

Narcan[®] Distribution Collaborative

Expanding Access in Hamilton County, Ohio and the Impacts

By

Tim Ingram, Health Commissioner
Hamilton County Public Health
Cincinnati, Ohio



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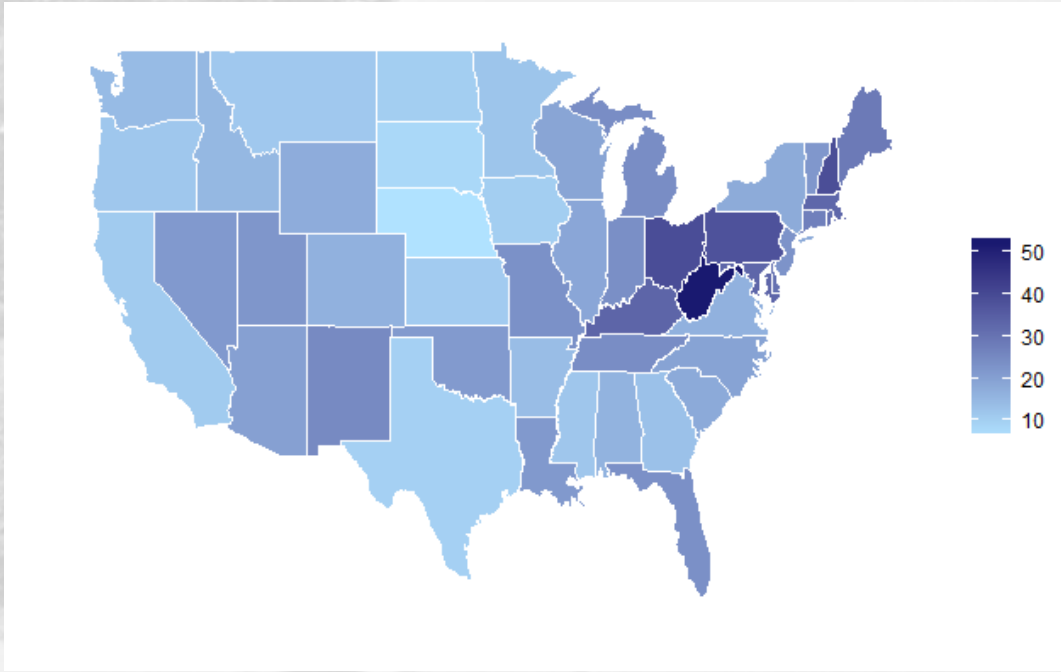
Credits

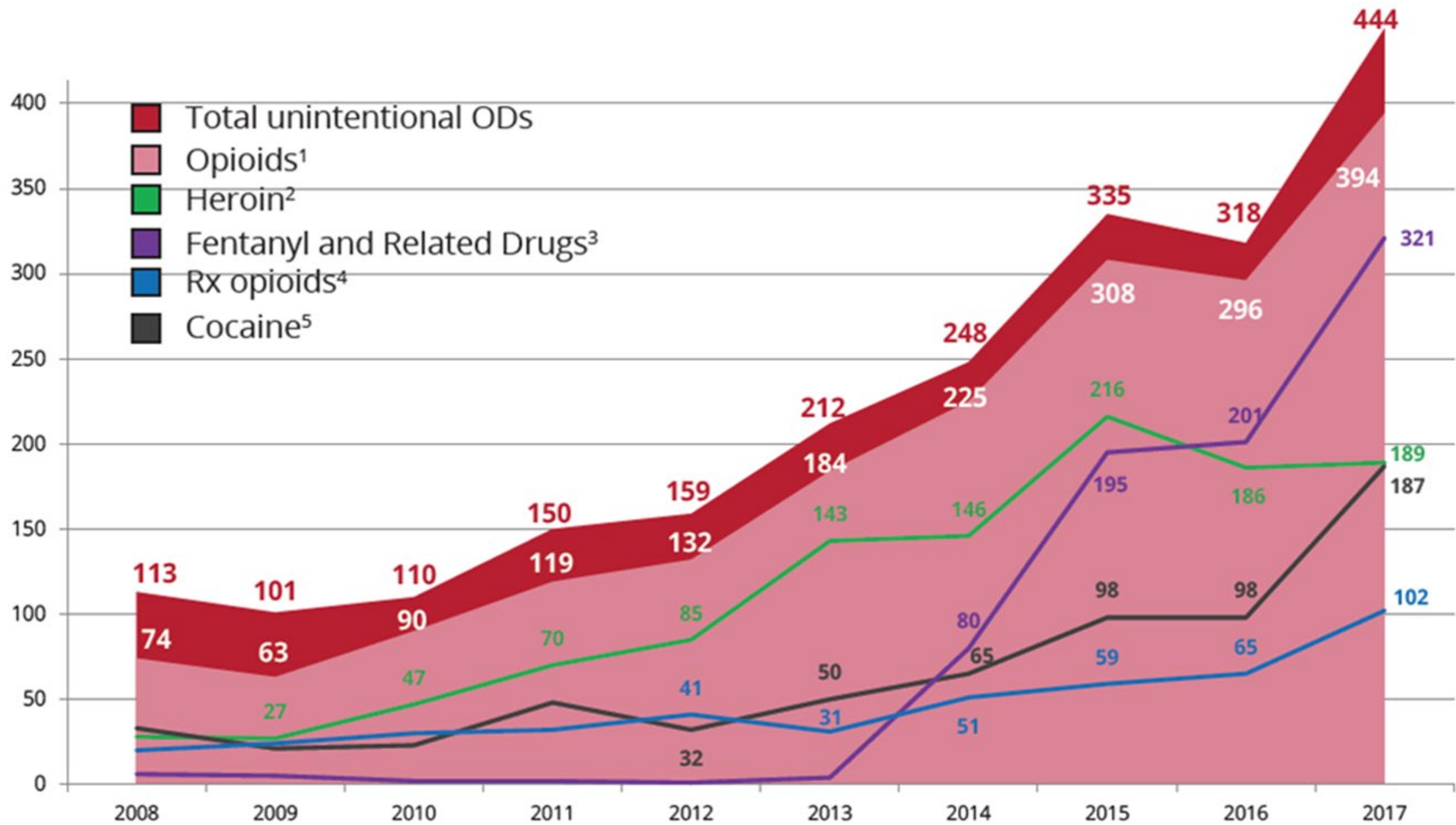
- Shawn A. Ryan, MD, MBA-BrightView Health
- Michael Lyons, MD, MPH – UC-Dept of Emergency Medicine
- Adapt Pharma-Emergent BioSolutions
- Five Health Care Systems and their Foundations
- Interact For Health and Deaconess Foundations
- Hamilton County Heroin Coalition—Bd of County Commissioners

Background

- US age-adjusted overdose rates in 2016, by state (per 100,000 population):
- Ohio is 2nd (39/100,000; 31% increase in 2016)
- Kentucky is 5th (34/100,000; 12% increase in 2016)
- Indiana is 15th (24/100,000; 23% increase in 2016)
- All three states had statistically significant increases in overdose deaths from 2015—2016

**United States Center for Disease Control and Prevention (CDC)*
https://www.cdc.gov/drugoverdose/data/state_deaths.html





Primary Goals:

- A. Rapidly and substantially increase distribution of 12,500 cartons (25,000 doses) of Narcan® (naloxone) throughout the community.
- B. Reduce by >50% both the number of fatal opioid overdoses and those resulting in intensive care unit (ICU) admission.

Primary Outcomes Measures:

- 1) Number of naloxone doses distributed.
- 2) Number of naloxone doses administered.
- 3) Number and proportion of opioid overdoses that result in death or ICU admission.



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Table 1. Naloxone provided in Hamilton County, October 1, 2017 thru September 30, 2018

	Total	Current (Sep-18)	Average per Month	Peak Month
	N	N	Median (IQR)	N
NDC NARCAN [®] cartons, take-home use	10,711	676	926 (661-1,148)	1,718
NDC NARCAN [®] cartons, 1 st responder administration	406	0	6 (0-73)	120
Non-NDC Project DAWN NARCAN [®] cartons*	84	15	12 (0-15)	25
Non-NDC, 1 st responder administration NARCAN [®] cartons	1,002	27	54 (26-126)	267
Prescriptions for naloxone (any formulation)	2,531	215	211 (163-239)	319

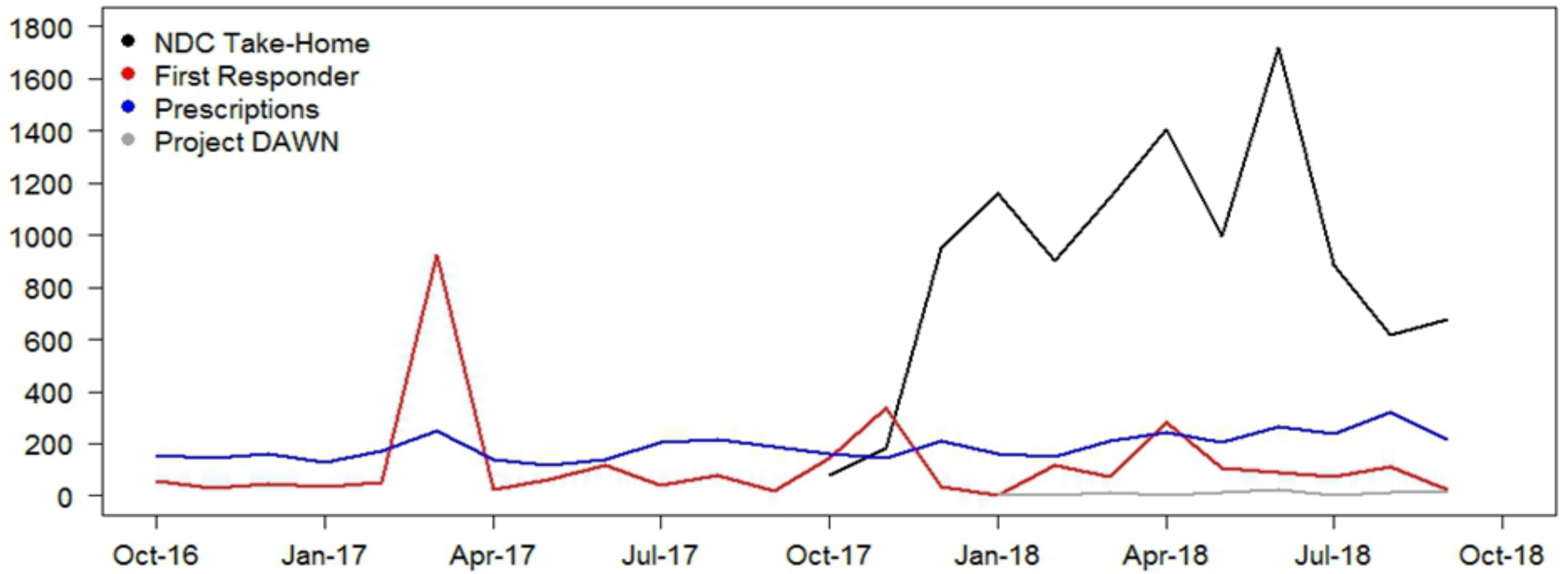
** Project DAWN distribution data for Hamilton County is available from January thru September 2018. Project DAWN is a community-based naloxone distribution program providing additional naloxone to individuals throughout the region, on a much smaller scale than NDC.*



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Naloxone Distributed in Hamilton County*



Residential Zip Codes of Individuals Distributed NARCAN® Cartons in Ohio, Kentucky, and Indiana (N = 6,285)

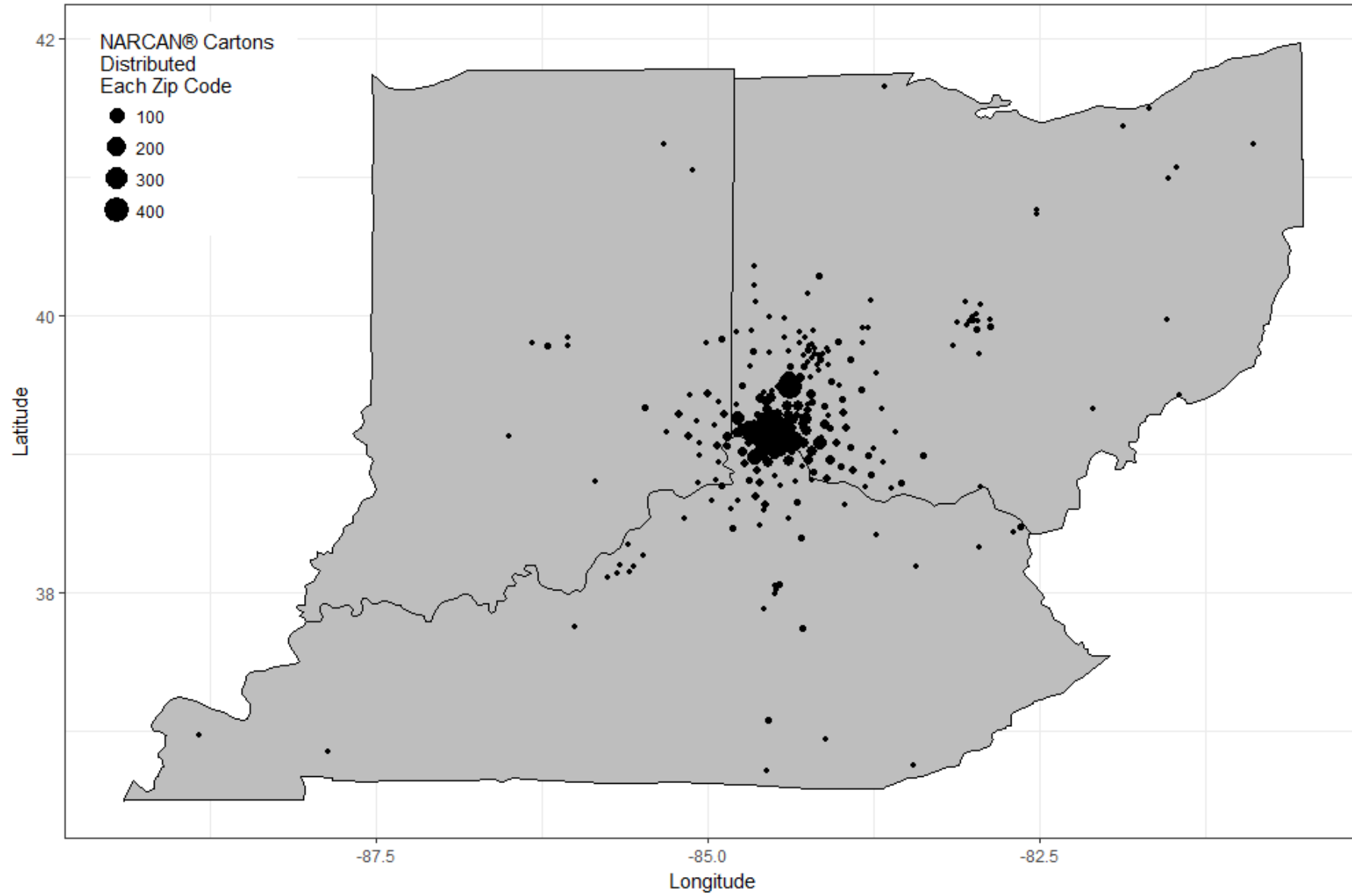


Table 2. Description of data collection for NDC take-home NARCAN® distribution to individuals

Data Collection Type	N
Total cartons distributed to sites	11,117
Cartons with individual recipient data expected	10,353
Cartons with individual recipient data received	8,288
Cartons with individual recipient data not expected*	764
Types of individual data received	8,288
Survey (shown in Tables 3—6, and Figure 2)	8,100
Medical records only (shown in Table 3)	188

Table 3. Types of sites where individuals were distributed NDC take-home NARCAN® cartons (N = 8,288)

Site Type	Distributes Cartons to...	N	(%)
Syringe Exchange	Injection drug users exchanging needles	3,703	(44.7)
Correctional Facility	Inmates and visitors to correctional facilities	1,460	(17.6)
Treatment Provider	Clients, employees, and on-hand for community members	1,140	(13.8)
Community Outreach	Community event participants and staff/employees of community organizations	738	(8.9)
Social Service Agency	Clients, employees, and volunteers	620	(7.4)
Nonprofit	Employees, volunteers, and clients	233	(2.8)
ED Pharmacy	ED overdose patients	188	(2.3)
Public Health	Community events participants, employees, and to have on hand at center	93	(1.1)
Nonprofit/Treatment Provider	Clients, employees, and on-hand for community members	28	(0.3)
Faith-Based Organization	Individuals at high-risk for injection drug use and employees	18	(0.2)
Quick Response Teams	Employees to distribute on QRT runs	15	(0.2)
Law Enforcement	Kept on site and employees to have on hand	13	(0.2)
Urgent Care	Employees to have on hand	5	(0.1)
Nonprofit Pharmacy	Community members/patients	1	(0.0)
Missing	Unknown	33	(0.4)

Table 4. Request type for individuals distributed NDC take-home NARCAN® cartons, by site type (N = 8,100)*

Site Type	Self-Request (n=3,393)		Staff-Initiated (n=3,832)		Missing Data (n=875)	
	n	%	n	%	n	%
Syringe Exchange	1,055	(31.1)	2,396	(62.5)	252	(28.8)
Correctional Facility	972	(28.6)	246	(6.4)	242	(27.7)
Treatment Provider	794	(23.4)	143	(3.7)	203	(23.2)
Community Outreach	468	(13.8)	182	(4.7)	88	(10.1)
Social Service Agency	21	(0.6)	535	(14.0)	64	(7.3)
Nonprofit	53	(1.6)	180	(4.7)	0	(0.0)
Public Health	20	(0.6)	73	(1.9)	0	(0.0)
Nonprofit/Treatment Provider	0	(0.0)	28	(0.7)	0	(0.0)
Faith-Based Organization	0	(0.0)	0	(0.0)	18	(2.1)
Quick Response Teams	2	(0.1)	13	(0.3)	0	(0.0)
Law Enforcement	0	(0.0)	13	(0.3)	0	(0.0)
Urgent Care	0	(0.0)	5	(0.1)	0	(0.0)
Nonprofit Pharmacy	1	(0.0)	0	(0.0)	0	(0.0)
Missing	7	(0.2)	18	(0.5)	8	(0.9)

* Does not include the 188 cartons distributed to individuals from ED pharmacies

Table 5. Reasons for receiving NDC take-home NARCAN[®] carton (N = 8,100)*

Reason (each person may select more than 1)^	n	%
“If I overdose” (individual use)	2,814	(34.7)
“If family/friend overdoses”	2,285	(28.2)
“If I see someone overdose”	3,768	(46.5)
“Location to have on hand”	658	(8.1)
“Unknown”	1,776	(21.9)
Missing	961	(11.9)

* Does not include the 188 cartons distributed to individuals from hospitals/pharmacies

^ Of the 7,139 (88.1%) individuals who responded, 2,361 selected > 1 reason (675 selected two, 1,571 selected three, and 115 selected all four possible options)

Table 6. Prior opioid use history, individuals distributed an NDC take-home NARCAN[®] cartons (N=8,100)*

Prior opioid history question (% is by row)	Yes		No		Not available		Missing	
	n	(%)	n	(%)	n	(%)	n	(%)
Administered Narcan [®] , ever	3,225	(39.8)	3,616	(44.6)	974	(12.0)	285	(3.5)
Overdosed on opioid, ever	2,286	(28.2)	4,519	(55.8)	1,016	(12.5)	279	(3.4)
If ever overdosed, did you overdose multiple times? [^]	1,635	(71.5)	605	(26.5)	40	(1.7)	6	(0.3)
Injected drugs, ever	3,910	(48.3)	2,776	(34.3)	1,133	(14.0)	281	(3.5)
If ever IVU, have you injected in past 30 days? [¥]	3,305	(84.5)	459	(11.7)	132	(3.4)	14	(0.4)
Received opioid treatment, ever	3,080	(38.0)	3,550	(43.8)	1,175	(14.5)	295	(3.6)

* Does not include the 188 cartons distributed to individuals from hospitals/pharmacies

[^] Only applicable if answered “yes” to opioid overdose, ever (n = 2,286)

^{^^} Only applicable if answered “yes” to injected drugs, ever (n = 3,910)

Table A: Drug overdose outcomes in Hamilton County, comparing eight months prior to the start of NDC compared to the eight months NDC was implemented.

	Eight Months Pre NDC Feb 17-Sep 17	Eight Months Post NDC Oct 17-May 18	% Change
Drug Overdose Outcomes			
ED Visits*	2,911	1,690	-41.9
EMS Runs*	3,063	1,910	-37.6
Drug Overdose Deaths – Hamilton County Residents	333	230	-30.9
Opioid Overdose Deaths – Hamilton County Residents	290	201	-30.7

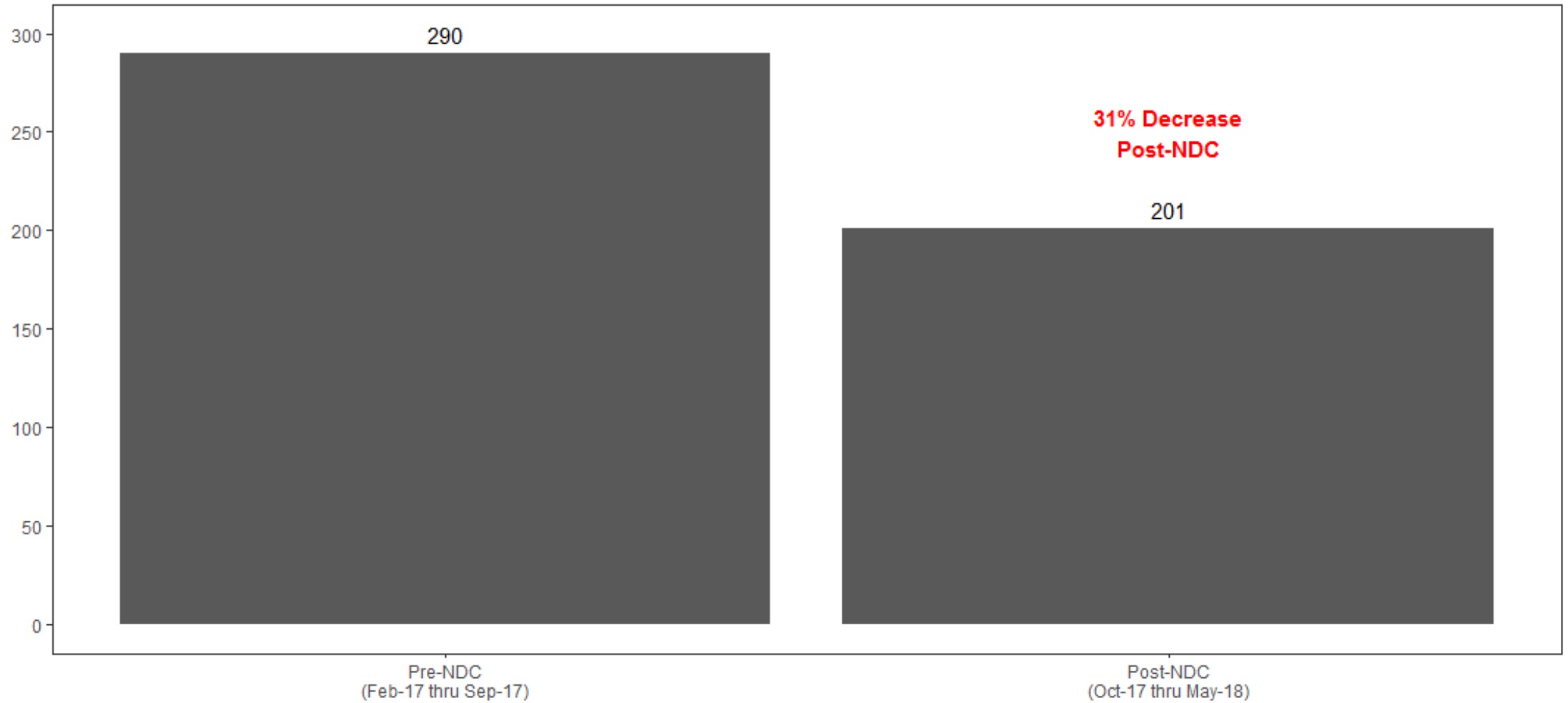
* Data for ED Visits and EMS Runs does not allow for opioid-related specificity

Table B: Drug overdose outcomes in Hamilton County, 2017 compared to 2018.

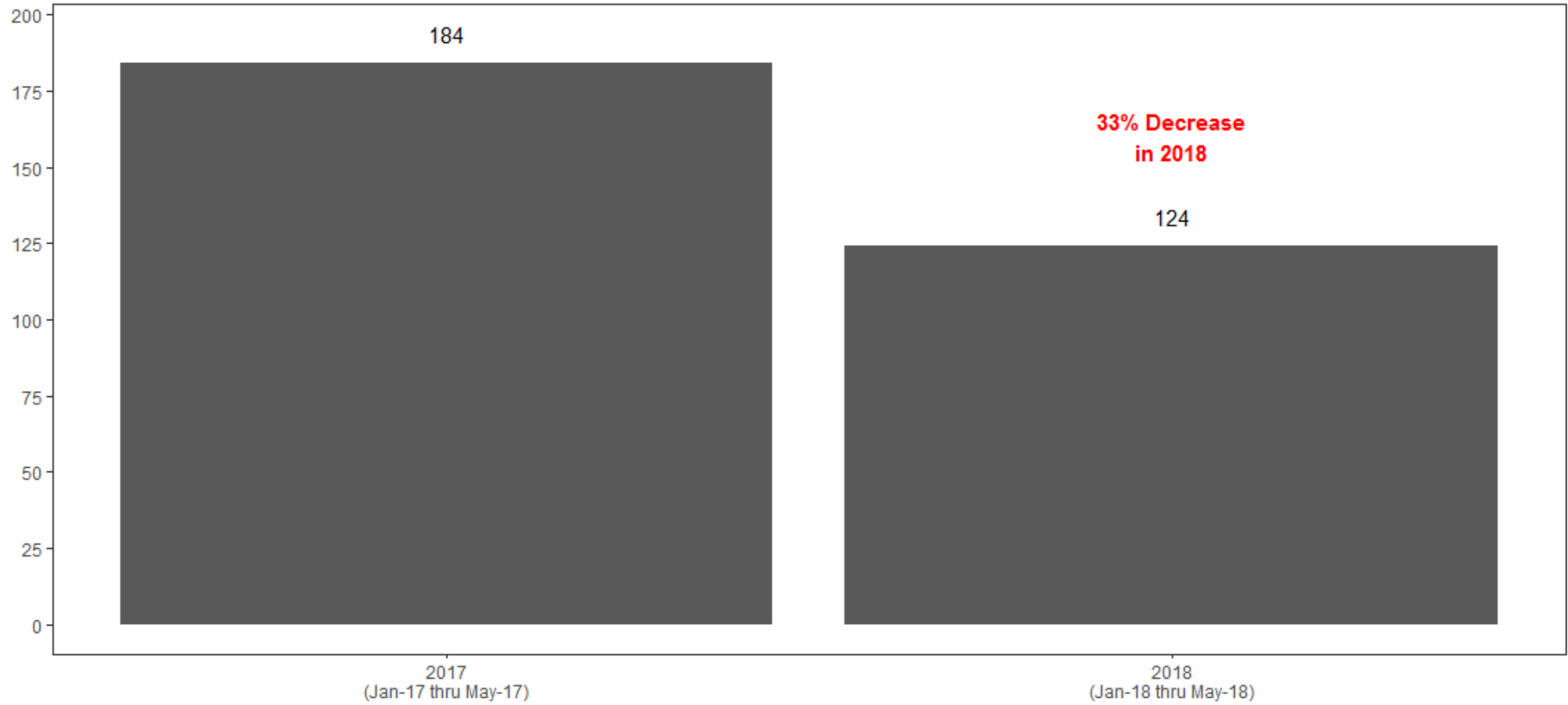
	Year to Date Jan-May 2017	Year to Date Jan-May 2018	% Change
Drug Overdose Outcomes			
ED Visits*	1,920	1,021	-46.8
EMS Runs*	1,935	1,087	-43.8
Drug Overdose Deaths – Hamilton County Residents	211	147	-30.3
Opioid Overdose Deaths – Hamilton County Residents	184	124	-32.6

* Data for ED Visits and EMS Runs does not allow for opioid-related specificity

Opioid Overdose Deaths in Hamilton County: Pre-NDC & Post-NDC, Total



Opioid Overdose Deaths in Hamilton County: 2017 & 2018, Total



Summary

- Opioid Drug Deaths decreased by 30.7% over the last eight months compared with Pre-NDC time period in Hamilton County, Ohio.
- Emergency Dept visits and EMS transport runs have decreased overall for all drug overdoses in 2018.
- No adverse health events reported to date as a result of administering Narcan[®]
- The NDC work will continue into 2019.

References

- Narcan® Distribution Collaborative Report: October 2018, revised December 3, 2018, University of Cincinnati Medical Center (subject to change as more data becomes available).
- Hamilton County Public Health Overdose Surveillance, <https://www.hamiltoncountyhealth.org/>
- Hamilton County Coroner's Office Drug Overdose Death Data
- Centers for Disease Control and Prevention, Opioids Portal <https://www.cdc.gov/opioids/>
- Ohio Dept of Health, EpiCenter Surveillance and ODH Public Health Data Warehouse, <https://odh.ohio.gov/wps/portal/gov/>

Thank-You

Contact information

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HAMILTON COUNTY OVERDOSE REPORT DECEMBER 2018

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Hamilton County Public Health
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Figure 1. Monthly counts of emergency department visits¹, 911 dispatches², and deaths due to overdose³; Hamilton County, December 2017 - December 2018⁴

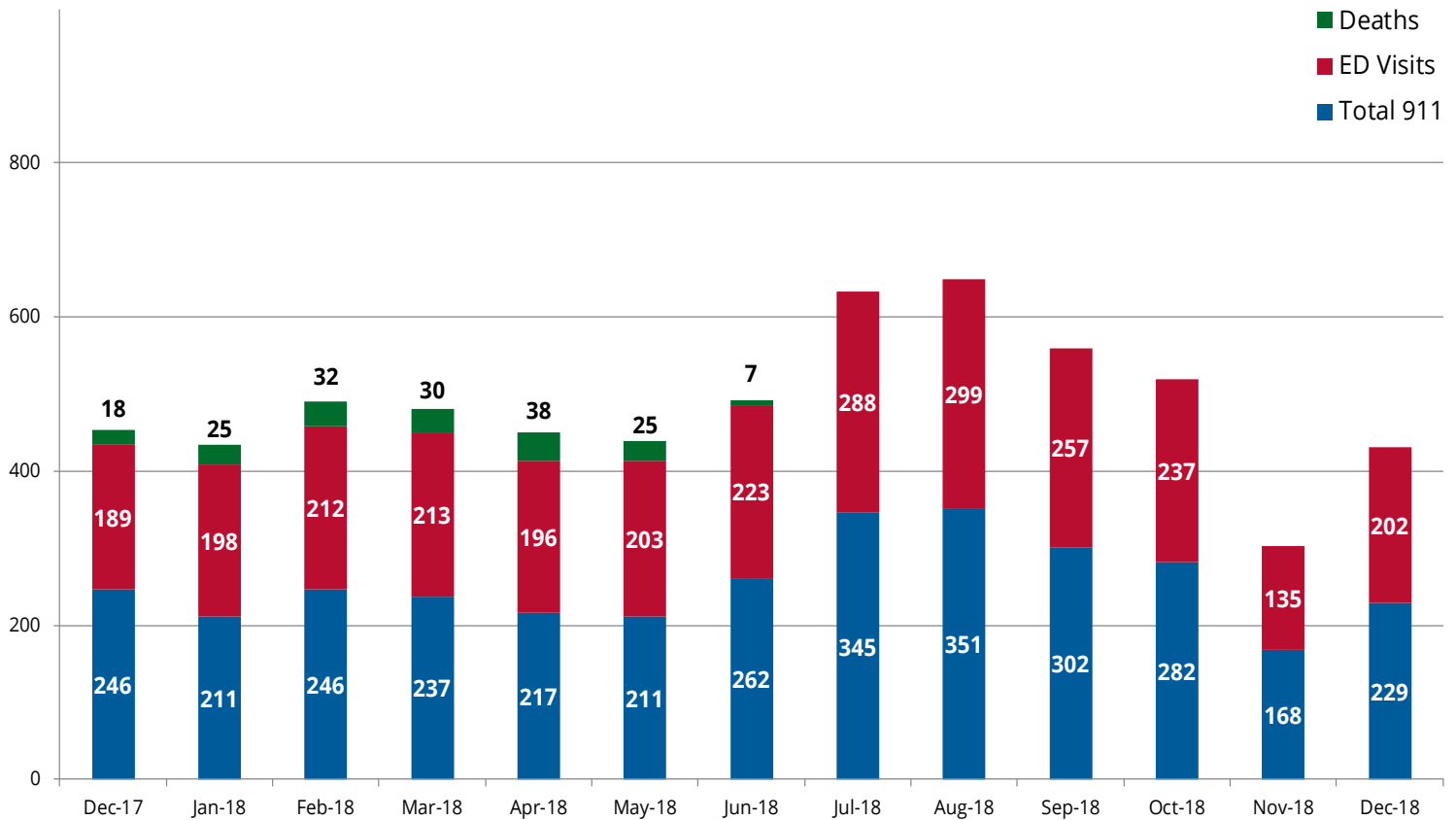


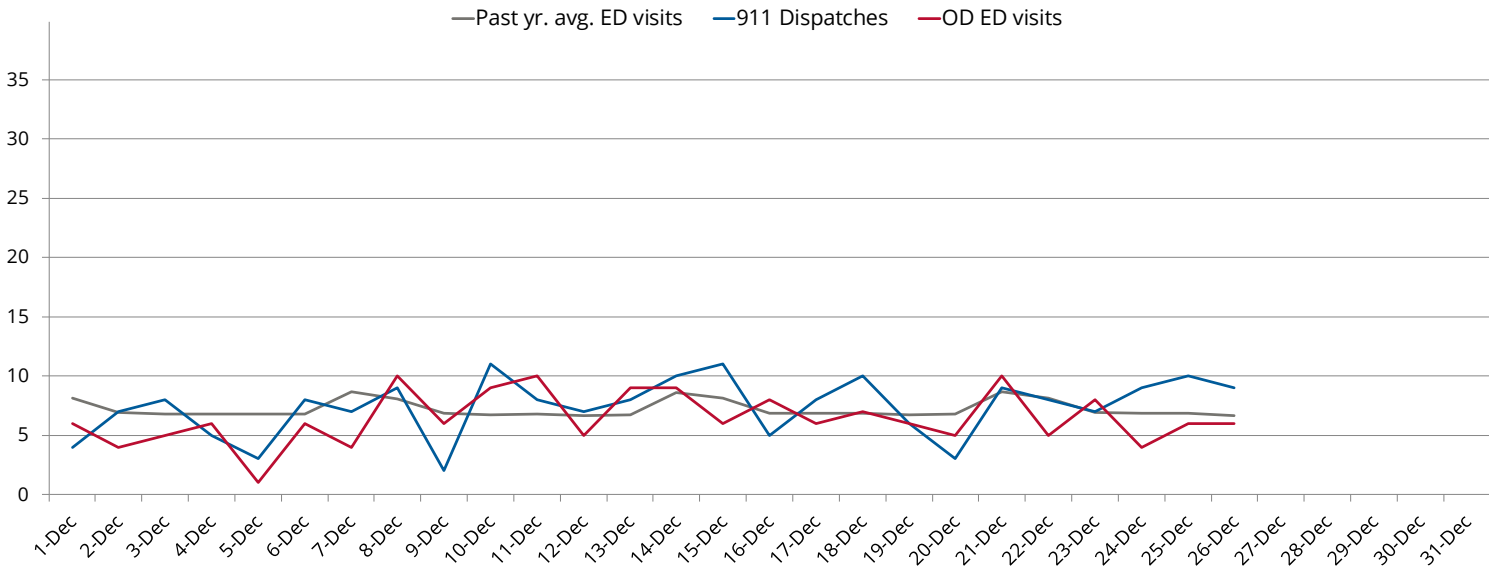
Figure 1 presents an overview of the major data sources for unintentional overdose that are explored in detail throughout this report. Historical analysis and descriptive statistics for the daily counts of overdoses can be found on pages three and four for ED visits, page five for 911 dispatches, and page seven for Hamilton County resident deaths. These measures are defined as follows:

- **ED visits:** The number of overdose hospital visits, regardless of patient's residence, reported by all hospital EDs located within Hamilton County.
- **911 dispatches:** The number of 911 dispatches responding to overdose that occurred within the jurisdiction of City of Cincinnati, Hamilton County, and Norwood 911 dispatch centers.
- **Deaths:** The number of deaths to residents of Hamilton County due to unintentional overdose of drugs of abuse.

Estimates for emergency department (ED) visits and 911 dispatches include data through December 26 and are pro-rated to the length of the full month. Death data is reported as it becomes available from the Ohio Department of Health (ODH) Bureau of Vital Statistics. The 2018 death counts provided here are preliminary, and as more recent overdose deaths are identified, it is possible that monthly estimates will change.



Figure 2. Daily counts of emergency department visits and 911 dispatches due to overdose; Hamilton County, December 2018⁴



Hamilton County overdose activity so far in the month of December, 2018, as characterized by ED visits and 911 dispatches due to overdose is summarized in Figure 2. The daily values were close to the past year averages for most of the month of December.

A demographic breakdown of ED visit patients during the reporting month is presented in Figure 3 below. The majority of ED patients fell between the ages of 25 and 49 (67%), were male (70%), and were Non-Hispanic white (88%).

Figure 3. Age, sex, and race of overdose-related emergency department patients; Hamilton County, December 2018

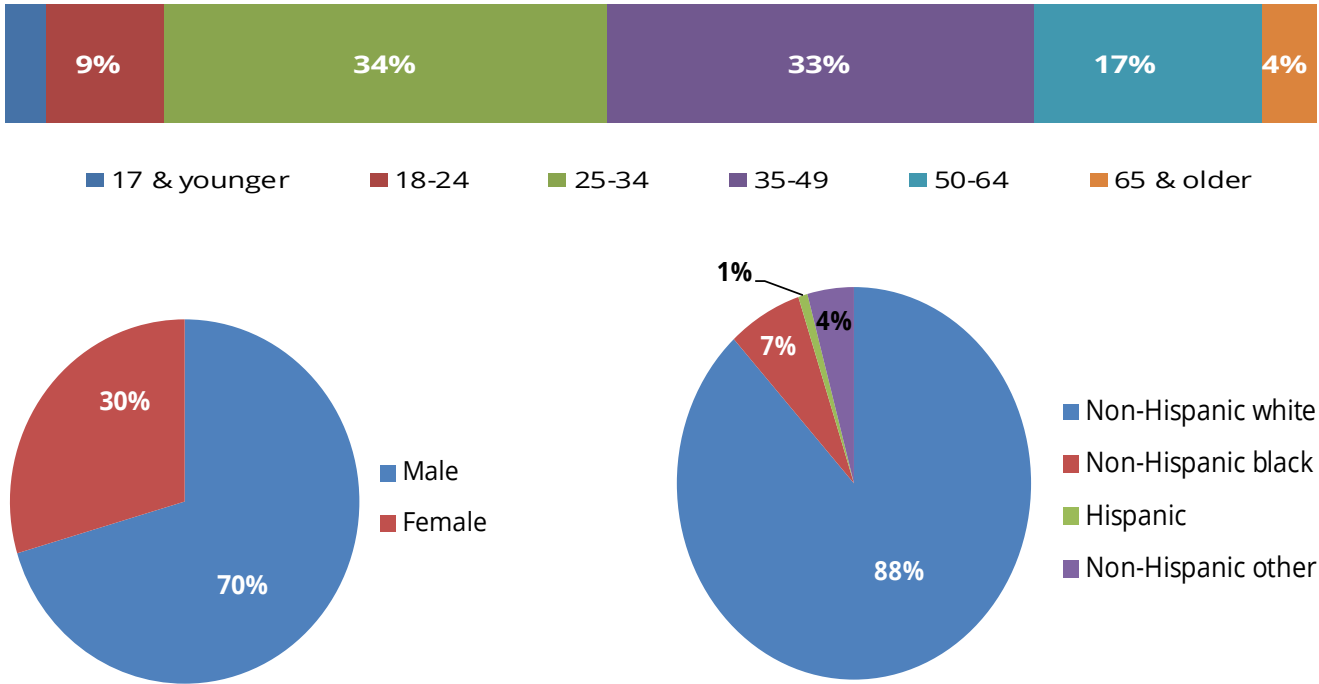


Figure 4. Monthly counts of emergency department visits due to overdose; Hamilton County, January 2017 - December 2018⁴

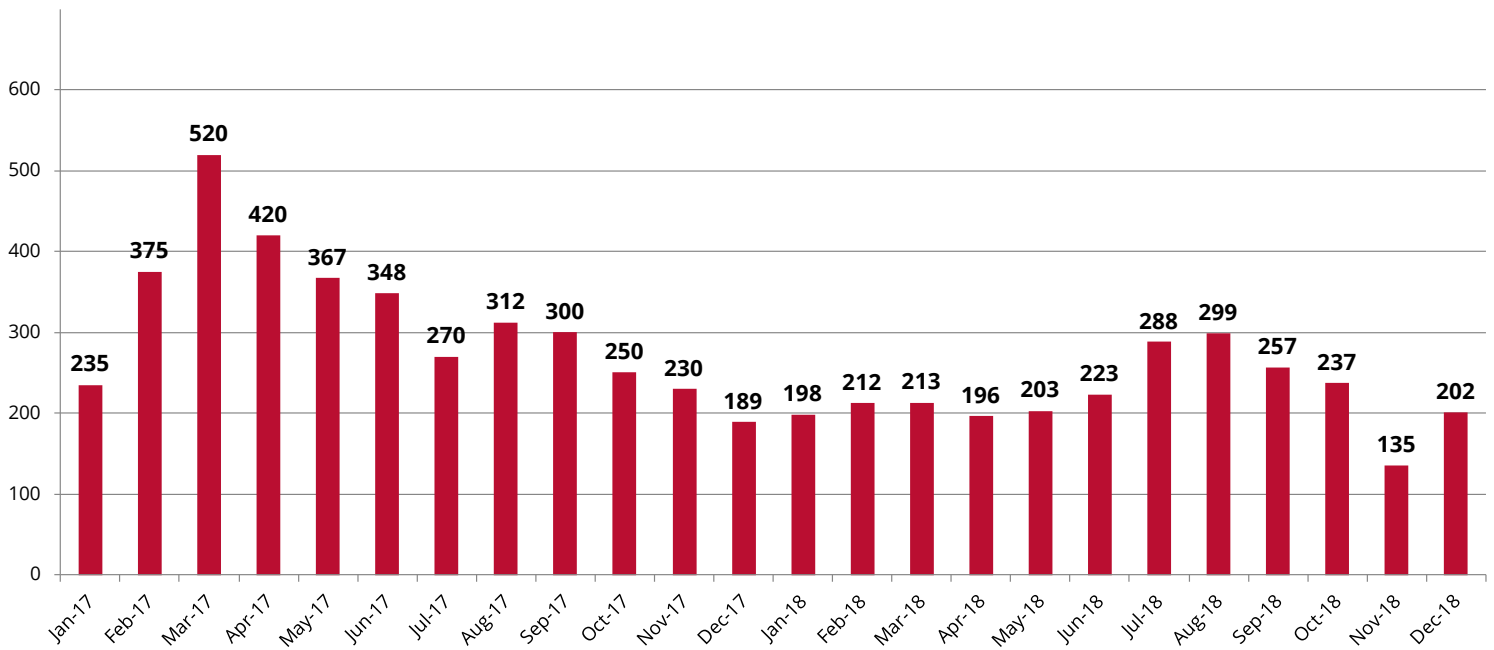


Table 1. Descriptive per day statistics of emergency department visits

ED Visits	Daily Average	Daily Median	Single Day Minimum	Single Day Maximum	T-test for two sample means (comparing to December 2018)
December 2018	6.5	6.0	2	11	-
Past month (Nov. 2018)	4.5	4.5	1	9	p<0.05
Past year (Dec 2017 - Nov 2018)	7.3	7.0	1	18	p>0.05

Monthly counts of ED visits due to overdose during the past two years are presented in Figure 4. These counts incorporate the reporting of all hospital EDs located within Hamilton County. December’s estimate includes data through December 26 and is pro-rated to the length of the full month. During December, 2018, there were an average of 6.5 ED visits due to overdose each day (Table 1); a 44% increase from November, 2018. The December average was significantly higher than the daily average observed during the preceding month.

Table 2 presents the breakdown of home residence among overdose patients seen at Hamilton County EDs with a known residence location. About three-fourths of patients during December resided in Hamilton County.

Table 2. Home residence of patients to Hamilton County emergency departments; December, 2018

Home Residence	N (%)
Hamilton County, OH	119 (73%)
Butler County, OH	5 (3%)
Clermont County, OH	20 (12%)
Northern Kentucky*	11 (7%)
Other	9 (5%)
Total	164

Analysis of the time of day and day-of-week for ED visits is provided below (Figure 5). These figures are updated monthly to reflect year-to-date statistics. Through December of 2018, half of overdoses occurred in the evening, with 49% of overdoses occurring from 4 p.m. up to midnight (Figure 5). 6-8 p.m. are the most common hours during which overdose patients are seen at Hamilton County EDs. Average number of overdoses by day of week are presented in Figure 6. Overdoses most often occur on Fridays and Saturdays.

**Figure 5. Time of day of emergency department visits due to overdose*;
Hamilton County, 2018 YTD**

	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Total
Sunday	4%	3%	2%	2%	4%	2%	1%	1%	2%	3%	3%	4%	7%	5%	5%	8%	8%	2%	9%	7%	4%	6%	5%	6%	100%
Monday	6%	2%	2%	3%	2%	2%	2%	1%	2%	3%	3%	2%	4%	5%	4%	7%	7%	6%	7%	6%	6%	7%	8%	7%	100%
Tuesday	4%	3%	2%	2%	2%	1%	2%	2%	1%	2%	3%	5%	5%	4%	5%	8%	5%	6%	7%	7%	5%	8%	5%	6%	100%
Wednesday	3%	2%	2%	1%	1%	2%	2%	2%	2%	3%	4%	2%	5%	6%	5%	8%	4%	7%	6%	9%	8%	5%	7%	3%	100%
Thursday	3%	5%	3%	3%	1%	1%	1%	1%	2%	3%	2%	6%	6%	4%	7%	5%	6%	5%	6%	8%	6%	6%	5%	5%	100%
Friday	4%	3%	3%	1%	1%	1%	1%	1%	1%	3%	2%	3%	6%	6%	6%	8%	4%	7%	7%	8%	9%	4%	5%	6%	100%
Saturday	5%	5%	3%	3%	2%	2%	1%	1%	3%	2%	3%	5%	4%	4%	4%	5%	6%	8%	5%	7%	6%	4%	8%	5%	100%
Total	4%	3%	2%	2%	2%	2%	2%	1%	2%	2%	3%	4%	5%	5%	5%	6%	6%	6%	7%	7%	6%	6%	6%	5%	100%

* Row percentages display the percent of cases within that day of the week; the total row on the bottom shows the overall distribution of time of day, regardless of day of week.

Figure 6. Average number of overdose emergency department visits by day of the week; Hamilton County, 2018 YTD

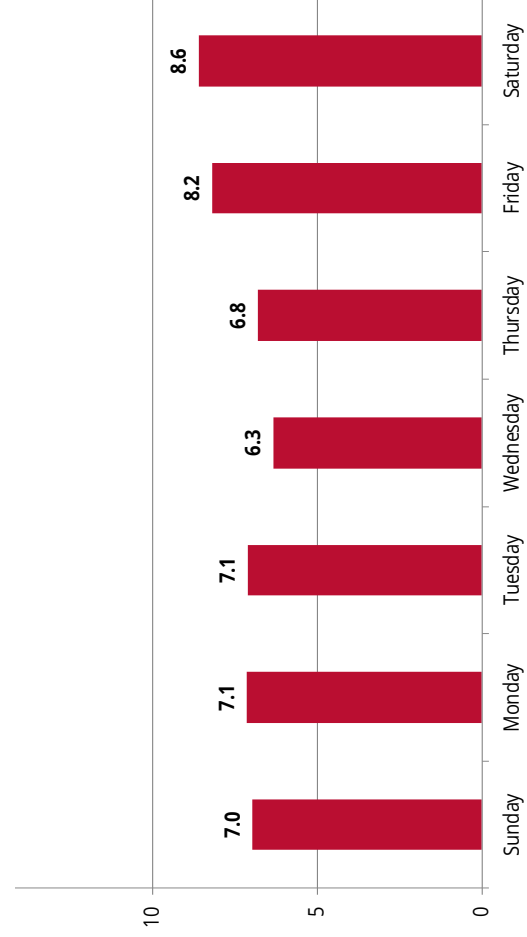


Figure 7. Monthly counts of 911 dispatches due to unintentional overdose of drugs of abuse; Hamilton County, January 2017 - December 2018⁴

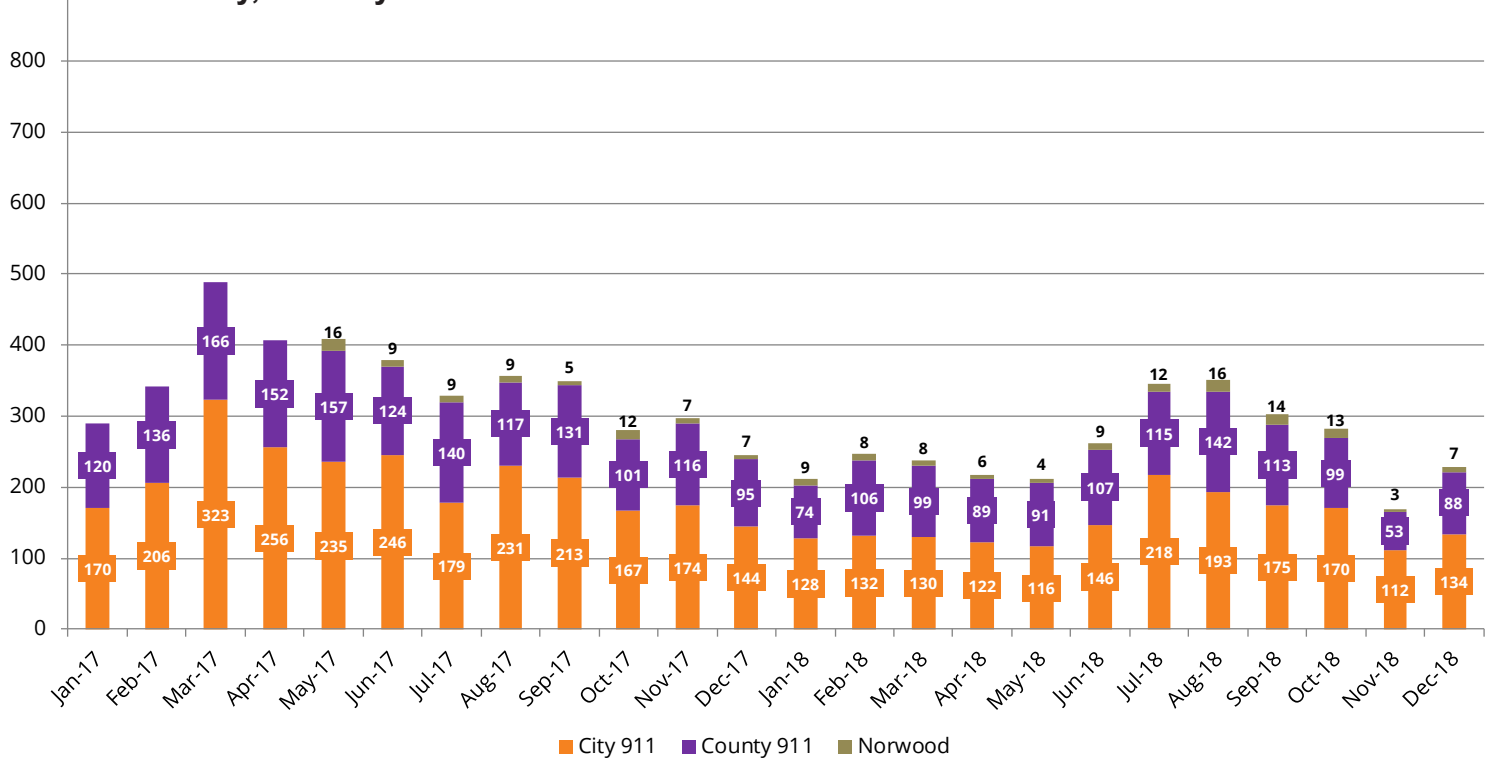


Table 3. Descriptive per day statistics of 911 dispatches from Hamilton County and City of Cincinnati 911 dispatch centers

Hamilton County	Daily Average	Daily Median	Single Day Minimum	Single Day Maximum	T-test for two sample means (comparing to December 2018)
December 2018	2.8	3.0	0	7	-
Past month (Nov 2018)	1.8	2.0	0	4	p<0.05
Past year (Dec 2017 - Nov 2018)	3.2	3.0	0	9	p>0.05

City of Cincinnati	Daily Average	Daily Median	Single Day Minimum	Single Day Maximum	T-test for two sample means (comparing to December 2018)
December 2018	4.3	4.5	0	8	-
Past month (Nov 2018)	3.7	3.0	0	8	p>0.05
Past year (Dec 2017 - Nov 2018)	4.9	5.0	0	13	p>0.05

Total 911 dispatches due to overdose for the past two years are presented in Figure 7. These counts incorporate 911 dispatches that occurred within the jurisdictions of Hamilton County and City of Cincinnati 911 dispatch centers. These estimates include data through December 26 and are pro-rated to the length of the full month. During the previous year, there were a daily median of four and a half 911 overdose responses from City of Cincinnati agencies and three from county response centers (Table 3).

Daily Hamilton County dispatches increased by 55% from November to December. The 2.8 911 dispatches due to overdose recorded by Hamilton County emergency response per day were significantly greater than the daily average observed during the preceding month.

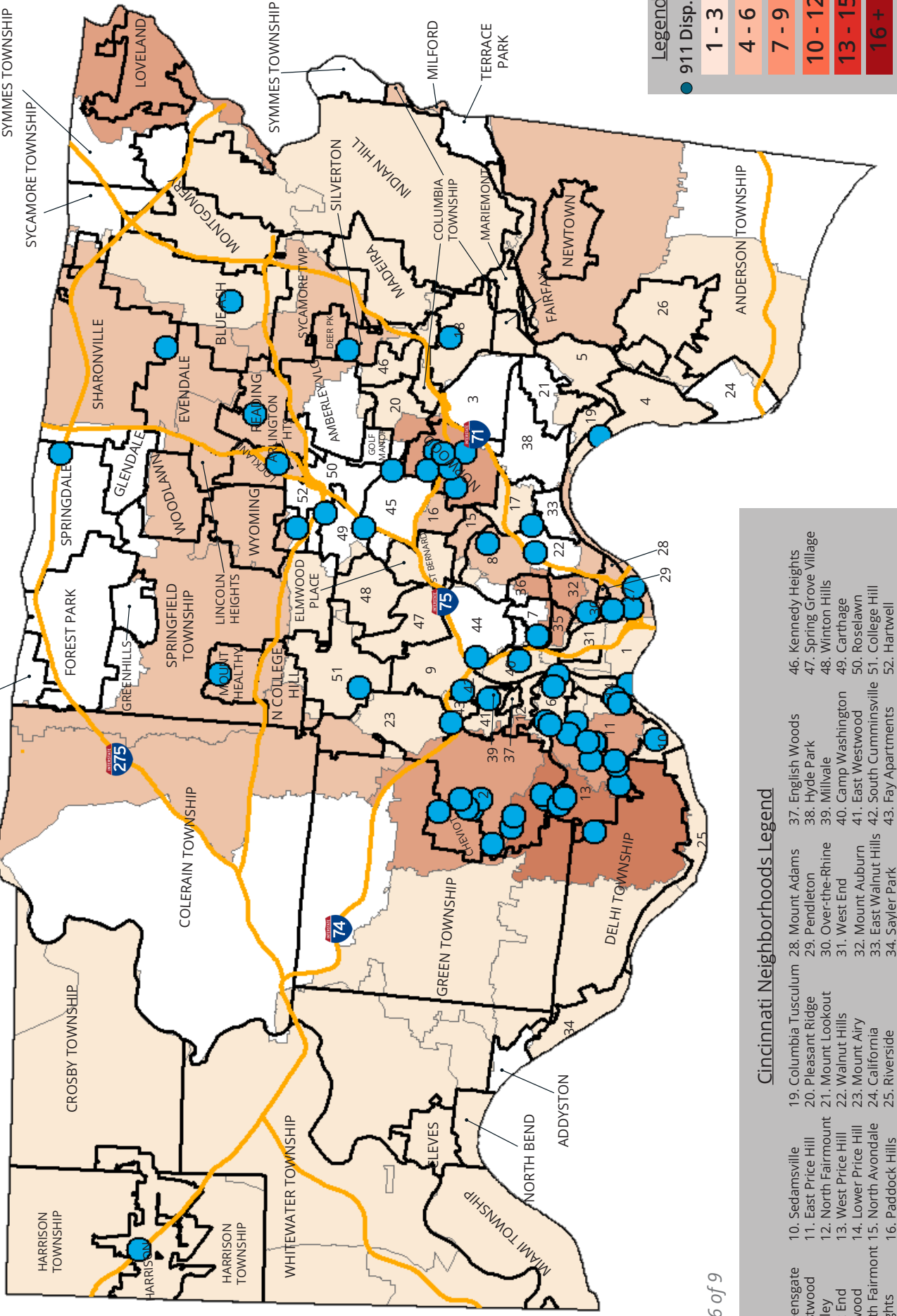
Daily Cincinnati dispatches increased by 16% from November to December, with an average of 4.3 dispatches per day during December. The December average was not significantly different from the daily average observed during the preceding month and the preceding year.



Figure 8. Home ZIP code of drug overdose ED patients & 911 dispatch locations due to overdose; Hamilton County, December 2018



The map presents the reporting month's home ZIP codes for drug overdose associated ED patients (red shades) overlaid with 911 dispatch locations due to overdose occurring in Hamilton County, as provided by the Greater Cincinnati Fusion Center (GCFC). 911 dispatch locations are offset slightly to protect confidentiality.



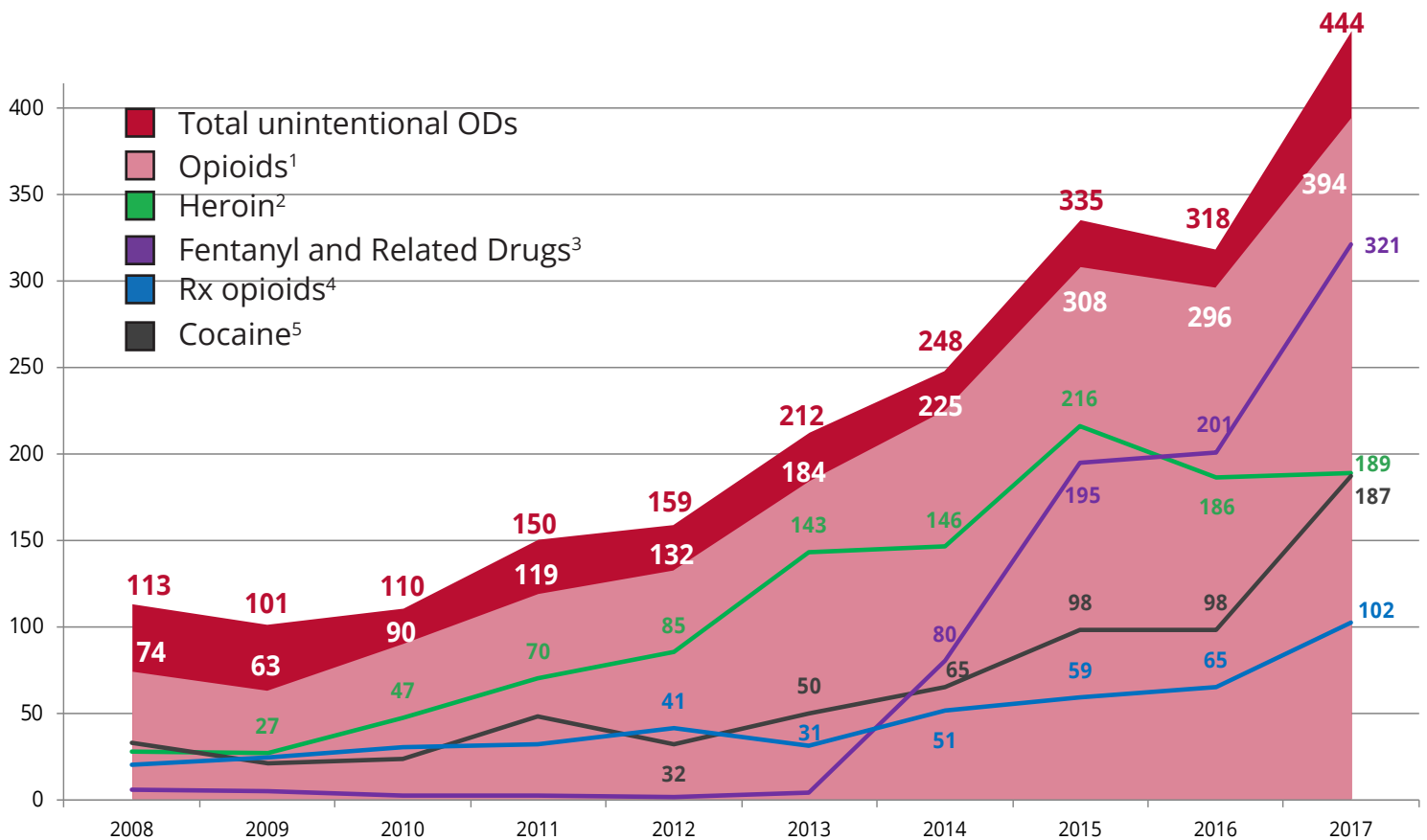
Legend

- 911 Disp. Loc.
- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15
- 16 +

Cincinnati Neighborhoods Legend

- 1. Queensgate
- 2. Westwood
- 3. Oakley
- 4. East End
- 5. Linwood
- 6. South Fairmont
- 7. Heights
- 8. Avondale
- 9. Northside
- 10. Sedamsville
- 11. East Price Hill
- 12. North Fairmount
- 13. West Price Hill
- 14. Lower Price Hill
- 15. North Avondale
- 16. Paddock Hills
- 17. Evanston
- 18. Madisonville
- 19. Columbia Tusculum
- 20. Pleasant Ridge
- 21. Mount Lookout
- 22. Walnut Hills
- 23. Mount Airy
- 24. California
- 25. Riverside
- 26. Mount Washington
- 27. CBD/Riverfront
- 28. Mount Adams
- 29. Pendleton
- 30. Over-the-Rhine
- 31. West End
- 32. Mount Auburn
- 33. East Walnut Hills
- 34. Saylor Park
- 35. CUF
- 36. Corryville
- 37. English Woods
- 38. Hyde Park
- 39. Millvale
- 40. Camp Washington
- 41. East Westwood
- 42. South Cumminsville
- 43. Fay Apartments
- 44. Clifton
- 45. Bond Hill
- 46. Kennedy Heights
- 47. Spring Grove Village
- 48. Winton Hills
- 49. Carthage
- 50. Roselawn
- 51. College Hill
- 52. Hartwell

Figure 9. Hamilton County resident deaths due to unintentional overdose by drug*; 2008 - 2017



Annual Hamilton County resident deaths due to unintentional overdose of drugs of abuse over the past decade as reported by the ODH Bureau of Vital Statistics are presented in Figure 9. Most 2017 overdose deaths involved some kind of opioid. The 2017 death total represents a single year high for overdose deaths both in Hamilton County and in the state of Ohio.

There were 444 overdose deaths to Hamilton County residents in 2017, and 89% of those deaths involved an opioid of some kind. A shift towards fentanyl replacing heroin in the drug supply is a suspected primary driver of the increase in overdose deaths. Fentanyl and its analogs were more present than ever during 2017; about 72% of deaths involved fentanyl or its analogs, while less than half (43%) involved heroin.

There were nearly twice as many overdose deaths involving cocaine in 2017 compared to 2015-16. Most deaths involving cocaine also involved a fentanyl (72%), indicating the possibility that cocaine is being increasingly mixed with fentanyl.

2017 had a higher proportion of deaths involving pharmaceutical prescription opioids (23%) than in recent years.

* Deaths often involve multiple drugs and therefore drug subcategories will sum to more than total number of overdoses.

1. Include ICD-10 codes T40.0-T40.4, T40.6

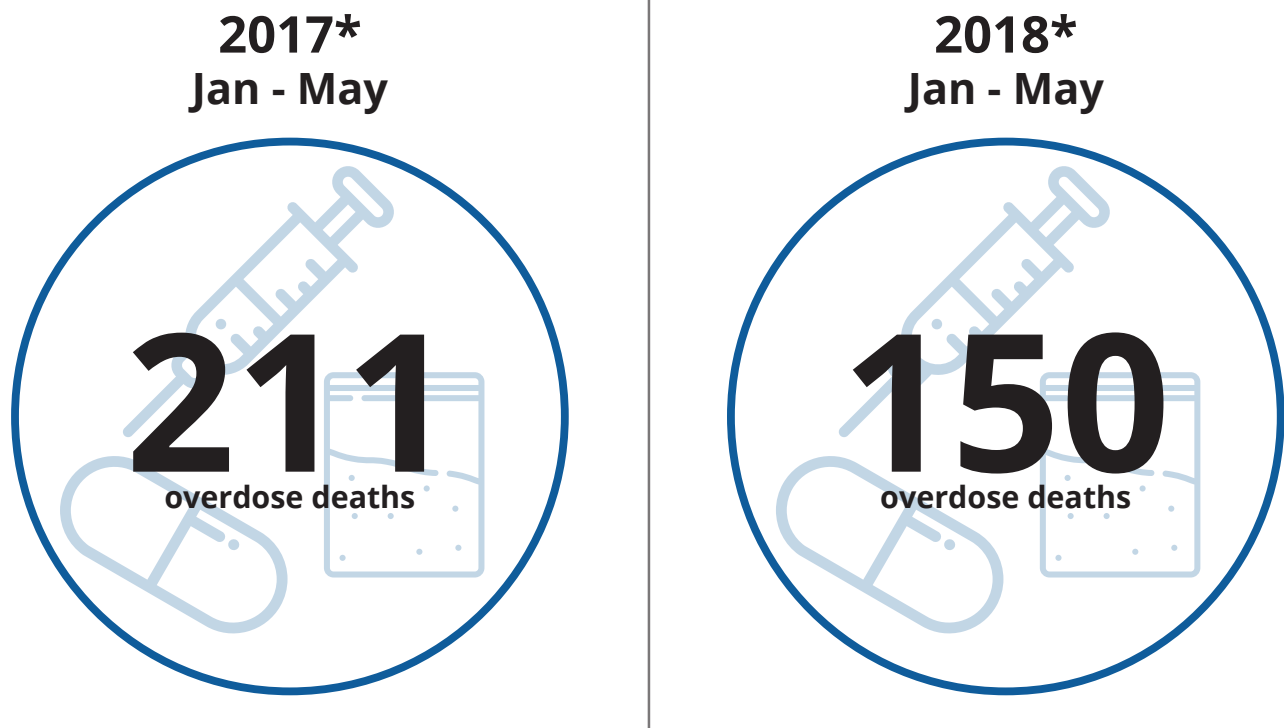
2. Include ICD-10 code T40.1

3. Identified as unintentional OD deaths involving fentanyl or its analogs by Ohio Department of Health review of death certificate death fields

4. Include ICD-10 code T40.2

5. Include ICD-10 code T40.5

Figure 10. Hamilton County resident deaths due to unintentional overdose; 2017 vs. 2018 (preliminary estimates*)



↓ 29%*

Through five months, preliminary 2018 death estimates are 29% lower than they were at this point in 2017. So far in 2018, there have been a greater share of deaths involving cocaine (46%) and a lower share involving heroin (26%) compared to recent years (Figure 9). Demographics of overdose decedents from 2017 and 2018 are presented below (Table 4).

Table 4. Age, race, and sex of overdose decedents; Hamilton County residents, 2017-2018*

Demographics	2017 (N=444)	YTD 2018 (N=153**)
Age		
24 & younger	28 (6%)	6 (4%)
25-34	103 (23%)	39 (24%)
35-49	173 (39%)	62 (38%)
50-64	126 (28%)	42 (26%)
65 & older	14 (3%)	14 (9%)
Race		
Non-Hispanic Black	70 (16%)	37 (23%)
Non-Hispanic White	368 (83%)	120 (75%)
Hispanic	2 (1%)	1 (1%)
Non-Hispanic Other	3 (1%)	2 (1%)
Sex		
Male	308 (69%)	112 (69%)
Female	136 (31%)	51 (31%)

*Death data is reported as it becomes available from the Ohio Department of Health (ODH) Bureau of Vital Statistics. The 2018 death counts provided here are preliminary and are subject to change.
 ** Thirteen deaths following the 150 occurring in January-May have been identified for 2018.

Table 5. HCPH Distribution of Naloxone

Agency	Doses Dist. (2015)	Doses Dist. (2016)	Doses Dist. (2017)	Doses Dist. (YTD 2018)	TOTAL
Community	20 (1%)	-	296 (5%)	2,556 (9%)	2,872 (8%)
Correctional Facilities	-	-	380 (6%)	3,454 (13%)	3,834 (10%)
Fire / EMS	994 (30%)	542 (37%)	1,830 (29%)	2,159 (8%)	5,525 (14%)
FQHC	-	-	72 (1%)	80 (1%)	152 (1%)
Harm Reduction	-	100 (7%)	636 (10%)	10,394 (39%)	11,130 (29%)
Hospital	1,193 (35%)	580 (40%)	300 (5%)	1,612 (6%)	1,912 (5%)
Law Enforcement	-	-	1,617 (25%)	936 (4%)	4,326 (11%)
Non-profit	-	-	76 (1%)	764 (3%)	840 (2%)
Pharmacy	-	-	-	696 (3%)	696 (2%)
Project DAWN	-	142 (10%)	-	-	142 (1%)
Public Health	-	50 (3%)	58 (1%)	718 (3%)	826 (2%)
Quick Response Team	-	-	42 (1%)	56 (1%)	98 (1%)
Social Services	-	48 (3%)	48 (1%)	982 (4%)	1,078 (3%)
Treatment Provider	1,160 (34%)	6 (1%)	1,024 (16%)	2,358 (9%)	4,548 (12%)
Urgent Care	-	-	-	1,368 (5%)	10 (1%)
TOTAL	3,367	1,468	6,379	26,775	37,989

Naloxone distribution by HCPH to different types of agencies are summarized in Table 5. HCPH first began distributing Naloxone in July 2015.

HCPH distributed over 3,700 doses of Naloxone during December 2018. Most were distributed to harm reduction (58%), Fire/EMS (26%) and correctional facilities (7%). A full 2018 breakdown is provided in Table 5.

Data Notes

1. Drug overdose data are retrieved from the state's EpiCenter surveillance tool. "Overdose" cases include all ED visits to Hamilton County hospitals in which drugs were indicated as reason for visit. Cases were included in analysis if the case notes for the patient included the term "overdose" or "OD." Where specified, traumatic injuries due to drugs caused by suicide attempts, adverse reactions to normal medications, or accidental overdose of over-the-counter or common drugs such as Tylenol or insulin were excluded from analysis. ZIP codes refer to the ZIP code of residence of the patient visiting the emergency department (ED).

Data from the EpiCenter surveillance tool is subject to at least 2 limitations. First, case notes in the EpiCenter tool are limited and often do not include full details of ED visit, such as drug used or intent of use, which can lead to misclassification of the ED visit as an unintentional overdose of a drug of abuse. Second, case notes are recorded at patient intake and may change from a patient's initial examination to their final diagnosis.

2. Emergency dispatches refer to fire/EMS and law enforcement responses to 911 emergency calls related to drug overdose, in which a unit was dispatched. Call notes are reviewed and included/excluded using the same criteria as EpiCenter, adapted for the format of 911 dispatch call logs.

3. Unless otherwise specified, 'overdose' on this report refers to unintentional overdose of drugs of abuse. This excludes instances where alcohol and/or marijuana are the sole drugs referenced.

4. For the purpose of estimating monthly counts, days for which ED Visits or 911 dispatches have missing information are estimated using the average for that measure over the rest of the month, i.e. the estimated is "pro-rated" to the number of days in the month.

For questions, contact: David Carlson, MPH;
Epidemiologist at HCPH; 513-946-7933; david.carlson@hamilton-co.org.



PREVENT. PROMOTE. PROTECT.



THE EXCHANGE PROJECT YEARLY REPORT 2018

Prepared by: Craig Haehn, MS, CHES

SITE BREAKDOWN

Location	Visits	New Visits	Syringes Exchanged	Narcan (doses)	Testing		Reactive Tests		Pregnancy Testing*	Treatment Referral	Medical Referral	Hep A/B Vacc**	Other Referral
					Hep C	HIV	HCV+	HIV+					
Northside	2,656	358	78,909	2,010	69	76	40	1	214	7	2	14	1
Middletown	2,544	393	86,380	2,002	62	88	33	0	261	17	7	0	0
Mt Auburn	2,257	304	70,409	1,836	56	78	25	0	174	9	4	5	0
Westwood	942	143	21,553	650	23	40	16	0	61	0	0	3	0
Clermont	319	106	6727	350	22	31	11	0	32	0	0	0	0
Corryville	2,493	288	89,630	1,788	55	76	27	0	169	13	1	32	0

TOTALS (YTD), January 1, 2018 - December 31, 2018

Year	Visits	New Visits	Syringes Exchanged	Narcan (doses)	Testing		Reactive Tests		Pregnancy Testing*	Treatment Referral	Medical Referral	Hep A/B Vaccine**	Other Referral
					Hep C	HIV	HCV+	HIV+					
2018	11,211	1,592	353,608	8,636	287	389	152	1	911	48	14	54	1

*Take-home pregnancy test provided

** Hepatitis A/B vaccine administered (as of 7/19/2018)

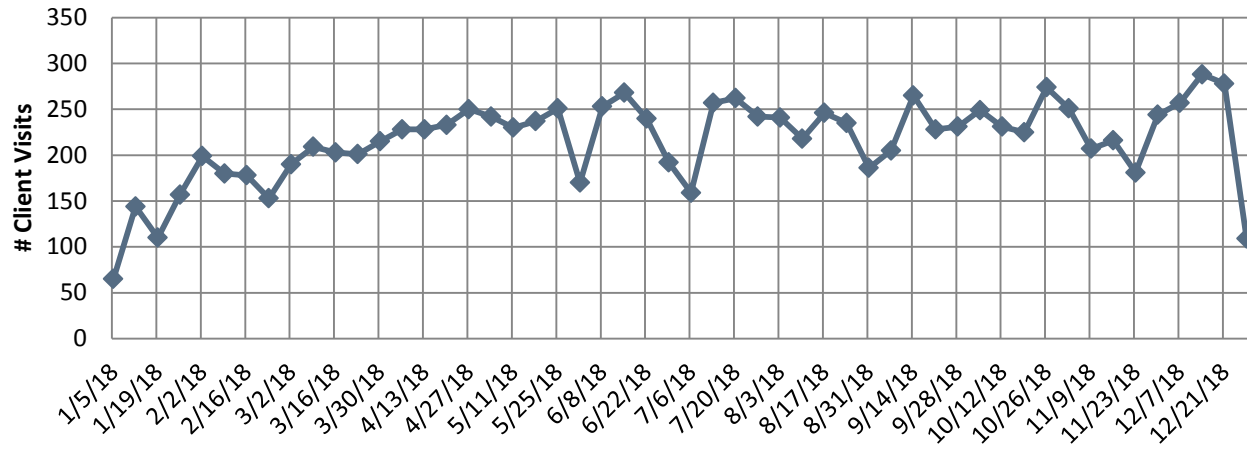
'Other referral' defined as social services or mental health services

Totals include Hamilton and Clermont Counties and Middletown

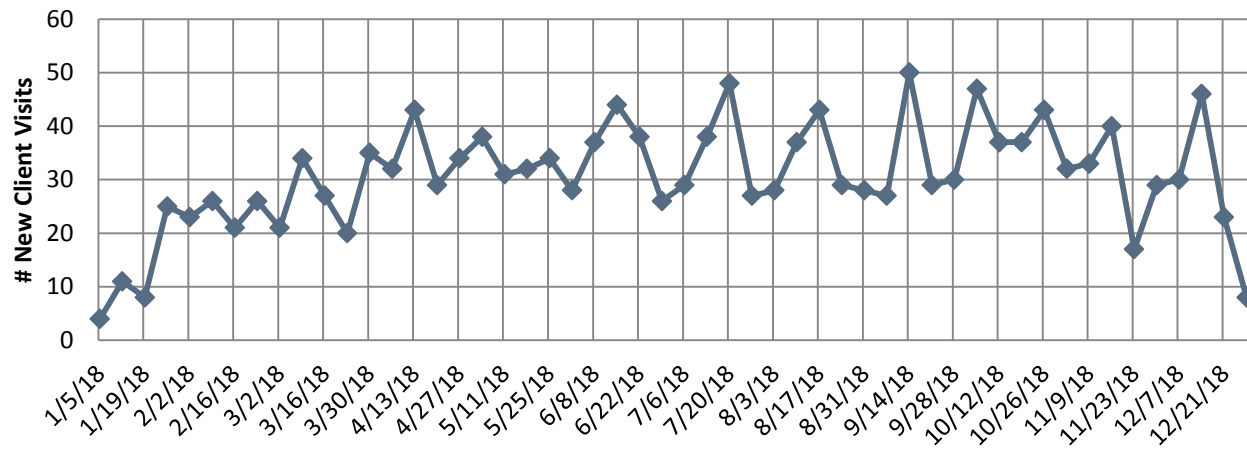




Client Visits Weekly 2018

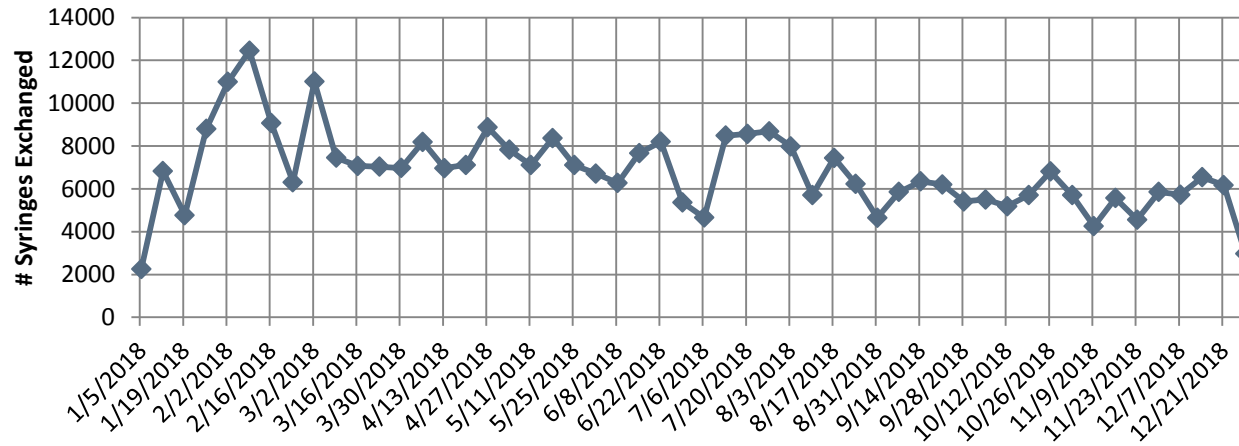


New Client Visits Weekly 2018

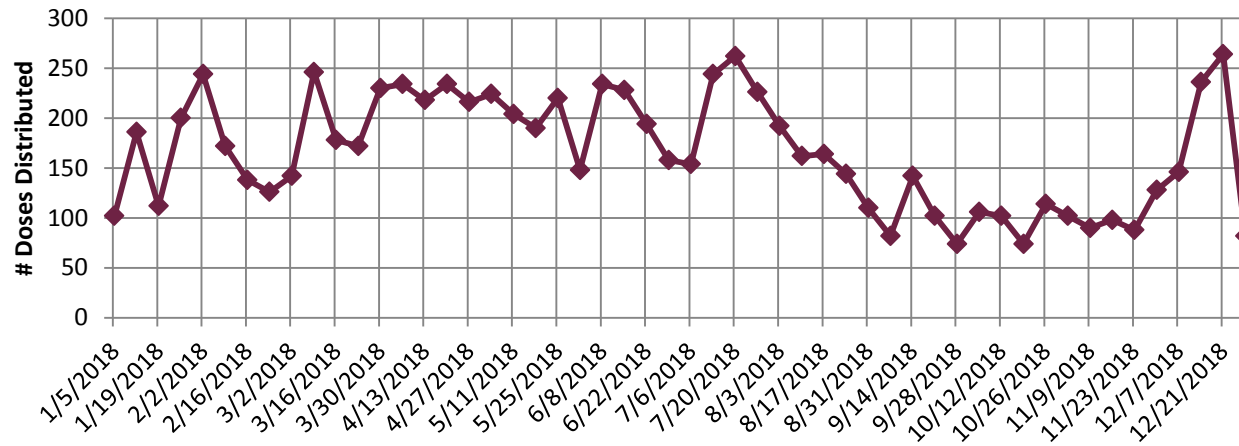




Syringes Exchanged Weekly 2018

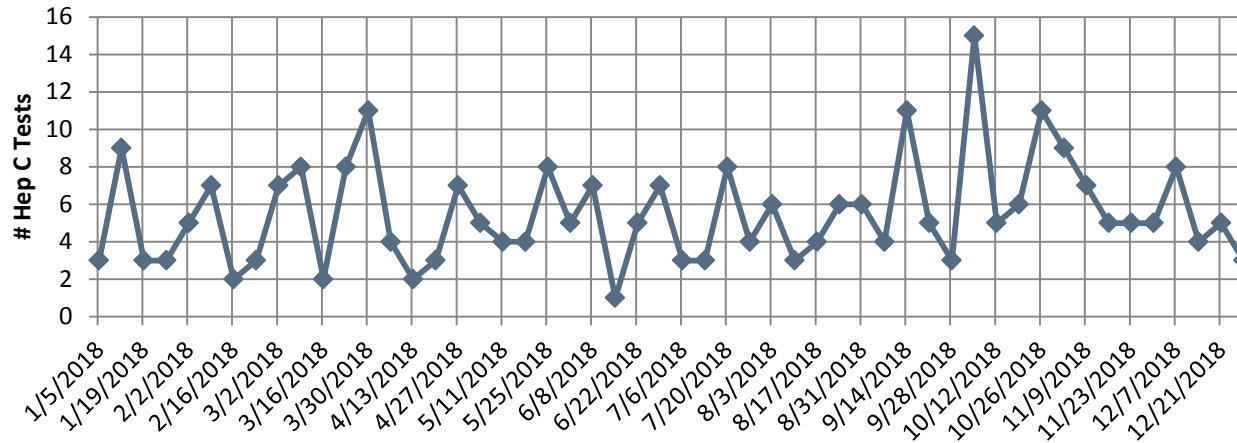


Narcan Doses Distributed Weekly 2018

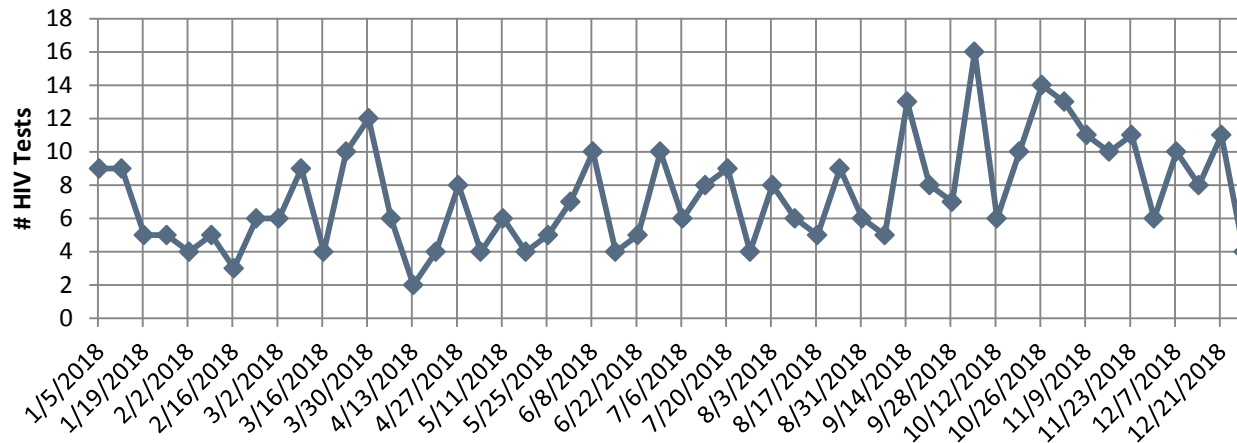




Hep C Testing Weekly 2018

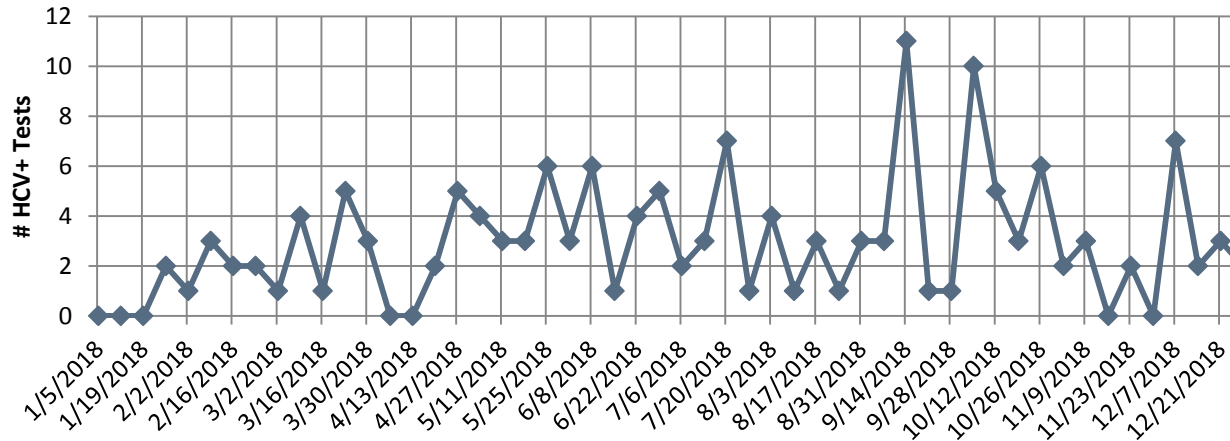


HIV Testing Weekly 2018





HCV+ Reactive Tests Weekly 2018



Pregnancy Tests Weekly 2018

