



Drug and Alcohol-Related Deaths & Naloxone Use – Racine County (2014 – 2017)

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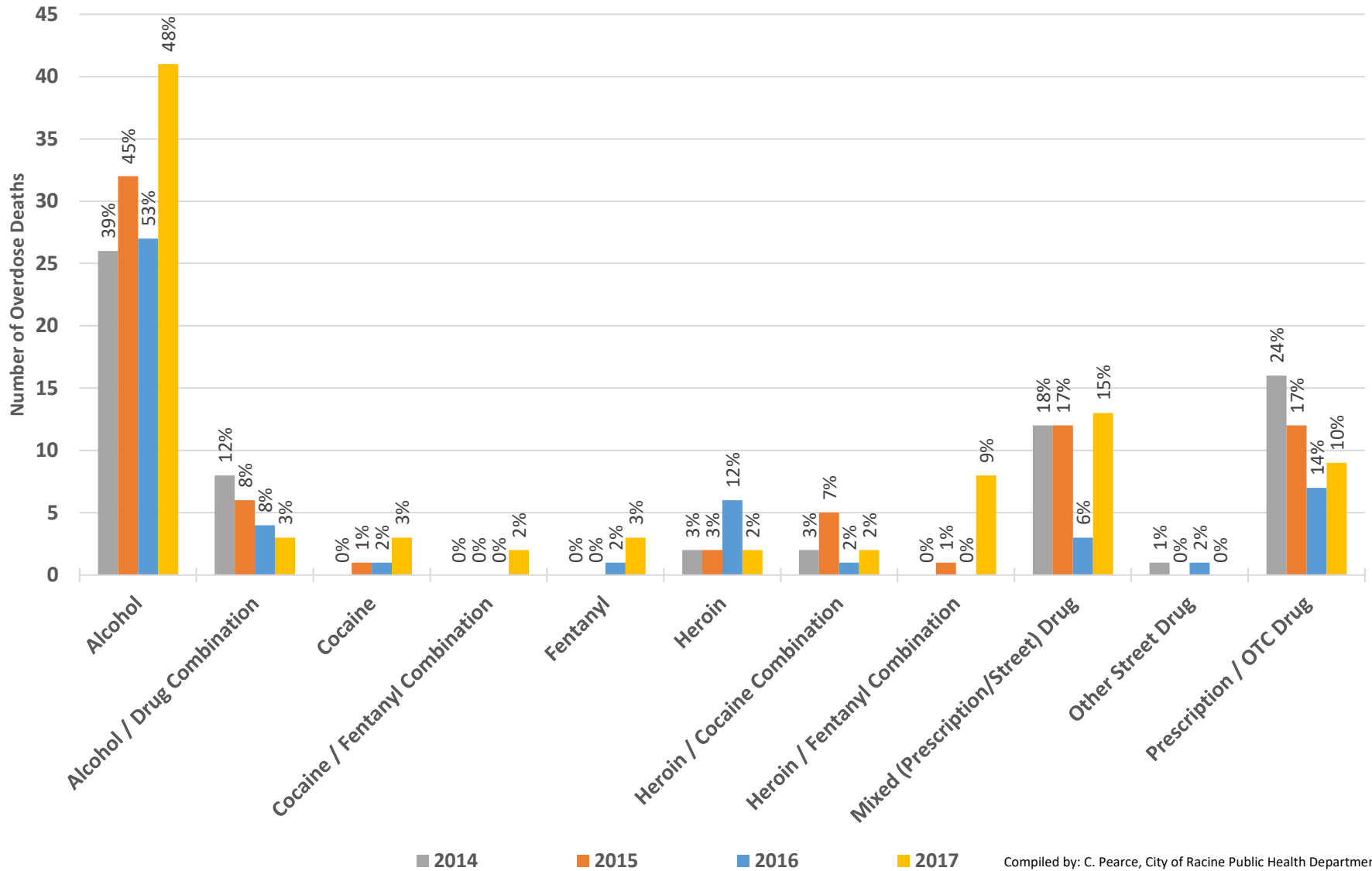
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Drug and Alcohol-Related Deaths – Racine County (2014 – 2017)

	Number of Deaths				Percent of Deaths				Average Age at Death			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Alcohol	26	32	27	41	39%	45%	53%	48%	56	56	59	57
Alcohol / Drug Combination	8	6	4	3	12%	8%	8%	3%	46	53	31	49
Cocaine	0	1	1	3	0%	1%	2%	3%	N/A	60	46	48
Cocaine / Fentanyl Combination	0	0	0	2	0%	0%	0%	2%	N/A	N/A	N/A	42
Fentanyl	0	0	1	3	0%	0%	2%	3%	N/A	N/A	28	38
Heroin	2	2	6	2	3%	3%	12%	2%	46	44	39	27
Heroin / Cocaine Combination	2	5	1	2	3%	7%	2%	2%	33	38	52	37
Heroin / Fentanyl Combination	0	1	0	8	0%	1%	0%	9%	N/A	28	N/A	39
Mixed (Prescription / Street) Drug	12	12	3	13	18%	17%	6%	15%	39	43	27	36
Other Street Drug	1	0	1	0	1%	0%	2%	0%	36	N/A	32	N/A
Prescription / OTC Drug	16	12	7	9	24%	17%	14%	10%	50	47	51	48
	67	71	51	86					49	50	50	49

Compiled by: C. Pearce, City of Racine Public Health Department
Data Source: Racine County Medical Examiner's Office Records

Street Drug, Prescription Drug and Alcohol-Related Deaths – Racine County (2014 – 2017)



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Data Source: Racine County Medical Examiner's Office Records

Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2014 – 2017)

The total number of deaths attributed to the use of street drugs, prescription/over-the-counter drugs, alcohol or a combination of these substances in Racine County over the last several years was 67 (2014), 71 (2015), 51 (2016), and 86 (2017). Alcohol-related deaths continue to be the most common of the categories examined. This was followed by deaths due to prescription/over-the-counter (OTC) drug use as well as a mixture of prescription/OTC and street drugs. Deaths due solely to the use of illegal street drugs (e.g. cocaine, heroin, methamphetamines, or U47700) were less frequent.

From 2014-2017 there were 17, 15, 9, and 20 deaths, respectively, attributed in whole or in part to the use of heroin. Of the 61 total deaths involving heroin, just 12, or 20%, occurred from the use of heroin alone. The majority of deaths occurred when heroin was used in conjunction with alcohol, prescription/over-the-counter drugs or another illegally used drug such as cocaine or fentanyl.

Fentanyl, however, has become an increasing concern. In 2014, two deaths in Racine County were tied to fentanyl use, with 2017 seeing a 1000% increase (over 2014) to 22 fentanyl-related deaths. The majority (19 of 22, or 86%) of fentanyl-related deaths in 2017 occurred when the substance was used in conjunction with one or more other substances. It is evident that fentanyl-related overdose deaths are a growing issue in this area.

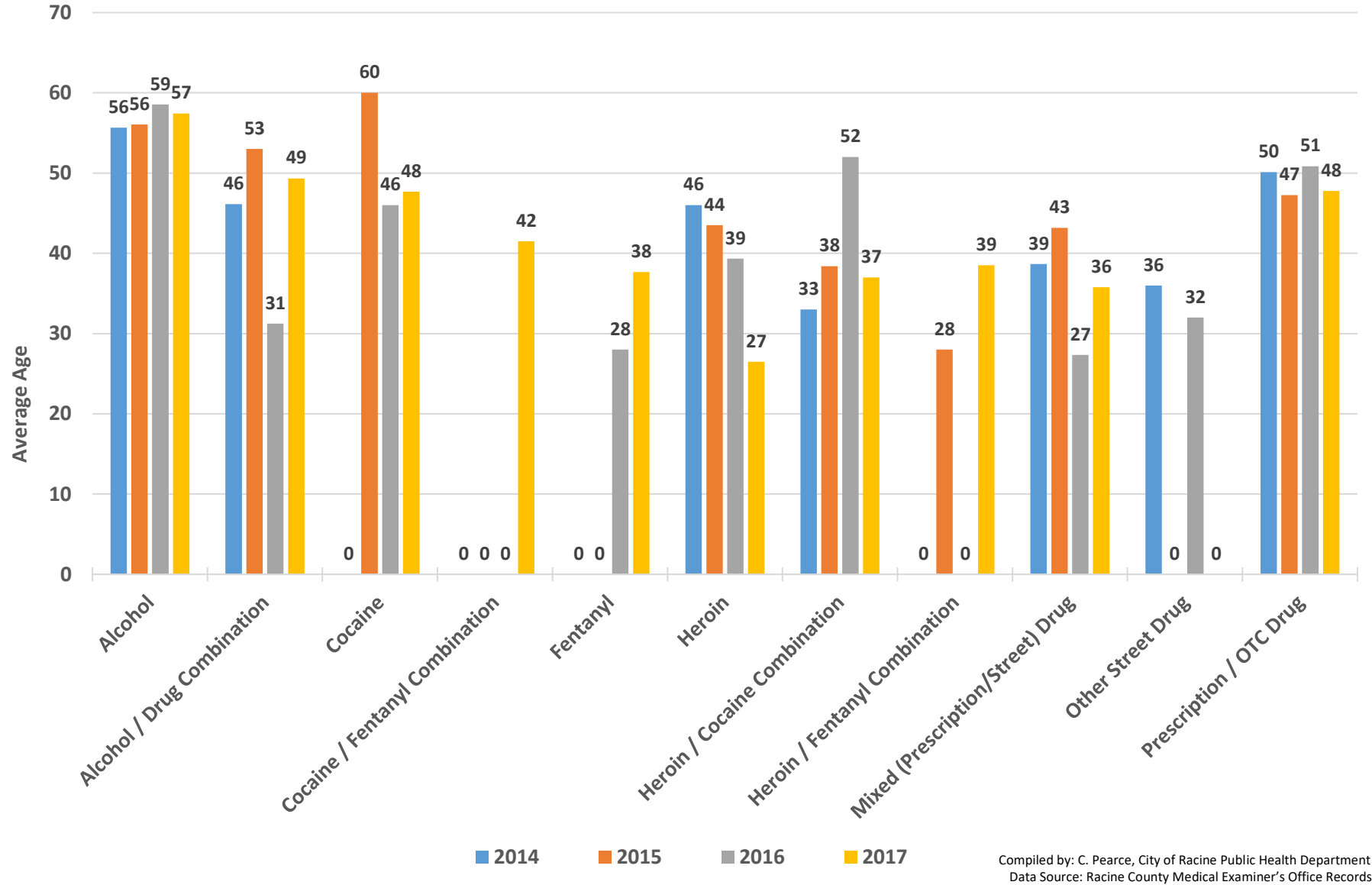
	Number of Deaths				Percent of Deaths				Average Age at Death			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Heroin Present	17	15	9	20	25%	21%	18%	23%	40	41	39	35
Fentanyl Present	2	5	1	22	3%	7%	2%	26%	45	45	28	39
Alcohol Present	34	38	31	44	51%	54%	61%	51%	53	56	55	57

There were two deaths from 2014-2017 attributed to a street drug other than heroin or cocaine; one tied to the use of methamphetamines (2014) and the other to U47700, a synthetic opioid (2016).

For the purpose of this review, drug-related deaths are categorized as follows:

- Alcohol Related: Only deaths with alcohol listed as a cause (cirrhosis, intoxication, etc.) and no other drug listed.
- Alcohol / Drug Combination: Deaths where alcohol and street, prescription, and/or OTC drugs were listed together.
- Cocaine Only: Only deaths with cocaine as the sole cause.
- Cocaine / Fentanyl Combination: Deaths where both cocaine and fentanyl, but no other drug or alcohol, were listed.
- Fentanyl: Only deaths with fentanyl as the sole cause.
- Heroin Only: Only deaths with heroin as the sole cause.
- Heroin / Cocaine Combination: Deaths where both heroin and cocaine, but no other drug or alcohol, were listed.
- Heroin / Fentanyl Combination: Deaths where both heroin and fentanyl, but no other drug or alcohol, were listed.
- Mixed (Prescription and Street) Drug: Deaths where contributing factors were some combination of prescription/OTC drug(s) and street drug(s).
- Other Street Drug: Only deaths with the sole cause as some sort of street drug other than heroin or cocaine.
- Prescription / OTC Drug: Deaths where all contributing factors are prescription and/or over-the-counter drugs.

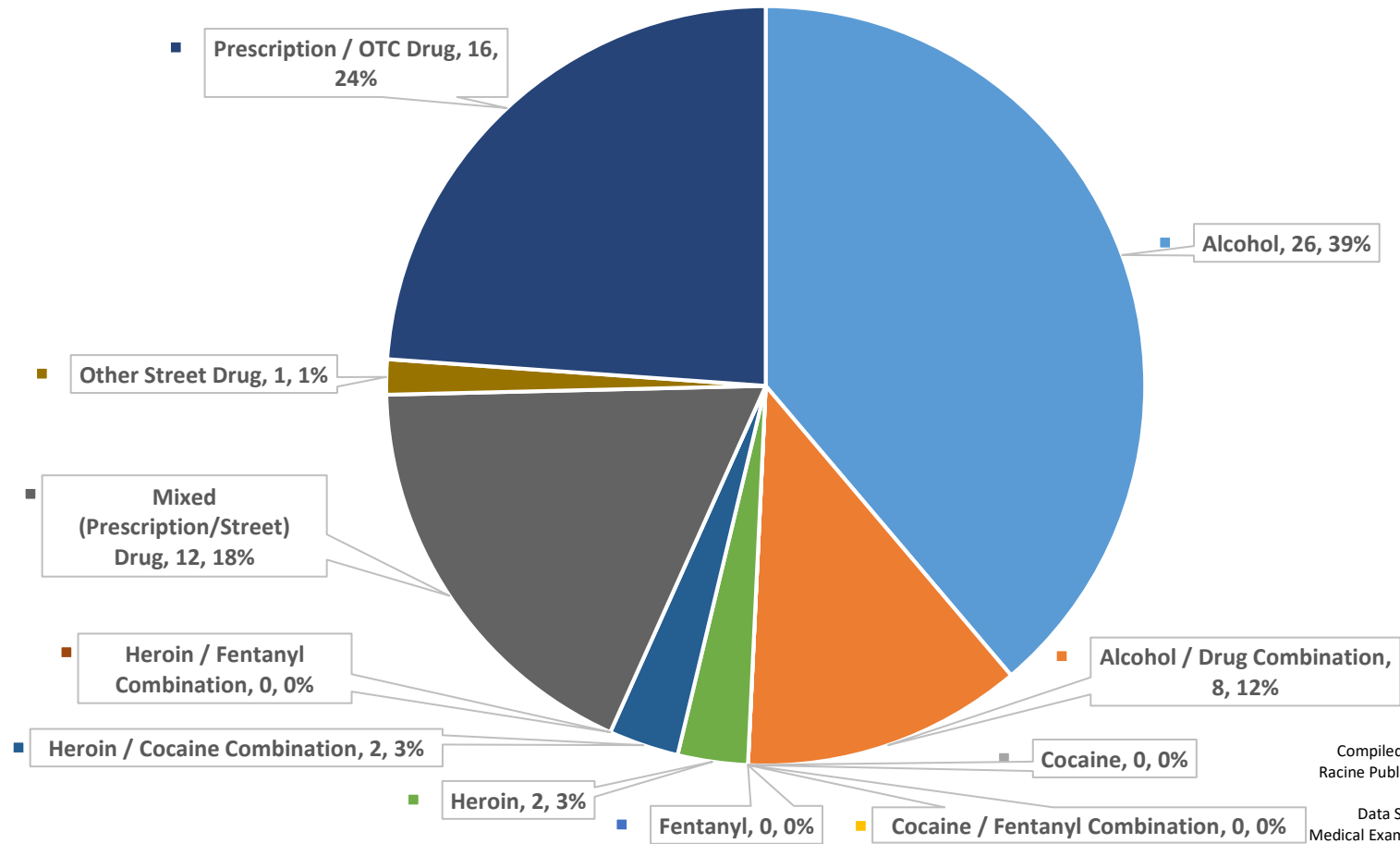
Comparison of Average Age of Death by Drug Category – Racine County (2014 – 2017)



Comparison of average age of death by drug category, 2014 - 2017.

There does not appear to be a concrete pattern among the data when viewing it year-by-year or by each category. It is worth noting that several categories, including those for “Cocaine” and “Other Street Drug” contain a very small number of data points (0-3) in each year. Overall, the sample sets are small in most categories, making it difficult to achieve good averages.

Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2014)



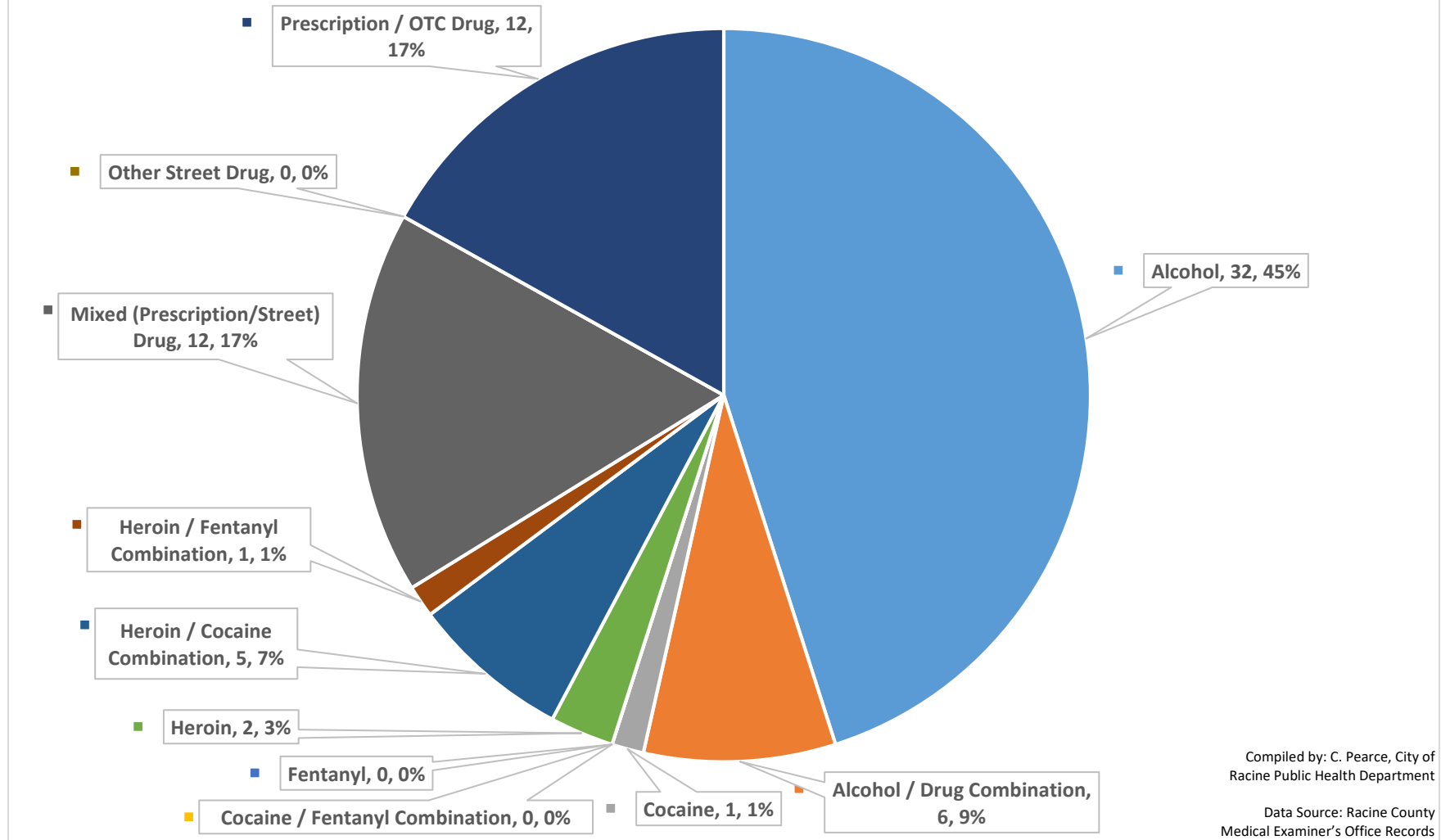
Compiled by: C. Pearce, City of Racine Public Health Department

Data Source: Racine County Medical Examiner's Office Records

Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2014)

In 2014, more than 1 in 3 Racine County deaths related to the use of alcohol, street drugs, and/or prescription drugs was attributable to alcohol use alone (26 of 67 deaths), with an average age at death of 55.7 years (median = 54.5 years, range = 35-76 years). Approximately one-fourth (16 of 67 deaths) were associated with the use of prescription and/or over-the-counter drugs only, with an average age at death of 50.3 years (median = 50 years; range = 27-82 years). When comparing drug-related deaths across multiple categories, heroin was the sole or contributing factor in 17 deaths (25%) in 2014, with an average age at death of 39.5 years (median = 38 years; range = 19-62 years). Other combinations of street, prescription, and and/or over-the-counter drugs, with and without the addition of alcohol, constituted lesser proportions of deaths. The single death in the “Other Street Drug” category resulted from methamphetamine use. Fentanyl was a contributing factor in two deaths (average age = 44.5 years, ages 36 and 53 years).

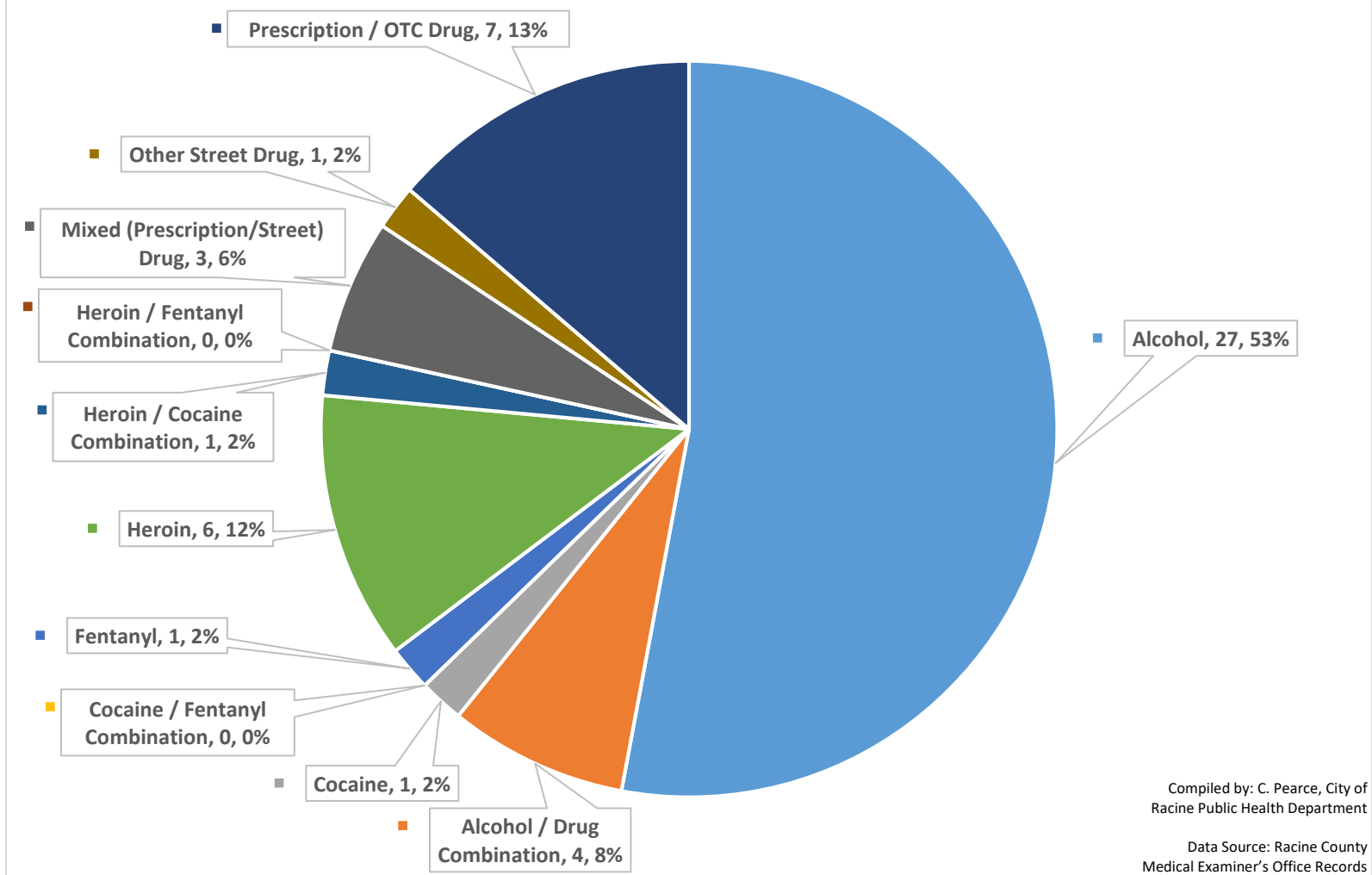
Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2015)



Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2015)

Alcohol consumption was responsible for nearly half of the drug-related deaths in 2015 (32 of 71 deaths), with an average age at death of 56.1 years (up slightly from 2014). Seventeen percent of the deaths (16 of 71 deaths) were tied to the use of prescription and/or over-the-counter drugs, with an average age at death of 47.6 years (median = 47.5 years; range = 16-86 years). Heroin was the sole or contributing factor in 15 deaths (21%), with an average age at death of 41.1 years (median = 40 years; range = 26-62 years), slightly down from 2014. With an increase from 2014, Fentanyl contributed to five deaths in 2015 (average age = 44.6 years; median = 45 years; range = 28-58 years).

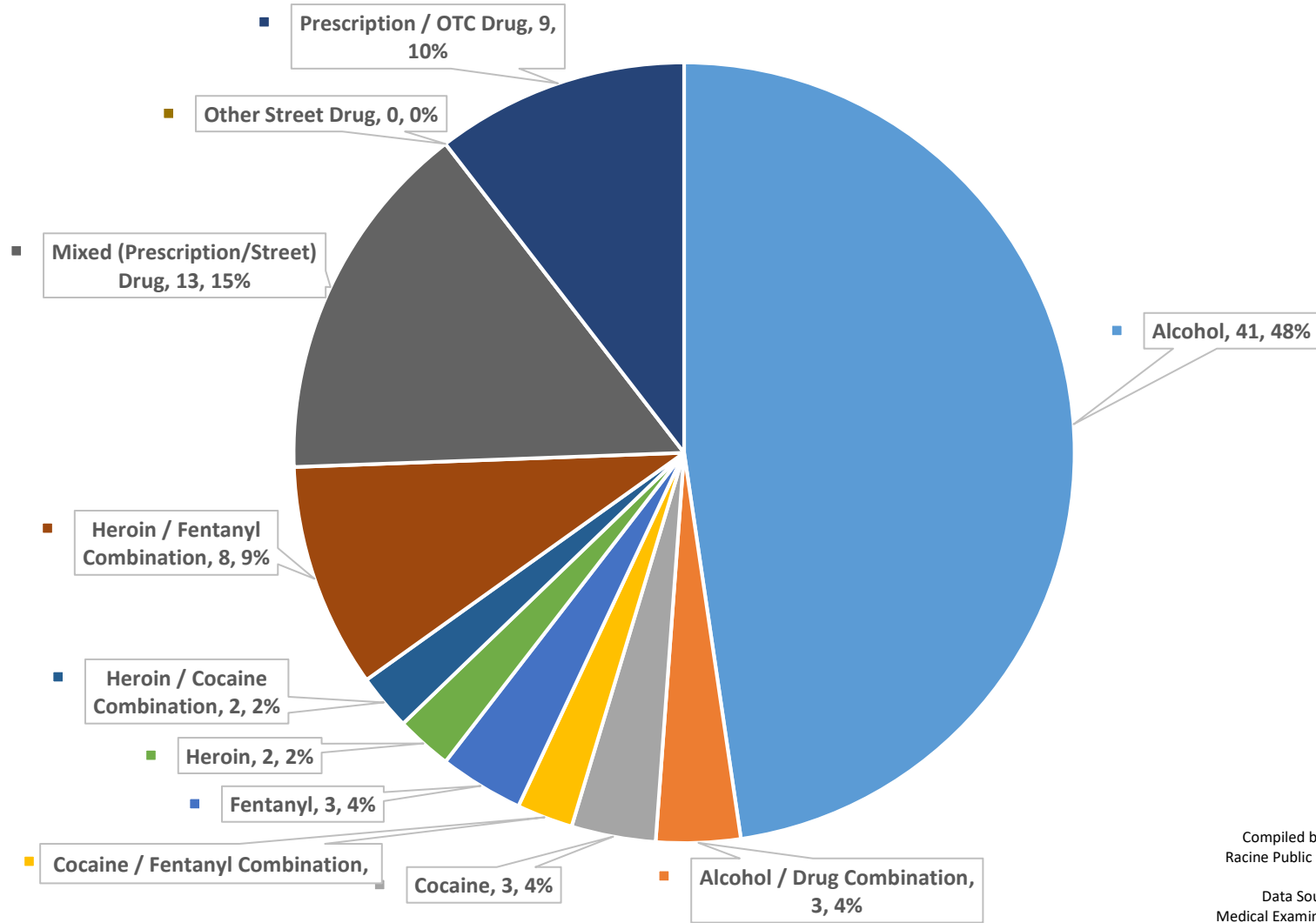
Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2016)



Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2016)

Alcohol use/abuse was the main cause of death for more than half of all drug-related deaths in 2016 (27 of 51), with an average age at death of 58.6 years; slightly higher than 2014 - 2015. Heroin was the sole or contributing factor in nine deaths (18%), with an average age at death of 38.7 years (median = 34 years; range = 25-55 years); lower in both number and percentage than 2014 - 2015. However, 2016 was the first year that heroin-related deaths surpassed prescription/over-the-counter drug deaths in recent years. Fourteen percent of deaths (7 of 51) were tied to the use of only prescription and/or over-the-counter drugs, with an average age at death of 51 years (median = 54 years; range = 39-63 years), followed by alcohol/drug combinations, prescription/street drug combinations, cocaine and all other street drugs. The single death attributed to the “Other Street Drug” category was the result of the synthetic opioid U47700. Fentanyl was involved in one death in 2016 (age at death = 28 years).

Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2017)

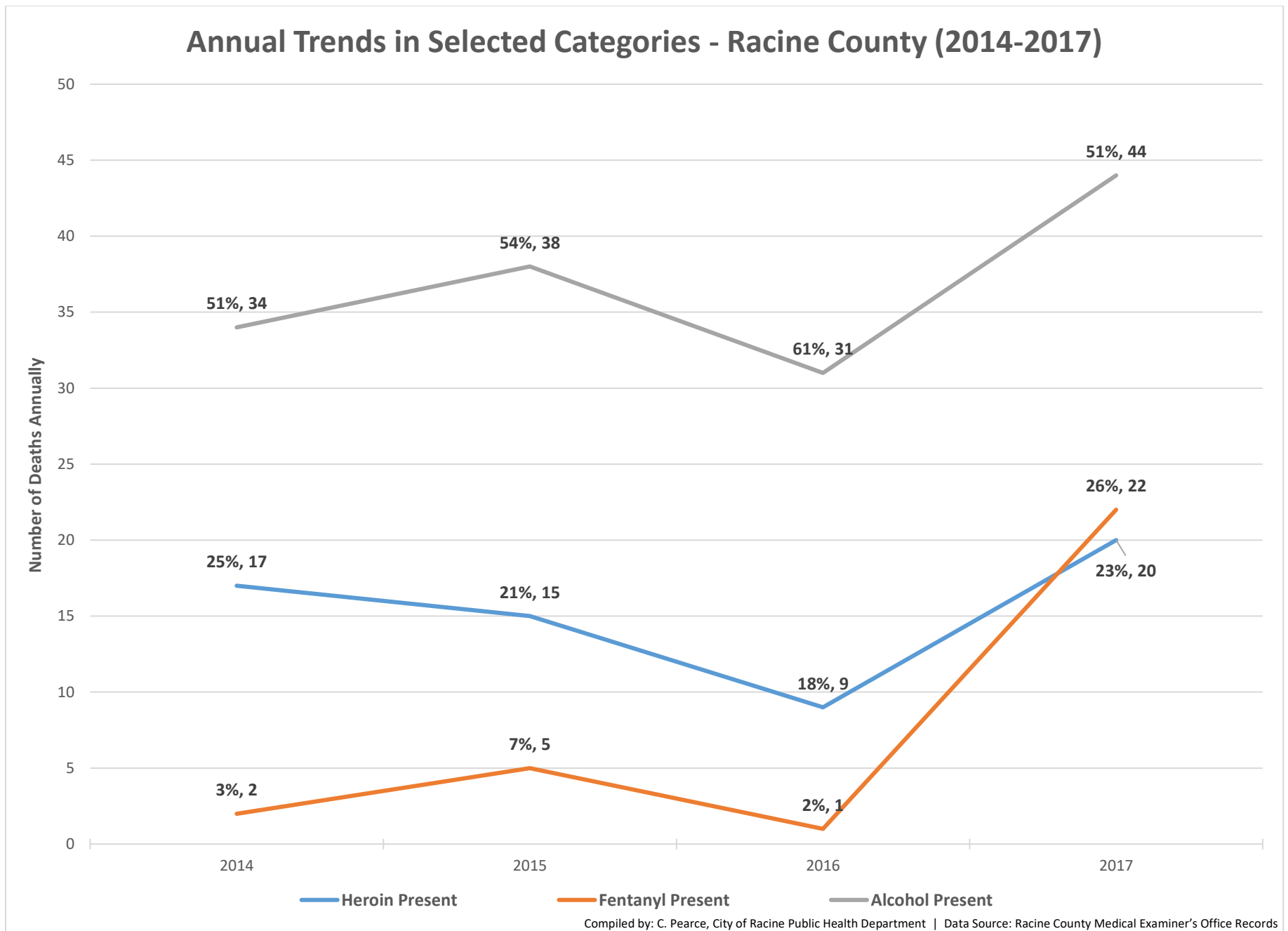


Compiled by: C. Pearce, City of Racine Public Health Department
 Data Source: Racine County Medical Examiner's Office Records

Street Drug, Prescription Drug, and Alcohol-Related Deaths – Racine County (2017)

Alcohol and drug-related deaths in Racine County saw a sharp increase in 2017, with 86 total deaths for the year. Alcohol use/abuse remained the main cause of death, accounting for nearly half of all drug-related deaths in 2016 (41 of 86), with an average age at death of 57.4 years (median = 61 years; range = 33-73 years). Deaths related to Heroin use, as well as to Fentanyl use, also increased over previous years. Heroin was the sole or contributing factor in 20 deaths (23%), with an average age at death of 34.8 years (median = 33 years; range = 26-62 years). Fentanyl contributed to 22 deaths in 2017 (average age = 38.8 years; median = 35.5 years; range = 23-62 years), a significant increase over previous years. Ten percent of deaths (9 of 86) were tied to the use of only prescription and/or over-the-counter drugs, with an average age at death of 48 years (median = 48 years; range = 20-77 years).

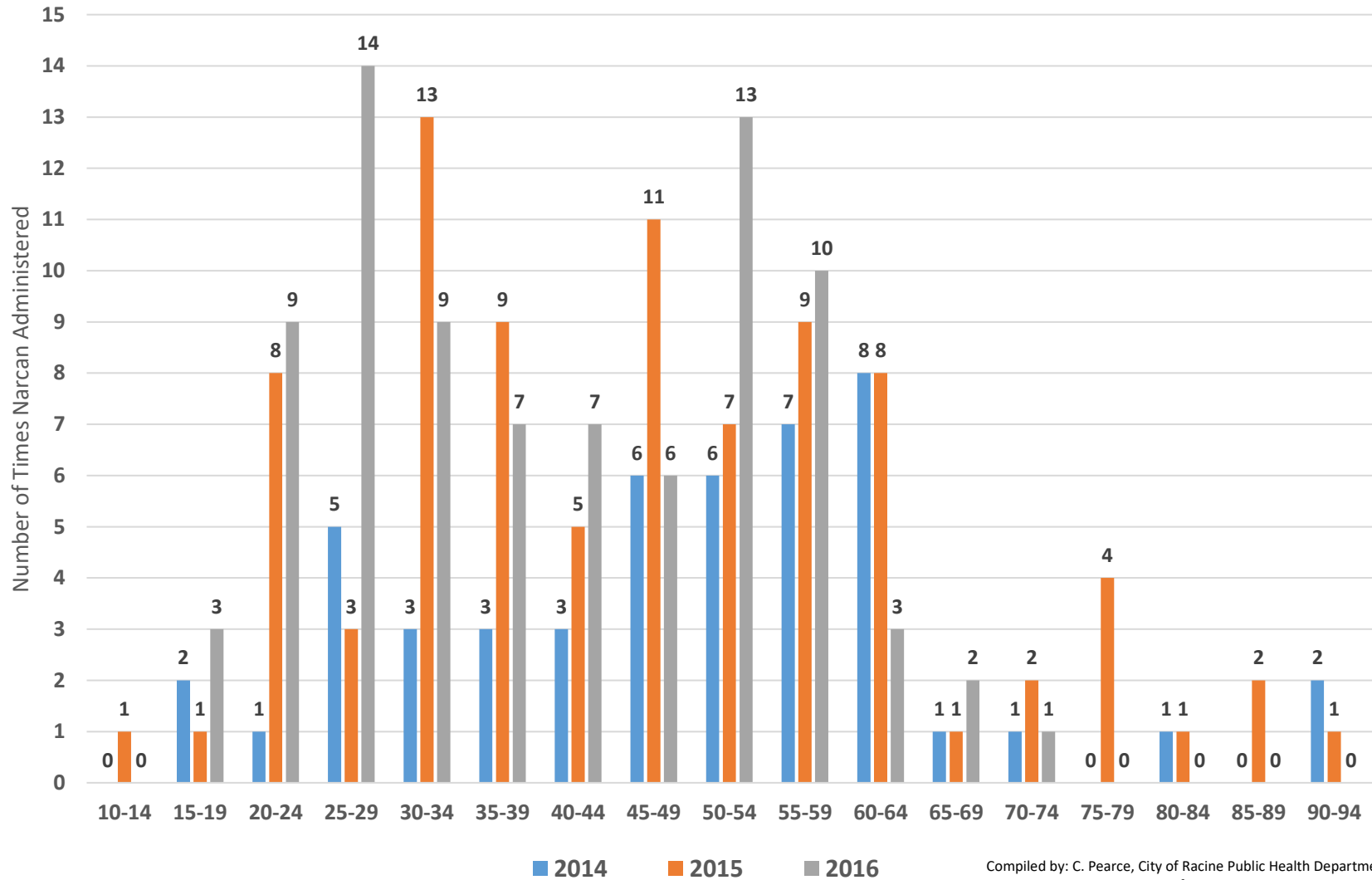
Annual Trends in Selected Categories - Racine County (2014-2017)



Annual Trends in Selected Categories – Racine County (2014-2017)

As can be seen here, the overall proportion of deaths annually involving alcohol or heroin has remained mostly consistent over the past four years. However, deaths tied to Fentanyl have increased significantly since 2014, even surpassing those related to Heroin use in 2017. This suggests a shift in drug use trends and/or street drug composition in the area.

Racine Fire Department Naloxone Administration by Age Group (2014-2016)

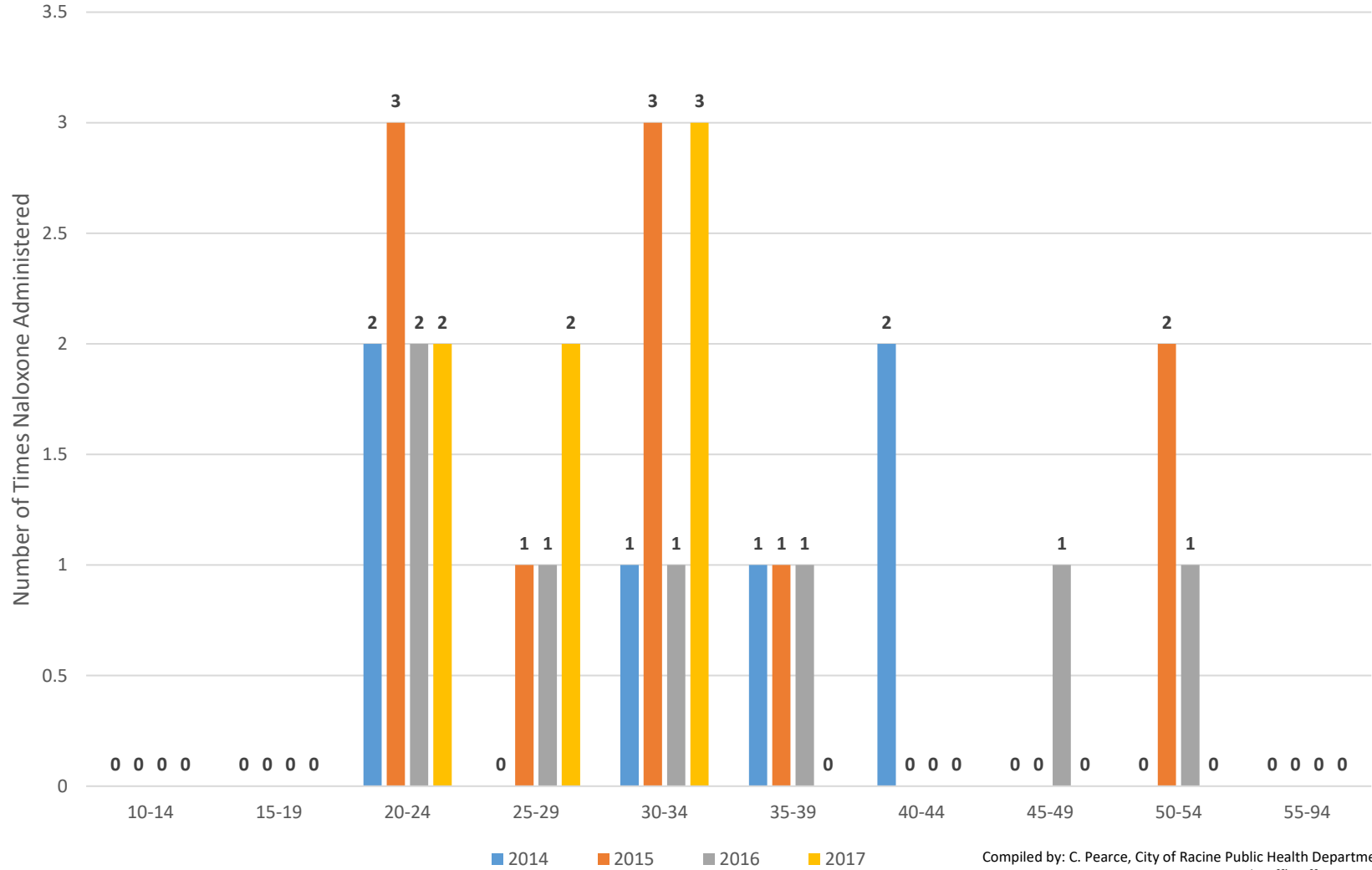


Compiled by: C. Pearce, City of Racine Public Health Department
Data Source: City of Racine Fire Department Records

City of Racine Fire Department Naloxone Administration by Age Group (2014-2016)

The number of times Naloxone has been administered by the City of Racine Fire Department (RFD) on emergency medical calls has increased greatly since 2014, with 49 uses in 2014 (25 male, 24 female), 86 in 2015 (55 male, 31 female), and 84 in 2016 (55 male, 29 female). The ages of individuals receiving Naloxone varied widely throughout each year. In 2014, the average age of those receiving Naloxone from RFD was 49.6 years (median = 50 years; age range = 18-94 years). The year 2015 saw a slight decrease in the average age of recipients, dropping to 46.5 years (median = 46 years; age range = 14-90 years). In 2016, the average age dropped even further to 40.2 years (median = 39.5 years; age range = 18-74 years). Overall, the age range receiving the most Naloxone injections from RFD is 20-64 years. Data were not available for 2017.

Racine County Sheriff's Office Naloxone Administration by Age Group (2014-2017)



Racine County Sheriff's Office Naloxone Administration by Age Group (2014-2017)

Naloxone was used by the Racine County Sheriff's Office (RCSO) in Racine County a total of 30 times from 2014-2017. Of the 6 uses in 2014, 3 were male and 3 were female with an overall average age of 33.2 years (median = 34.5 years; age range = 20-44 years). In 2015, there were 6 males and 4 females who received Naloxone through RCSO; the average age was marginally lower than 2014 at 32.7 years (median = 31 years; age range = 21-53 years). In 2016, 2 males and 5 females received a Naloxone injection from RCSO, with a slightly higher average age of 34.6 years (median = 33 years; age range = 22-53 years). In 2017, 4 males and 3 females saved by Naloxone administered by RCSO; the average age was lower than any previous year at 27.4 years (median = 25 years; age range = 20-34 years).