7	19.6	17.0	12.0	35.2
Johnston	5.4	7.8	6.9	10.9	17.7	11.6	12.0	11.9	10.0	16.8	12.1
Jones	0.0	0.0	9.9	19.7	19.9	9.5	9.4	0.0	9.6	38.4	38.6
Lee	12.9	16.3	8.8	17.5	15.6	24.1	18.7	13.5	11.9	18.7	13.5
Lenoir	10.1	8.4	6.7	10.1	16.8	23.6	3.4	11.9	17.0	24.0	12.2
Lincoln	20.9	20.4	19.8	22.1	10.2	19.1	22.8	25.2	16.2	16.0	26.8
Macon	42.9	15.9	8.9	15.6	6.7	15.5	11.0	11.1	11.0	13.2	28.5
Madison	0.0	24.1	3.0	3.0	8.8	5.8	5.9	2.9	11.6	23.0	4.5
Martin	8.1	19.8	24.3	29.0	19.2	18.9	28.3	14.0	18.5	23.1	16.9
McDowell	16.0	73.8	49.0	20.4	28.6	37.3	37.6	21.1	29.6	42.1	43.9
Mecklenburg	9.0	8.4	8.3	7.3	8.9	10.1	9.5	6.9	10.7	11.2	15.2
Mitchell	51.4	19.3	32.1	19.2	32.2	12.9	32.4	13.0	13.0	45.8	26.2
Montgomery	18.4	0.0	10.8	10.8	17.9	0.0	14.3	14.4	7.2	10.8	7.2
Moore	14.6	9.5	11.6	16.1	11.3	10.1	17.6	8.7	12.9	15.9	17.7
Nash	11.0	13.0	5.4	4.2	7.3	12.5	17.8	13.7	12.7	17.0	28.6
New Hanover	17.4	16.0	20.8	22.0	16.7	21.3	21.4	18.7	22.5	25.0	36.2
Northampton	0.0	0.0	9.1	18.1	0.0	9.1	0.0	9.4	9.5	14.2	14.4
Onslow	11.5	10.1	8.0	12.6	10.2	12.3	13.6	10.4	13.0	9.3	20.6

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Orange	6.4	13.4	7.7	10.6	8.2	9.6	12.3	6.5	5.7	8.6	12.8
Pamlico	15.3	0.0	15.3	15.2	7.6	22.5	15.2	7.7	22.8	30.4	22.5
Pasquotank	15.3	7.5	17.3	12.3	7.4	12.4	7.5	12.7	7.6	10.1	14.9
Pender	14.8	14.3	19.9	9.7	19.1	9.4	14.8	14.4	10.6	31.1	33.6
Perquimans	0.0	7.7	15.1	7.5	0.0	14.8	7.3	7.3	14.7	7.3	7.4
Person	13.2	21.0	15.7	7.7	10.1	17.7	10.2	10.2	10.2	17.7	7.6
Pitt	10.6	5.1	13.1	13.4	14.2	6.5	12.8	10.4	17.2	11.4	18.8
Polk	15.3	25.2	20.0	14.8	24.4	14.6	44.3	4.9	4.8	19.2	14.3
Randolph	13.2	18.2	14.4	17.8	16.2	20.4	16.2	19.0	14.7	29.4	27.1
Richmond	17.3	17.2	25.7	30.0	19.3	28.0	23.8	26.1	26.5	28.7	22.3
Robeson	8.5	6.9	9.9	9.8	11.2	16.4	23.8	16.4	20.2	13.5	17.3
Rockingham	18.5	22.7	23.7	15.0	18.2	17.1	19.4	16.3	9.7	17.4	27.2
Rowan	24.1	14.9	24.2	24.0	23.8	26.8	24.6	24.6	24.4	26.4	34.8
Rutherford	20.0	29.0	33.0	26.8	17.7	23.5	13.3	23.6	25.2	31.1	28.1
Sampson	14.5	22.4	23.7	14.2	12.6	18.8	10.9	12.5	34.2	15.7	18.9
Scotland	13.8	13.8	19.2	5.5	8.3	5.5	22.0	13.8	16.6	25.1	16.8
Stanly	15.3	27.0	10.0	21.6	33.0	16.5	18.2	19.8	11.5	27.8	16.2
Stokes	23.7	10.8	27.7	10.6	10.6	31.6	8.5	19.3	15.0	29.9	42.8
Surry	19.4	13.8	16.5	20.5	25.8	21.8	23.1	17.8	28.5	19.2	22.0
Swain	50.2	29.0	36.1	14.4	92.9	14.1	20.7	6.9	13.5	13.4	13.5
Transylvania	12.7	25.0	18.5	24.4	12.1	27.1	30.3	30.2	21.0	17.8	23.4
Tyrrell	0.0	22.8	0.0	0.0	0.0	23.0	24.1	0.0	0.0	47.5	48.4
Union	12.8	2.2	9.9	8.6	6.4	4.4	5.8	10.9	11.6	12.3	11.2

County of Residence	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Vance	13.4	17.9	15.5	13.3	8.8	8.8	26.4	15.6	13.4	17.8	17.8
Wake	8.0	7.8	7.7	5.4	6.8	7.1	7.2	8.9	10.6	10.0	13.9
Warren	9.8	0.0	4.8	9.6	9.5	4.8	4.8	9.8	4.9	4.9	14.9
Washington	0.0	7.5	0.0	7.6	7.6	7.7	0.0	15.6	23.7	8.0	24.1
Watauga	10.6	18.7	12.1	20.0	5.9	13.4	15.3	13.3	13.2	13.0	10.9
Wayne	5.1	11.8	9.2	7.4	12.2	15.4	8.0	10.4	9.6	12.0	16.0
Wilkes	31.1	32.3	37.8	46.3	27.5	15.8	27.3	31.6	45.8	40.2	45.7
Wilson	11.6	6.4	5.0	3.7	2.5	9.8	6.1	12.3	11.1	14.7	17.1
Yadkin	21.3	15.9	18.4	18.3	18.2	20.8	23.5	21.0	31.7	15.9	15.9
Yancey	39.4	22.3	16.7	22.4	33.7	33.3	33.6	22.3	39.1	33.4	16.5
TOTAL	13.8	13.2	13.7	14.0	13.3	14.6	15.2	14.3	15.9	17.5	21.0

Table 92 Number of Poisoning Deaths in North Carolina by Gender, Age Group, and Race, 2006 – 2016

Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Female	<1		2			1	3
	1-4	5	5				10
	5-9	6	1			1	8
	10-14	7	1		1		9
	15-19	70	3	1	1	5	80
	20-24	253	22	10		5	290
	25-34	941	85	17	7	20	1070
	35-44	1362	181	32	2	13	1590
	45-54	1765	213	38	5	18	2039
	55-64	796	91	8	3	5	903
	65-74	175	10	3		1	189
	75-84	58	7		1	1	67
	85+	35	1	1			37
	<i>Subtotal</i>		5473	622	110	20	70
Gender	Age Group	White	Black	American Indian	Asian	Unknown	Total
Male	<1						0
	1-4	8	6			1	15
	5-9	8	3				11
	10-14	18	1				19
	15-19	227	12	6	1	4	250
	20-24	734	55	12	8	23	832
	25-34	1986	180	28	10	59	2263
	35-44	2060	251	24	8	45	2388
	45-54	2156	350	37	5	26	2574
	55-64	875	254	18	4	10	1161
	65-74	154	47	2		4	207
	75-84	32	6				38
	85+	15	3				18
	<i>Subtotal</i>		8273	1168	127	36	172
TOTAL		13746	1790	237	56	242	16071

Table 93 Rate of Poisoning Deaths in North Carolina by Gender, 2006 – 2016

Gender	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Female	9.4	10.1	10.1	10.5	10.4	11.8	12.1	11.2	12.2	13.4	15.7
Male	18.5	16.5	17.4	17.6	16.3	17.5	18.5	17.6	19.8	21.9	26.6
TOTAL	13.8	13.2	13.7	14.0	13.3	14.6	15.2	14.3	15.9	17.5	21.0

Figure 33 Number and Rate of Poisoning Deaths in North Carolina by Gender, 2006 – 2016

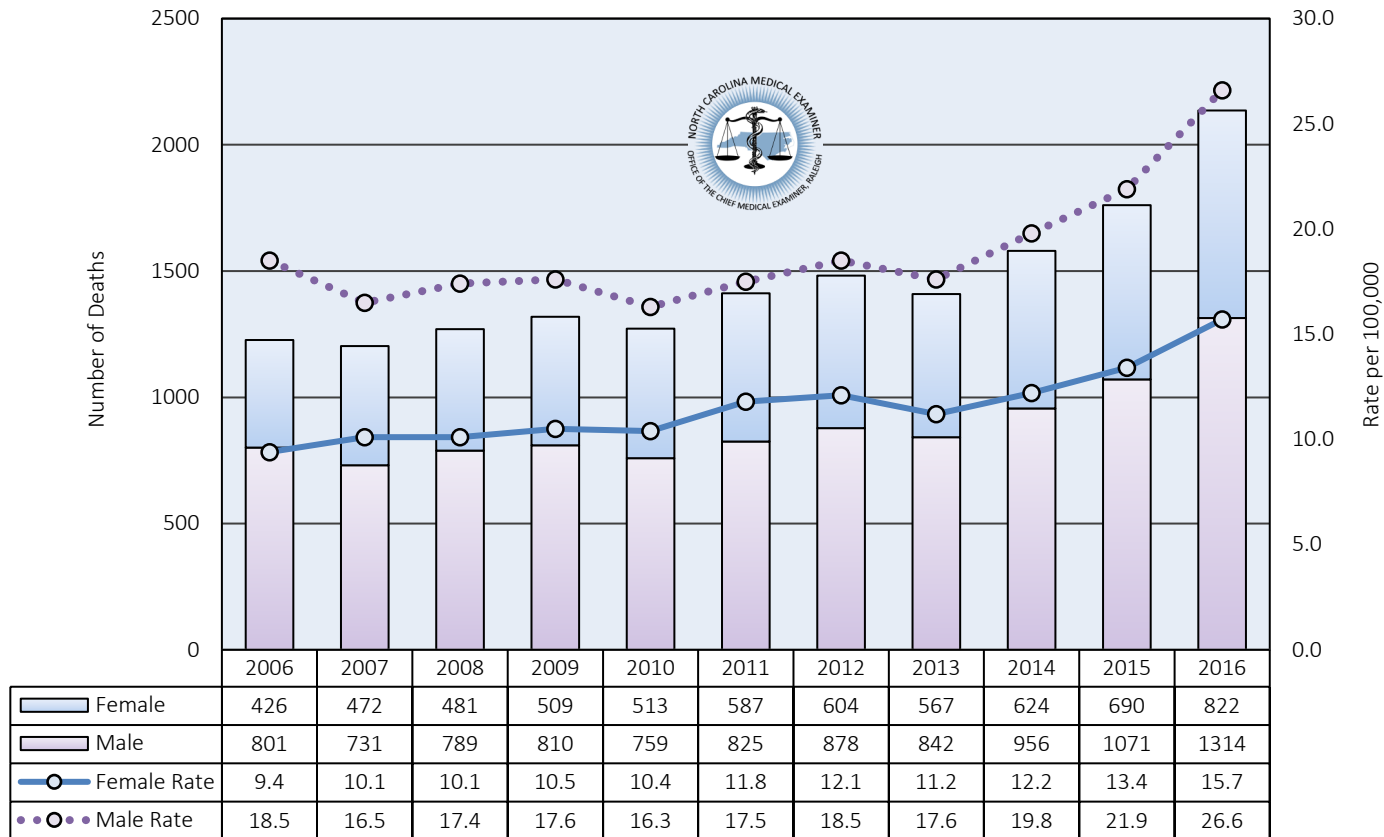


Table 94 Number of Poisoning Deaths in North Carolina by Age Group, 2006 – 2016

Age Group	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
<1	0	0	0	0	0	2	0	0	0	0	1	3
1 – 4	4	3	2	1	1	2	0	3	3	3	3	25
5 – 9	2	3	2	2	0	1	3	2	2	2	0	19
10 – 14	5	4	2	3	1	1	3	1	4	3	1	28
15 – 19	36	36	41	43	29	36	22	24	13	22	28	330
20 – 24	104	87	115	103	69	96	95	85	106	111	151	1112
25 – 34	240	216	252	269	245	297	299	272	334	366	543	3333
35 – 44	338	337	327	345	314	317	334	354	376	396	540	3978
45 – 54	390	359	377	383	414	428	443	408	435	504	472	4613
55 – 64	88	125	115	138	175	179	217	215	232	271	309	2064
65 – 74	13	28	21	22	11	43	43	41	54	57	63	396
75 – 84	5	3	9	7	8	8	16	1	15	18	15	105
85+	2	2	7	3	5	2	7	3	6	8	10	55
TOTAL	1227	1203	1270	1319	1272	1412	1482	1409	1580	1761	2136	16071

Figure 34 Number of Poisoning Deaths in North Carolina by Age Group, 2010 – 2015

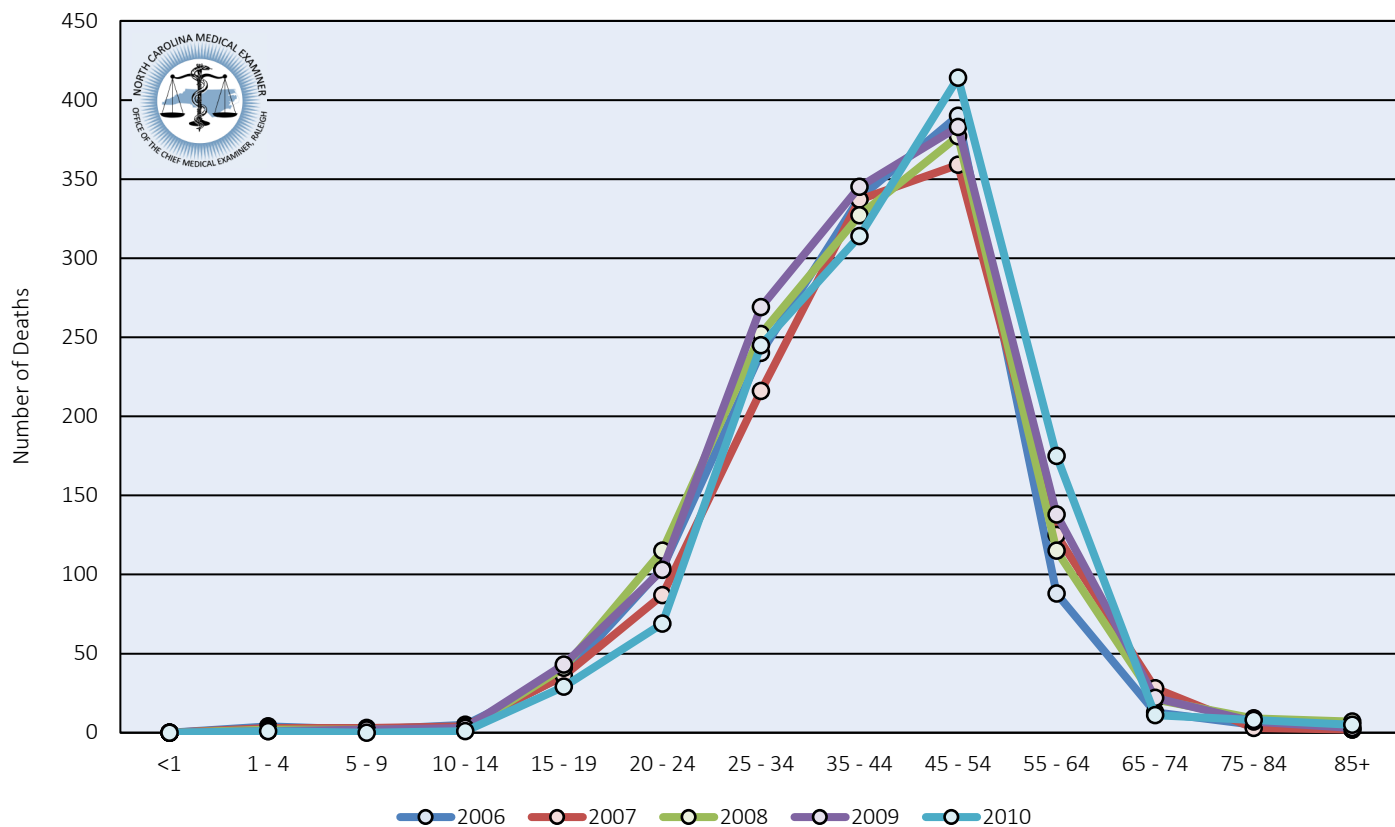


Figure 35 Number of Poisoning Deaths in North Carolina by Age Group, 2011 – 2016

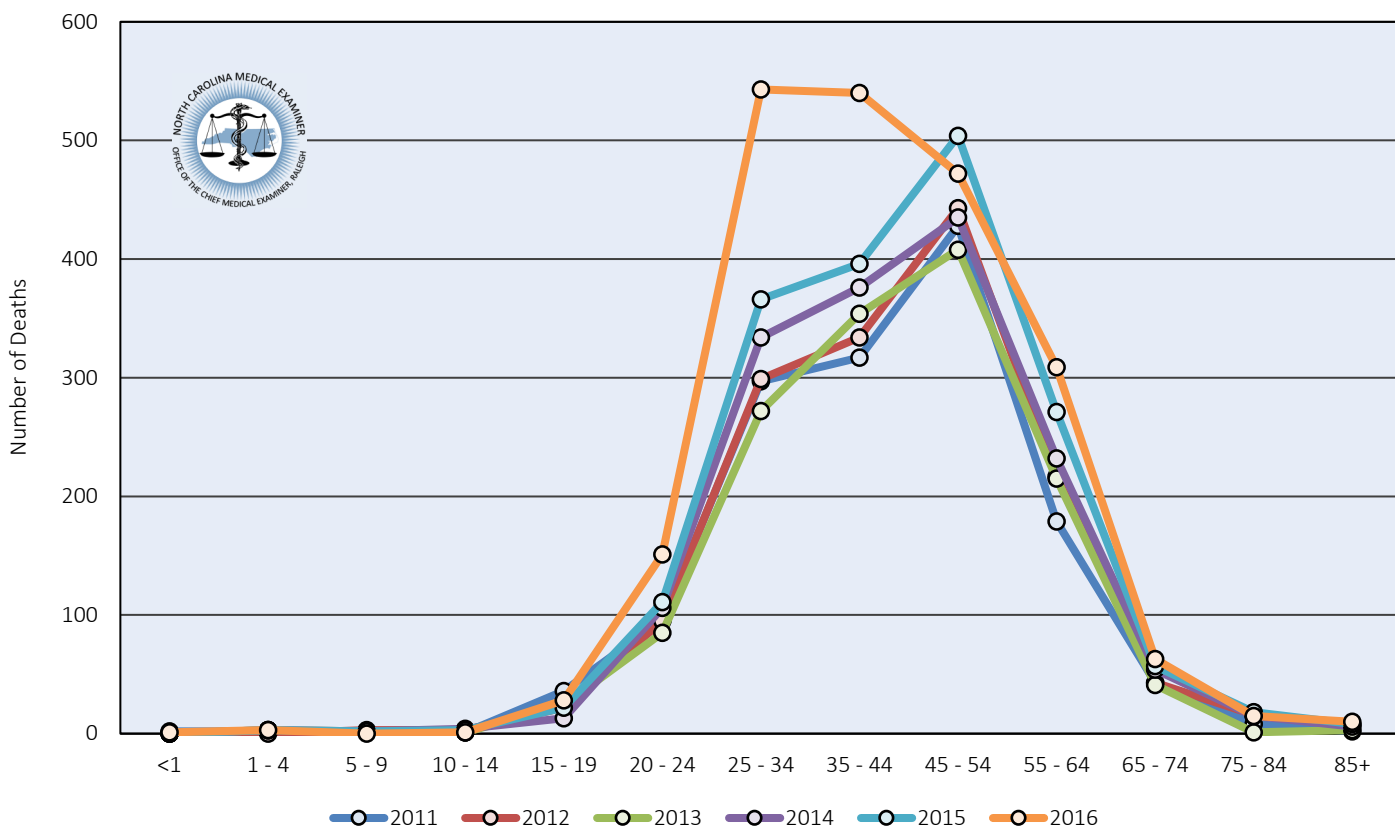


Table 95 Number of Poisoning Deaths in North Carolina by Race, 2006 – 2016

Race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
White	1009	1049	1111	1157	1094	1209	1290	1213	1335	1485	1794	13746
Black	178	128	119	119	127	153	140	145	184	219	278	1790
Unknown	12	11	20	18	20	20	23	22	16	34	46	242
Am. Indian	24	8	17	21	27	27	24	24	38	15	12	237
Asian	4	7	3	4	4	3	5	5	7	8	6	56
TOTAL	1227	1203	1270	1319	1272	1412	1482	1409	1580	1761	2136	16071

Figure 36 Rate of Poisoning Deaths in North Carolina by Race, 2006 – 2016

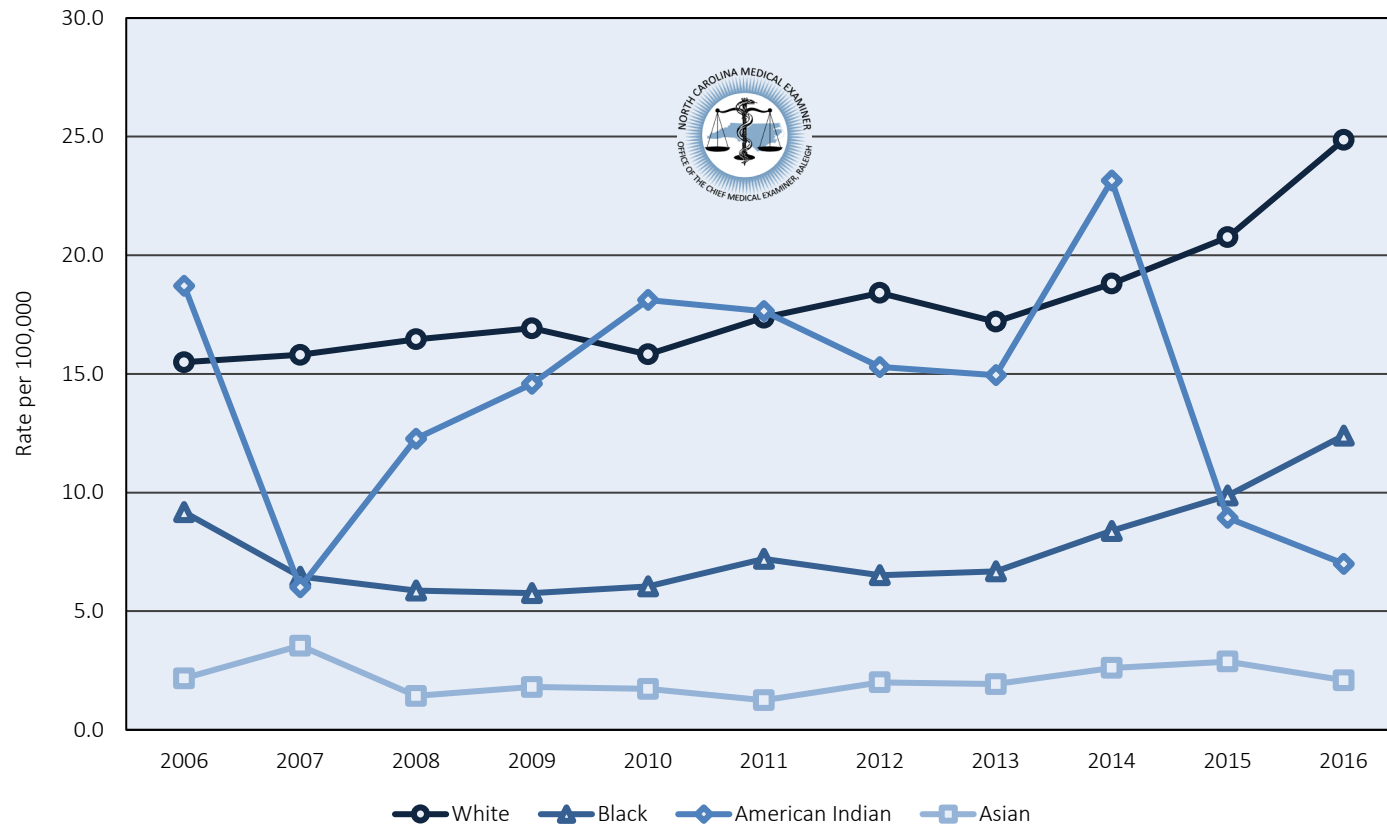
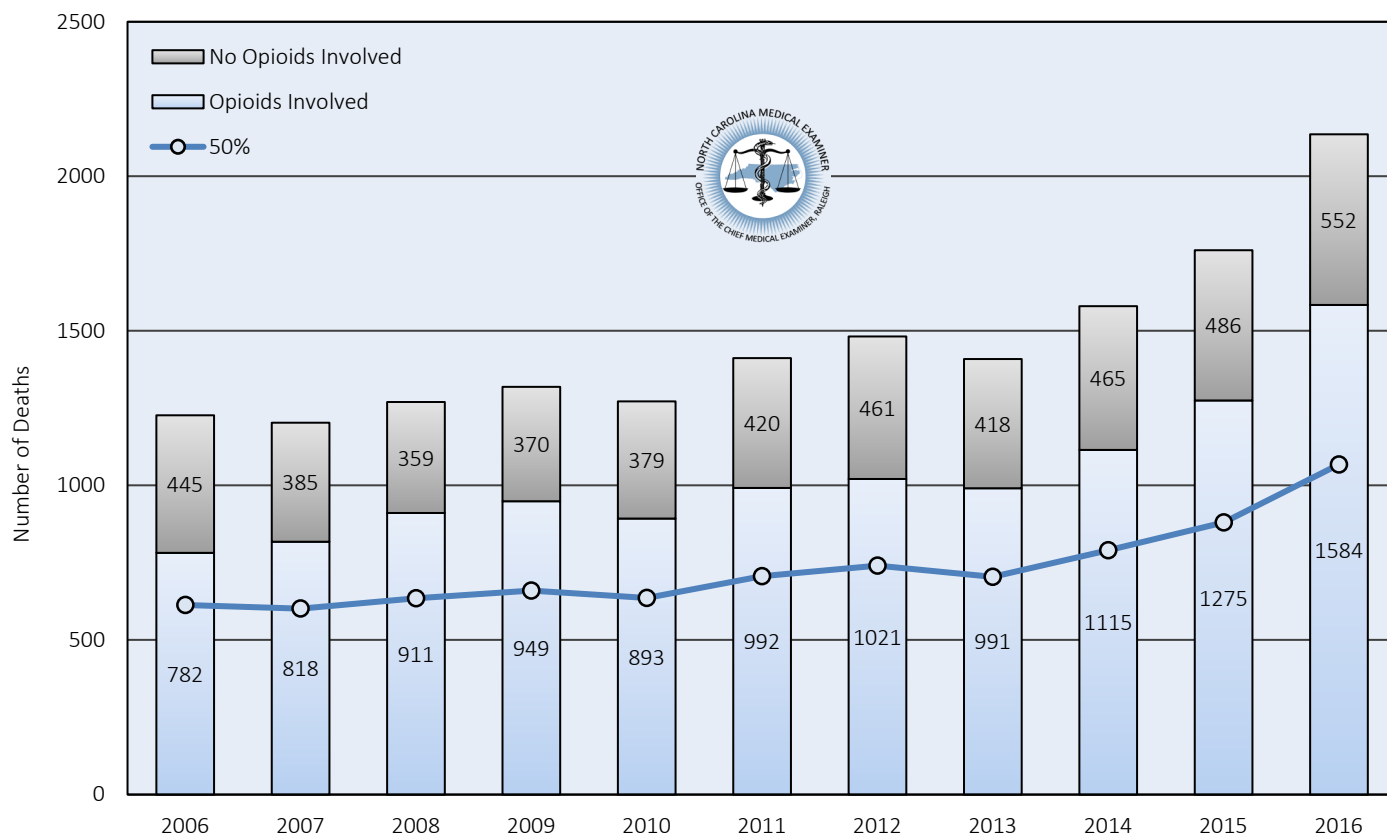


Table 96 Poisoning Deaths in North Carolina Involving Prescription and/or Illicit Opioids, 2006 – 2016

Year	Opioids Involved	No Opioids Involved	Total
2006	782 (63.7%)	445 (36.3%)	1227
2007	818 (68.0%)	385 (32.0%)	1203
2008	911 (71.7%)	359 (28.3%)	1270
2009	949 (71.9%)	370 (28.1%)	1319
2010	893 (70.2%)	379 (29.8%)	1272
2011	992 (70.3%)	420 (29.7%)	1412
2012	1021 (68.9%)	461 (31.1%)	1482
2013	991 (70.3%)	418 (29.7%)	1409
2014	1115 (70.6%)	465 (27.6%)	1580
2015	1275 (72.4%)	486 (25.8%)	1761
2016	1584 (74.2%)	552 (29.5%)	2136
TOTAL	11331 (70.5%)	4740 (29.5%)	16071

Figure 37 Poisoning Deaths in North Carolina Involving Prescription and/or Illicit Opioids, 2006 – 2016⁷



⁷Drugs included: buprenorphine, codeine, fentanyl, fentanyl analogues, heroin, hydrocodone, hydromorphone, loperamide, meperidine, methadone, mitragynine, morphine, oxycodone, oxymorphone, pentazocine, propoxyphene, tapentadol, tramadol, U-47700.

Table 97 Opioid-Related Deaths in North Carolina by Drug, 2006 – 2016⁸

Opioids	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Buprenorphine	0	0	0	0	12	12	17	19	32	41	48	181
Codeine	6	13	11	3	15	15	13	7	14	24	15	136
Fentanyl	94	85	103	125	118	137	118	101	160	211	390	1642
Fentanyl Analogues ⁹	0	0	0	0	0	0	0	0	7	31	153	191
Heroin	60	46	58	77	47	87	170	201	287	401	573	2007
Hydrocodone	75	122	112	143	126	161	139	138	130	160	158	1464
Hydromorphone	4	2	5	7	13	16	30	17	19	24	20	157
Loperamide	0	0	0	0	0	0	2	4	7	6	14	33
Meperidine	0	1	2	4	3	2	2	2	2	1	2	21
Methadone	379	359	318	282	231	254	234	213	153	134	136	2693
Mitragynine	0	0	0	0	0	0	0	1	6	6	15	28
Morphine	80	100	108	105	110	122	120	113	122	128	95	1203
Oxycodone	159	178	252	273	291	310	347	318	370	419	396	3313
Oxymorphone	3	13	50	60	71	156	127	109	135	144	126	994
Pentazocine	0	3	1	1	0	0	1	0	0	0	0	6
Propoxyphene	26	33	33	37	40	9	2	2	1	0	1	184
Tapentadol	0	0	0	0	1	5	8	6	5	5	6	36
Tramadol	15	25	34	33	36	46	53	46	57	67	55	467
U-47700	0	0	0	0	0	0	0	0	0	1	32	33

If you would like additional information, please contact Alison Miller at alison.miller@dhhs.nc.gov.

⁸ Categories are not mutually exclusive.

⁹ Fentanyl analogues included: Acetyl fentanyl, Acrylfentanyl, Butyrylfentanyl, Carfentanil, Fluorofentanyl, Fluoroisobutyrylfentanyl, Furanylfentanyl.

GLOSSARY

Accident

This *manner of death* is used when there is no evidence of intent; an unexpected, sudden, and unintentional death.

Associate Chief Medical Examiner

A board-certified forensic pathologist licensed to practice medicine in the state of North Carolina appointed by the *Chief Medical Examiner*. The *Associate Chief Medical Examiner* is responsible for performing autopsies and investigating deaths that fall under the jurisdiction of the medical examiner system with the goal of determining *cause and manner of death*.

Autopsy

A comprehensive postmortem external and internal examination performed to determine the cause and manner of death, collect evidence, and document the absence or presence of injury.

Cause of Death

The disease, abnormality, injury, or poisoning that caused the death, not the mechanism of death, such as cardiac or respiratory arrest, shock, or heart failure (CDC 2003). The *cause of death* is determined based on the results of the external and/or internal examination, toxicology testing, and antemortem medical records, if necessary.

Chief Medical Examiner

The head of the Office of the Chief Medical Examiner (OCME). The *Chief Medical Examiner* must be a board-certified forensic pathologist licensed to practice medicine in the state of North Carolina.

County of Death

The county in which the death occurred. The *county of death* may differ from the county in which the decedent legally resided, also known as the *county of residence*.

County of Residence

The county in which the decedent legally resided prior to death. The *county of residence* may differ from the county in which the death occurred, also known as the *county of death*.

Deputy Chief Medical Examiner

A board-certified forensic pathologist licensed to practice medicine in the state of North Carolina appointed by the *Chief Medical Examiner*. The *Deputy Chief Medical Examiner* is responsible for performing autopsies and investigating deaths that fall under the jurisdiction of the medical examiner system with the goal of determining *cause and manner of death*. The *Deputy Chief Medical Examiner* also assumes the duties of the *Chief Medical Examiner* in the event of his/her absence.

Homicide

This *manner of death* is used when the death resulted from intentional harm of one person by another. Intent to cause death is a common element, but not required for a *manner of death* classification of *homicide* (CDC 2003).

Jurisdiction

Pursuant to § 130A-383 of the North Carolina General Statutes, the medical examiner assumes jurisdiction:

(a) Upon the death of any person resulting from violence, poisoning, accident, suicide or homicide; occurring suddenly when the deceased had been in apparent good health or when unattended by a physician; occurring in a jail, prison, correctional institution or in police custody; occurring in State facilities operated in accordance with Part 5 of Article 4 of Chapter 122C of the General Statutes; occurring pursuant to Article 19 of Chapter 15 of the General Statutes; or occurring under any suspicious, unusual or unnatural circumstance, the medical examiner of the county in which the body of the deceased is found shall be notified by a physician in attendance, hospital employee, law-enforcement officer, funeral home employee, emergency medical technician, relative or by any other person having suspicion of such a death. No person shall disturb the body at the scene of such a death until authorized by the medical examiner unless in the unavailability of the medical examiner it is determined by the appropriate law enforcement agency that the presence of the body at the scene would risk the integrity of the body or provide a hazard to the safety of others. For the limited purposes of this Part, expression of opinion that death has occurred may be made by a nurse, an emergency medical technician or any other competent person in the absence of a physician.

(b) The discovery of anatomical material suspected of being part of a human body shall be reported to the medical examiner of the county in which the material is found.

(c) Upon completion of the investigation and in accordance with the rules of the Commission, the medical examiner shall release the body to the next of kin or other interested person who will assume responsibility for final disposition. (1955, c. 972, s. 1; 1957, c. 1357, s. 1; 1963, c. 492, s. 4; 1967, c. 1154, s. 1; 1983, c. 891, s. 2; 1989, c. 353, s. 1; 2008-131, s. 2.)

Local Medical Examiner

A medical professional appointed by the *Chief Medical Examiner*, charged with the duty of investigating and certifying specified categories of human deaths in North Carolina. A medical examiner's authority derives from Article 16 of Section 130A of the North Carolina General Statutes. His/her primary purpose is to detect, analyze, and document the medical aspects of certain types of deaths so that deaths can be better understood scientifically, legally, and socially.

Manner of Death

A classification of death based on the circumstances surrounding a particular *cause of death* and how that cause came into play. The *manner of death* is one of the items that must be reported on the death certificate and consists of five (5) categories: *accident, homicide, natural, suicide, and undetermined* (NAME 2002).

Means of Death

The method or item involved in causing the death. For example, the *means of death* may be a firearm, poison, motor vehicle, or sharp instrument.

Natural

This *manner of death* is used when the death resulted from disease and/or the aging process (CDC 2003).

Office of the Chief Medical Examiner (OCME)

The Office of the Chief Medical Examiner (OCME) is a branch within the Division of Public Health (DPH), which is part of the North Carolina Department of Health and Human Services (NC DHHS). The OCME is responsible for the investigation of all sudden, unexpected, violent deaths that occur in North Carolina, as well as natural deaths unattended by a physician and deaths that occur while in custody.

Suicide

This *manner of death* is used when the death resulted from an intentional, self-inflicted act committed to do self-harm or cause the death of one's self (CDC 2003).

Undetermined

This *manner of death* is used when the information pointing to one manner of death is no more compelling than the information pointing to one or more other competing manners of death (CDC 2003).

REFERENCES

Centers for Disease Control and Prevention. 2003. *Medical Examiners' and Coroners' Handbook on Death Registration and Fetal Death Reporting*. 1 – 138.

Hanzlick R, Hunsaker JC, Davis GJ. 2002. *A Guide for Manner of Death Classification*. National Association of Medical Examiners: 1 – 29.

National Association of Medical Examiners. 2014. *Inspection and Accreditation Checklist*. 1-32.

North Carolina General Statutes, Article 16, § 130A-389.