

SOUTH CAROLINA
DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL

Drug Overdose Deaths South Carolina

2017



INTRODUCTION

This report describes fatal drug overdose deaths that occurred in South Carolina in 2017. Data were derived from death certificates registered with the Department of Health and Environmental Control Vital Statistics and represent deaths that occurred in the state of South Carolina regardless of the residence of the decedent.

Drug overdose deaths are identified using underlying cause-of-death codes from the tenth revision of ICD (ICD-10): X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), and Y10–Y14 (undetermined). Drug overdose deaths involving selected drug categories are identified by additional multiple cause-of-death codes. The category "prescription drugs" includes both opioid and non-opioid prescription drugs. The category "opioids" includes both legal and illegal opioids. Prescription drugs are identified by the following ICD-10 codes: T36.0–T39.9, T40.2–T40.4, T41.0–T43.5 and T43.7–T50.8. Opioids are identified by codes T40.0 -- T40.6. Other codes used are: heroin T40.1, methadone T40.3, cocaine T40.5. Fentanyl is identified through a search of the literal cause of death. Psychostimulants with abuse potential, which include such drugs as methamphetamine, amphetamine, methylphenidate (Ritalin), and 3,4-methylenedioxy-methamphetamine (MDMA, Ecstasy) are identified by the code T43.6.

Drug overdose deaths may involve multiple drugs; therefore, a single death might be included in more than one category when describing the number of drug overdose deaths involving a specific drug. For example, a death that involved both heroin and fentanyl would be included in the following categories: deaths involving heroin, deaths involving fentanyl, deaths involving opioids, and deaths involving prescription drugs.

Figure 1.
 Number of Drug Overdose Deaths by Intent
 South Carolina, 2008-2017
 Occurrence Data

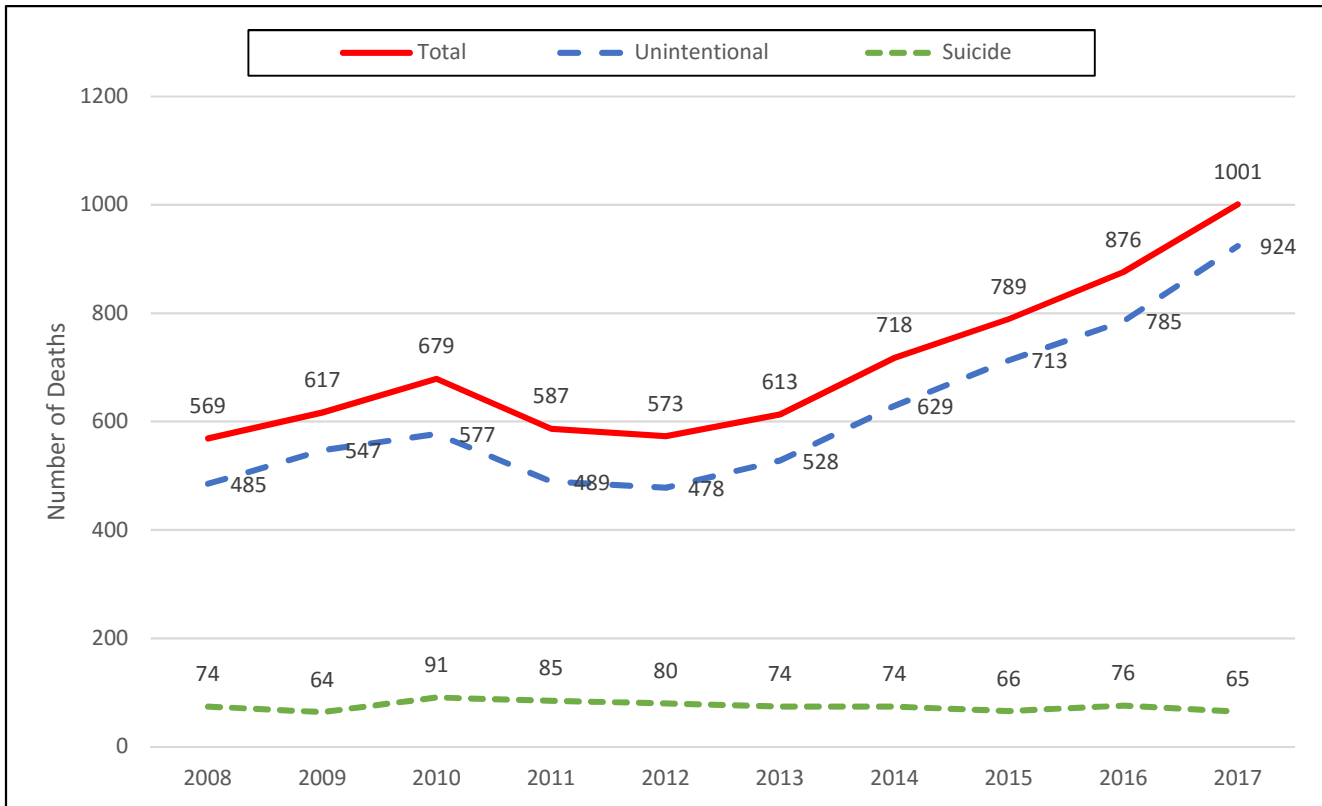


Table 1.
 Number of Drug Overdose Deaths by Intent
 South Carolina, 2008-2017
 Occurrence Data

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	569	617	679	587	573	613	718	789	876	1,001
Unintentional	485	547	577	489	478	528	629	713	785	924
Suicide	74	64	91	85	80	74	74	66	76	65
Homicide	1	0	2	1	1	0	3	0	3	1
Undetermined	9	6	9	12	14	11	12	10	12	11

Table 2.
 Number of Drug Overdose Deaths by Drug Category
 South Carolina, 2014-2017
 Occurrence Data

Year	Total Drug Overdose	Prescription Drugs	Opioids	Psychostimulants with Abuse Potential	Fentanyl	Heroin	Methadone	Cocaine
2014	718	572	508	68	68	57	79	88
2015	789	641	565	95	130	95	59	117
2016	876	684	616	129	190	108	53	139
2017	1,001	782	748	194	362	144	45	235

Figure 2.
 Number of Drug Overdose Deaths by Drug Category
 South Carolina, 2014-2017
 Occurrence Data

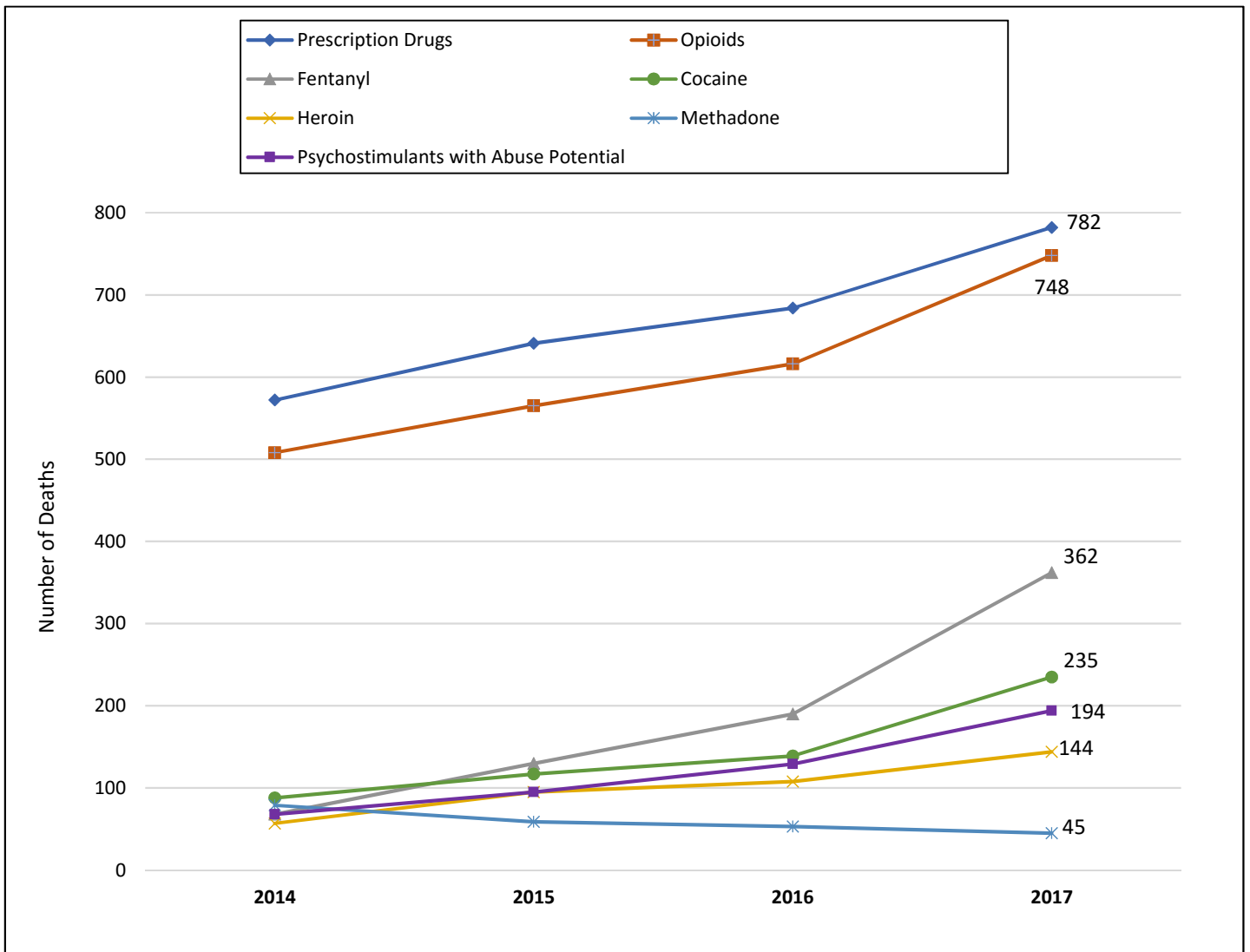


Table 3.
Drug Overdose Deaths by County and Drug Category
South Carolina, 2017
Occurrence Data

County of Death	Total Drug Overdose		Prescription Drugs		Opioids		Psychostimulants with Abuse Potential	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
South Carolina	1,001	20.4	782	15.9	748	15.5	194	4.1
Abbeville	8	34.7	7	30.6	6	26.4	3	14.7
Aiken	40	24.9	31	18.8	31	20.3	12	7.7
Allendale	-	-	-	-	-	-	-	-
Anderson	32	17.1	22	11.9	22	12.0	13	6.7
Bamberg	-	-	-	-	-	-	-	-
Barnwell	4	19.9	4	19.9	3	15.0	1	4.9
Beaufort	25	16.2	23	14.9	18	11.6	2	1.2
Berkeley	27	12.6	25	11.7	23	10.8	10	5.1
Calhoun	-	-	-	-	-	-	-	-
Charleston	118	27.6	99	23.0	94	22.1	19	4.9
Cherokee	1	1.9	-	-	1	1.9	-	-
Chester	5	15.9	5	15.9	5	15.9	1	4.6
Chesterfield	4	9.4	2	5.5	3	6.8	-	-
Clarendon	4	9.9	2	6.5	2	6.5	-	-
Colleton	6	14.9	4	10.6	5	13.3	1	1.6
Darlington	9	14.5	9	14.5	8	12.9	-	-
Dillon	6	24.2	4	16.1	4	16.1	2	7.2
Dorchester	28	17.3	22	13.6	20	12.9	5	3.3
Edgefield	2	8.2	1	4.7	1	4.7	1	3.5
Fairfield	3	19.5	1	6.9	2	13.8	-	-
Florence	31	23.6	25	18.8	26	20.2	5	3.7
Georgetown	18	36.2	14	28.3	14	27.8	-	-
Greenville	107	21.1	79	15.7	73	14.7	29	5.6
Greenwood	16	24.4	14	21.4	14	22.5	2	3.5
Hampton	1	5.4	-	-	-	-	-	-
Horry	103	35.2	84	28.0	77	27.0	28	9.5
Jasper	6	23.6	4	16.5	3	12.5	-	-
Kershaw	7	11.3	2	3.0	4	6.4	3	4.6
Lancaster	24	28.7	20	23.7	23	27.6	2	2.3
Laurens	12	16.0	10	13.6	7	8.9	2	3.1
Lee	1	6.2	1	6.2	1	6.2	-	-
Lexington	49	17.1	43	14.8	36	12.7	9	3.3
McCormick	-	-	-	-	-	-	-	-
Marion	2	7.3	2	7.3	2	7.3	1	3.8
Marlboro	-	-	-	-	-	-	-	-
Newberry	2	5.8	1	2.7	-	-	-	-
Oconee	22	29.9	18	22.8	18	22.8	5	8.6
Orangeburg	9	9.7	6	6.5	5	4.6	2	3.1
Pickens	27	21.9	23	18.3	19	16.7	7	6.7
Richland	93	23.1	69	17.6	71	17.9	5	1.0
Saluda	2	6.0	1	3.0	1	3.0	-	-
Spartanburg	69	22.5	45	15.2	47	15.3	15	5.5
Sumter	7	6.3	3	2.6	6	5.7	1	1.0
Union	4	12.2	3	8.6	3	8.6	-	-
Williamsburg	7	23.6	2	9.3	5	20.2	-	-
York	60	22.5	52	19.2	45	16.9	8	3.2

¹Age-adjusted rate per 100,000 population. Rates calculated with 20 or fewer deaths are unreliable and should be used cautiously.

Table 3. (Continue)
Drug Overdose Deaths by County and Drug Category
South Carolina, 2017
Occurrence Data

County of Death	Fentanyl		Heroin		Methadone		Cocaine	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
South Carolina	362	7.6	144	3.1	45	0.9	235	4.8
Abbeville	-	-	-	-	2	8.8	1	4.1
Aiken	19	12.9	7	5.3	1	0.4	6	3.7
Allendale	-	-	-	-	-	-	-	-
Anderson	4	2.5	-	-	4	2.3	6	2.7
Bamberg	-	-	-	-	-	-	-	-
Barnwell	3	15.0	-	-	-	-	4	19.9
Beaufort	12	8.2	1	0.9	-	-	6	4.3
Berkeley	7	3.5	3	1.5	2	1.0	4	2.0
Calhoun	-	-	-	-	-	-	-	-
Charleston	59	13.6	33	7.6	3	0.6	36	8.0
Cherokee	-	-	1	1.9	-	-	-	-
Chester	1	3.0	1	3.5	-	-	-	-
Chesterfield	2	5.5	2	4.4	-	-	2	5.6
Clarendon	1	4.8	-	-	1	1.7	2	3.5
Colleton	1	1.6	1	2.7	2	5.9	2	5.9
Darlington	4	6.6	-	-	1	1.8	2	3.5
Dillon	1	4.5	-	-	-	-	3	11.6
Dorchester	7	4.4	2	1.4	1	0.8	5	3.2
Edgefield	-	-	1	4.7	1	4.7	-	-
Fairfield	1	6.9	1	6.9	-	-	1	6.9
Florence	9	7.4	3	2.3	2	1.7	8	6.5
Georgetown	6	11.3	3	6.6	1	2.4	5	9.8
Greenville	39	8.1	21	4.3	4	0.9	16	3.2
Greenwood	9	14.5	1	2.0	1	1.0	3	4.5
Hampton	-	-	-	-	-	-	1	5.4
Horry	36	13.0	5	1.9	1	0.3	37	12.8
Jasper	3	12.5	-	-	-	-	2	7.1
Kershaw	2	3.0	2	3.3	-	-	4	5.8
Lancaster	16	18.9	9	11.4	1	1.2	9	10.8
Laurens	3	4.1	-	-	-	-	-	-
Lee	1	6.2	-	-	-	-	-	-
Lexington	14	5.0	3	1.1	2	0.9	5	1.6
McCormick	-	-	-	-	-	-	-	-
Marion	1	3.5	-	-	-	-	1	3.5
Marlboro	-	-	-	-	-	-	-	-
Newberry	-	-	-	-	-	-	1	3.1
Oconee	5	6.4	1	1.5	3	4.9	1	1.5
Orangeburg	3	3.2	-	-	-	-	2	2.0
Pickens	5	4.5	2	2.5	3	2.4	3	2.7
Richland	38	9.4	17	4.0	4	0.9	31	7.6
Saluda	1	3.0	-	-	-	-	1	3.0
Spartanburg	23	7.9	11	3.2	2	0.7	12	3.4
Sumter	1	0.9	4	4.0	-	-	2	1.5
Union	1	4.5	-	-	-	-	1	4.5
Williamsburg	-	-	2	7.1	-	-	3	7.1
York	24	9.2	7	2.7	3	1.1	7	2.8

¹Age-adjusted rate per 100,000 population. Rates calculated with 20 or fewer deaths are unreliable and should be used cautiously.

Figure 3.
Number of Opioid-Involved Overdose Deaths by County
South Carolina, 2017
Occurrence Data

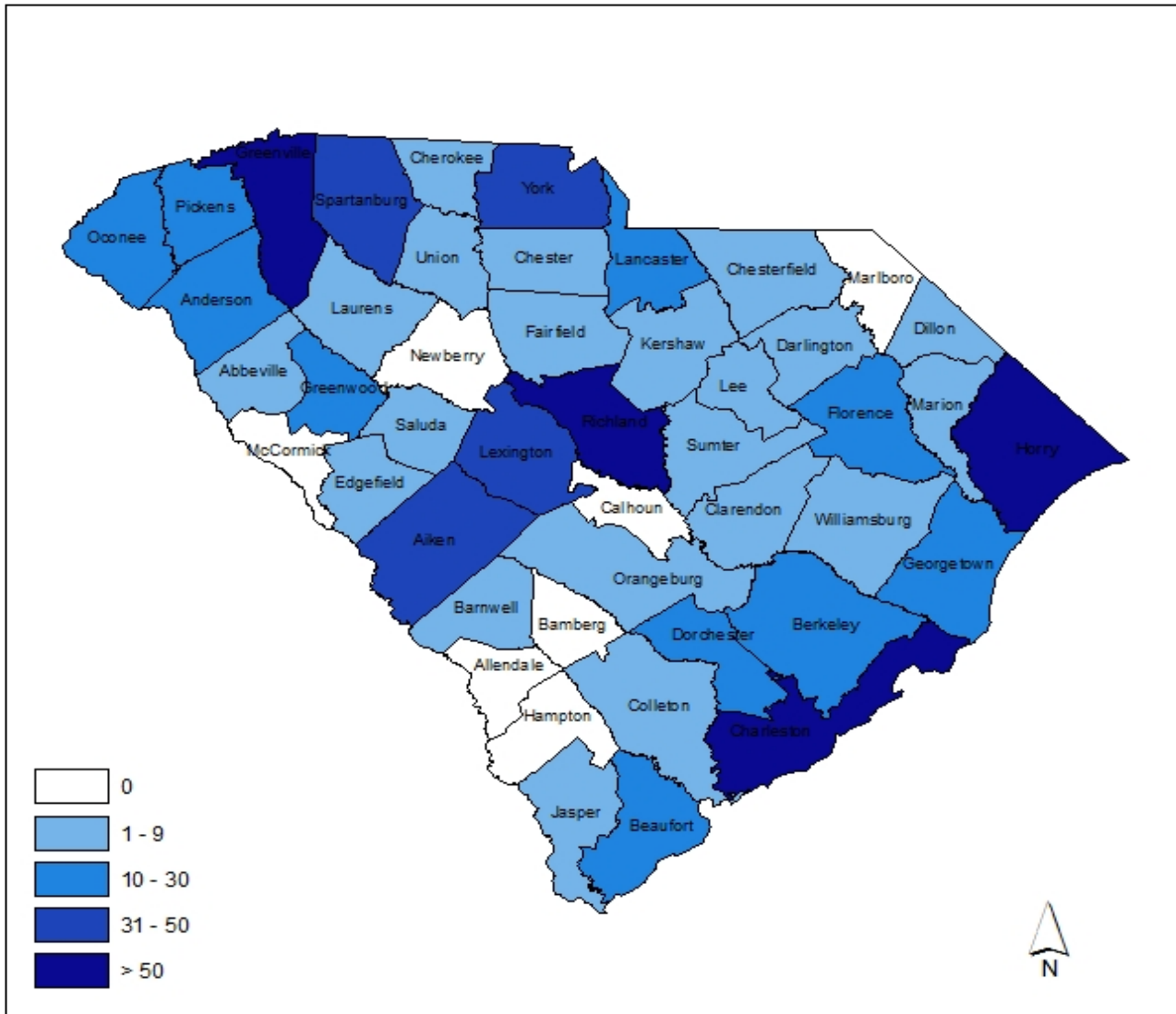
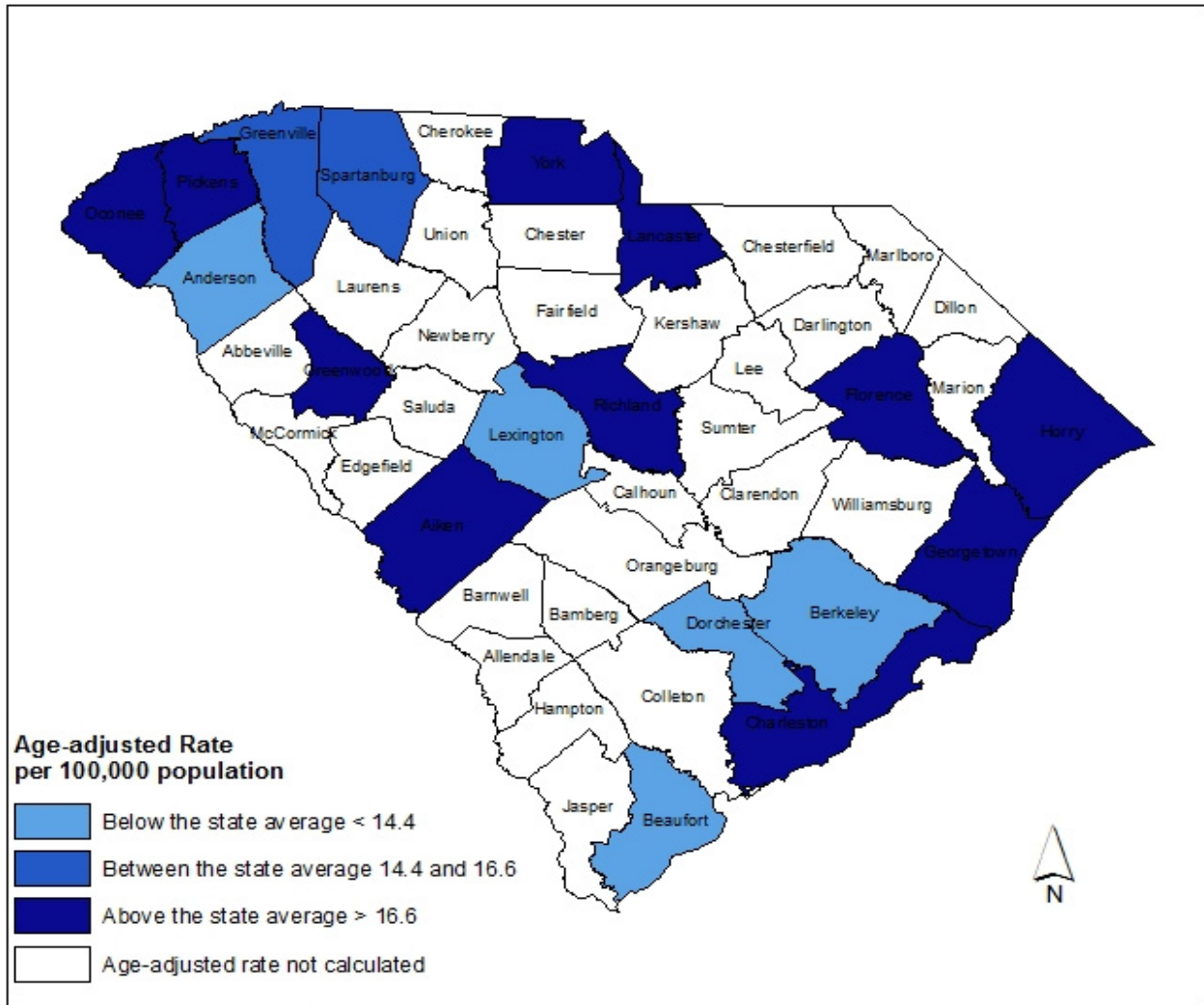


Figure 4.
 Age-Adjusted Rate for Opioid-Involved Overdose Deaths by County
 South Carolina, 2017
 Occurrence Data



State age-adjusted rate: 15.5 per 100,000 population

Age-adjusted rate not calculated for counties with fewer than 10 deaths in 2017.

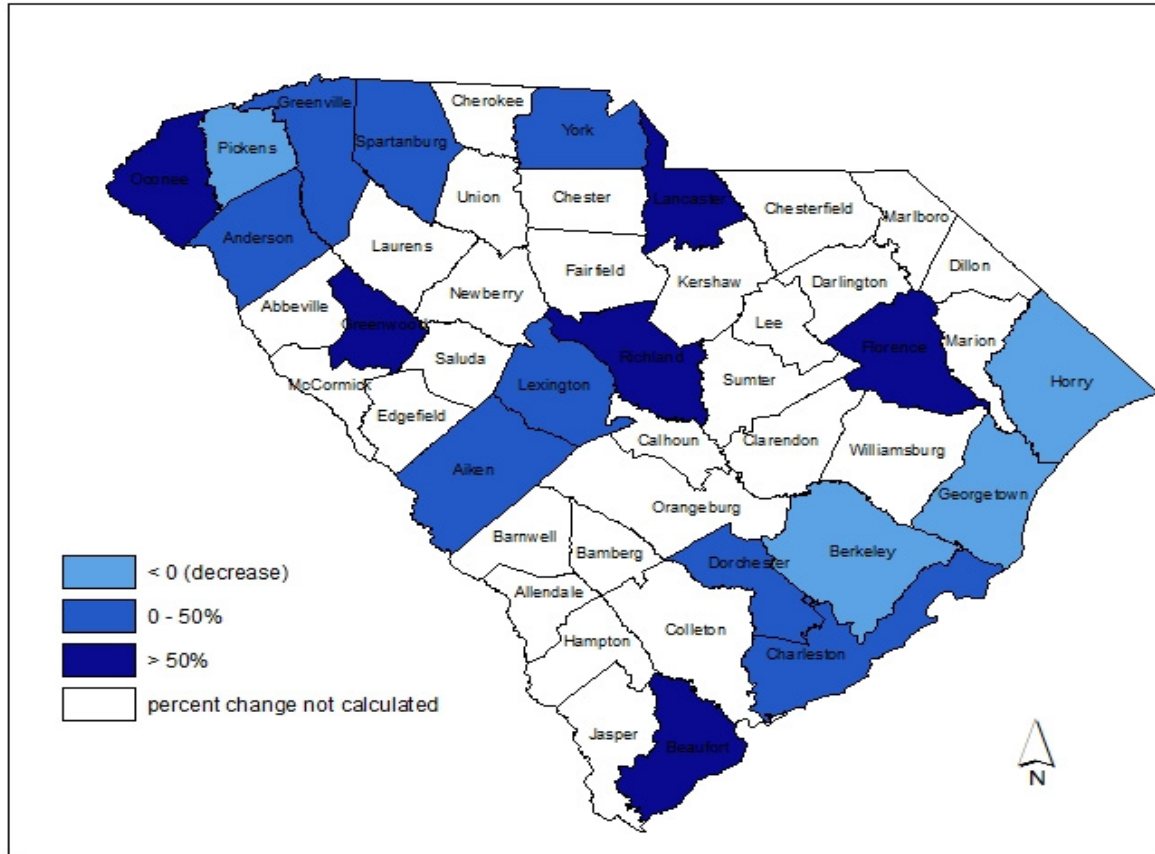
Table 4.
Change in Drug Overdose Deaths by County and Drug Category
South Carolina, 2016-2017
Occurrence Data

County of Death	Total Drug Overdose			Opioids		
	2016	2017	Percent Change	2016	2017	Percent Change
South Carolina	876	1,001	14.3	616	748	21.4 *
Abbeville	4	8		2	6	
Aiken	28	40	42.9	23	31	34.8
Allendale	-	-		-	-	
Anderson	33	32	-3.0	20	22	10.0
Bamberg	-	-		-	-	
Barnwell	1	4		1	3	
Beaufort	10	25	150.0 *	8	18	125.0
Berkeley	34	27	-20.6	26	23	-11.5
Calhoun	-	-		-	-	
Charleston	87	118	35.6	65	94	44.6
Cherokee	2	1		2	1	
Chester	-	5		-	5	
Chesterfield	8	4		6	3	
Clarendon	4	4		3	2	
Colleton	11	6		8	5	
Darlington	3	9		2	8	
Dillon	4	6		3	4	
Dorchester	16	28	75.0	14	20	42.9
Edgefield	-	2		-	1	
Fairfield	-	3		-	2	
Florence	20	31	55.0	15	26	73.3
Georgetown	33	18	-45.5	27	14	-48.1
Greenville	91	107	17.6	53	73	37.7
Greenwood	8	16	100.0	7	14	100.0
Hampton	-	1		-	-	
Horry	146	103	-29.5 *	101	77	-23.8
Jasper	5	6		3	3	
Kershaw	1	7		-	4	
Lancaster	8	24	200.0 *	5	23	360.0 *
Laurens	12	12	0.0	10	7	
Lee	3	1		-	1	
Lexington	44	49	11.4	33	36	9.1
McCormick	-	-		-	2	
Marion	4	2		4	-	
Marlboro	2	-		1	-	
Newberry	3	2		2	-	
Oconee	16	22	37.5	10	18	80.0
Orangeburg	9	9		4	5	
Pickens	31	27	-12.9	25	19	-24.0
Richland	68	93	36.8	42	71	69.0 *
Saluda	2	2		2	1	
Spartanburg	63	69	9.5	36	47	30.6
Sumter	8	7		6	6	
Union	2	4		2	3	
Williamsburg	4	7		3	5	
York	48	60	25.0	42	45	7.1

* Percent change not calculated for counties with fewer than 10 deaths in 2017.

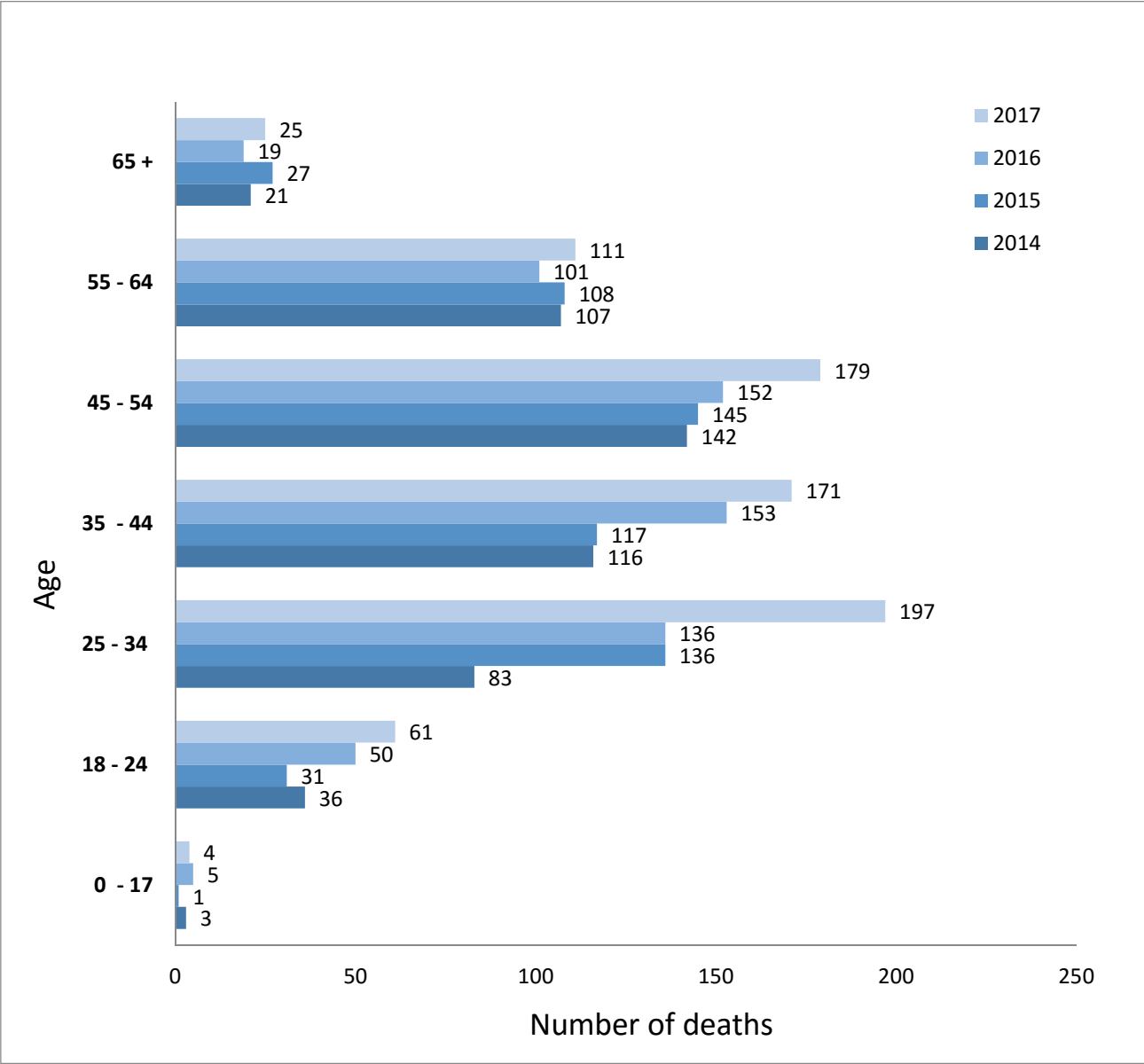
* Statistically significant at 95% confidence interval

Figure 5.
 Change in Opioid-Involved Overdose Deaths by County
 South Carolina, 2016-2017
 Occurrence Data



Percent change not calculated for counties with fewer than 10 deaths in 2017.

Figure 6.
 Opioid-Involved Overdose Deaths by Age
 South Carolina, 2014-2017
 Occurrence Data



Source: SC DHEC, Vital Statistics

Figure 7.
 Select Drug Categories by Race/Sex
 South Carolina, 2017
 Occurrence Data

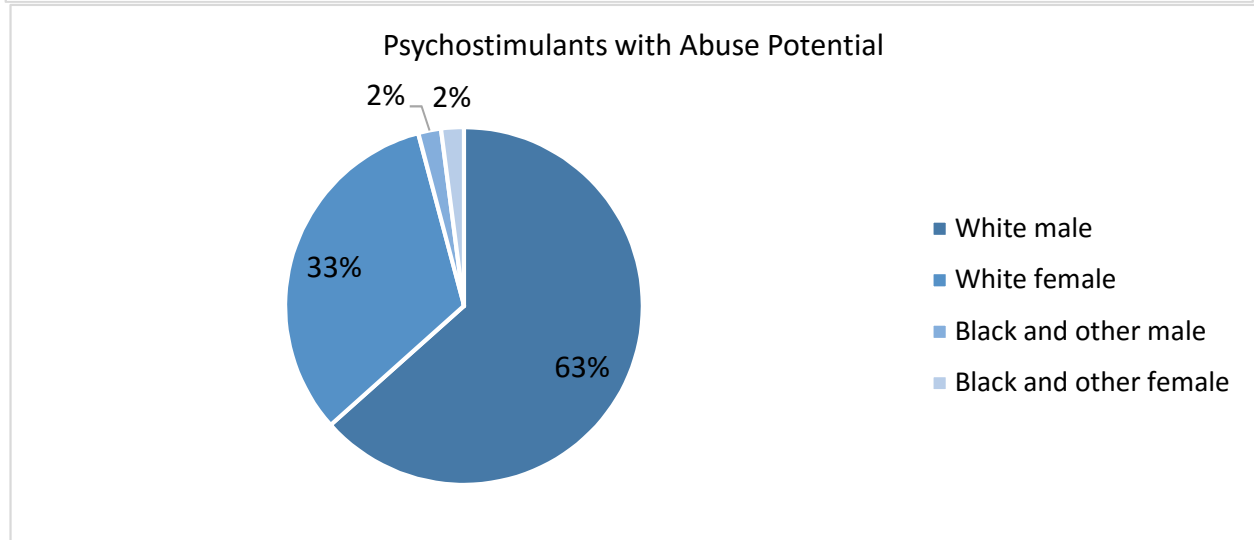
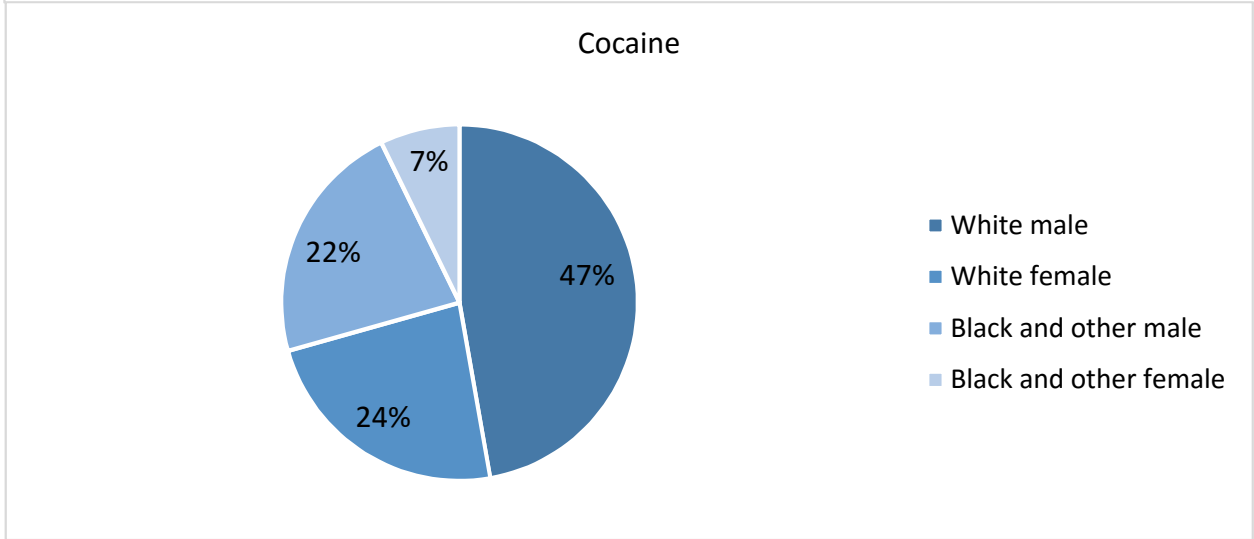
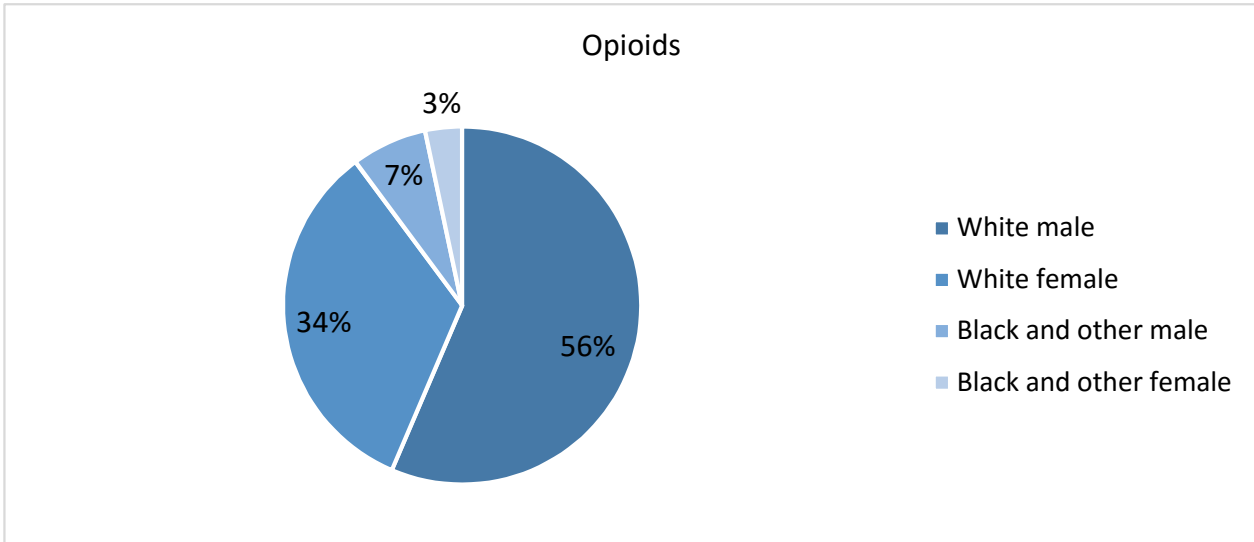


Figure 8.
 Select Drug Categories by Education
 South Carolina, 2017
 Occurrence Data

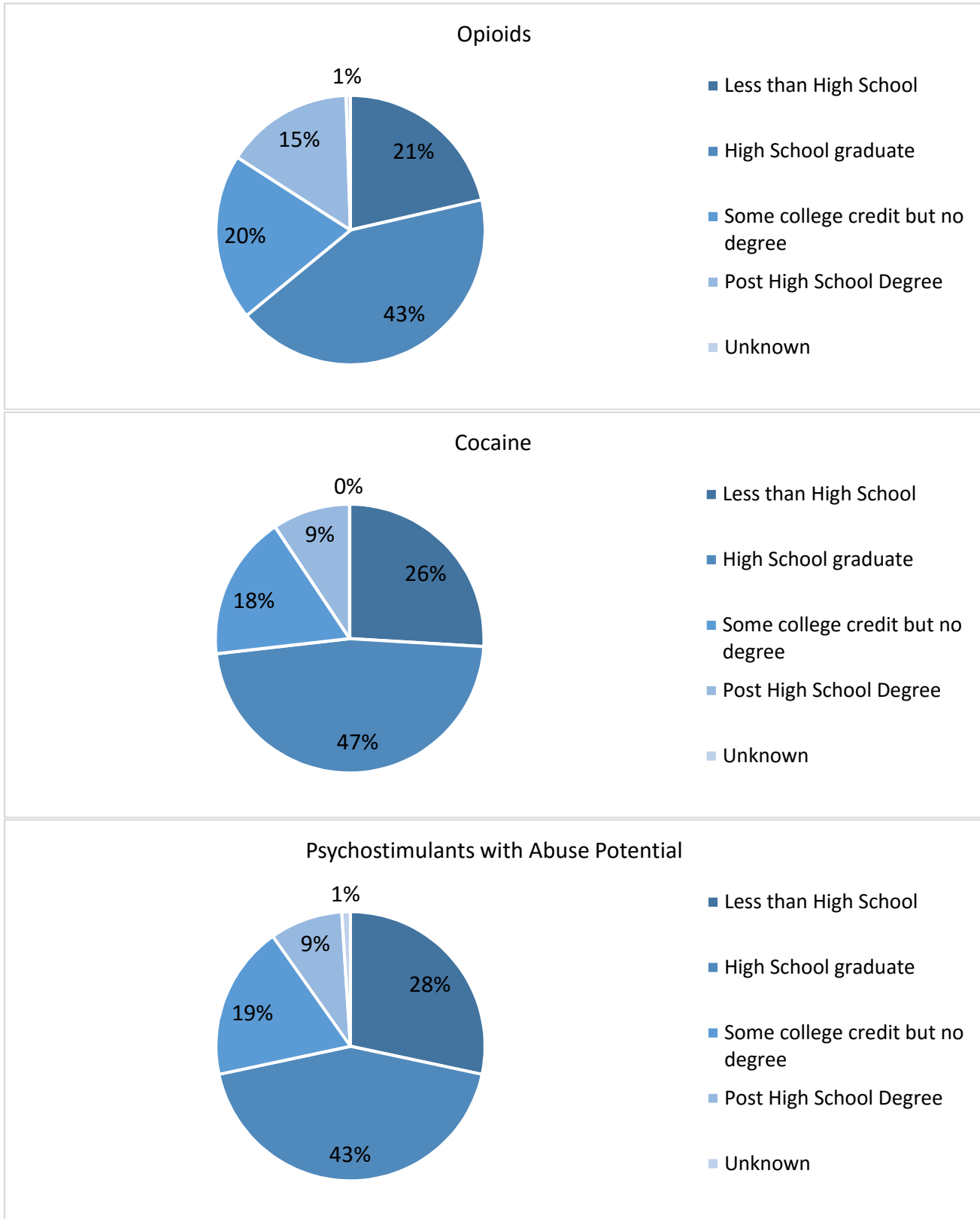


Figure 9.
 Number of Drug Overdose Deaths by Month
 South Carolina, 2017
 Occurrence Data

