

Statewide Opioid Reporting Directive (SWORD)  
2021 Annual Report  
June 2020-May 2021



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## Introduction

Since June 1, 2019 Connecticut Emergency Medical Services (EMS) responders, have reported suspected opioid overdoses to the Connecticut Poison Control Center (CPCC) as part of the Statewide Opioid Reporting Directive (SWORD). Following each suspected overdose, EMS responders call the CPCC's 1-800-222-1222 line to report the event and answer a series of questions. CPCC specialists record the information and enter a portion of the data into the Overdose Detection Mapping Application Program (ODMAP), a federal mapping application. In its inaugural two years of operation, the SWORD program has collected 9,365 overdose cases, including 4,859 cases from June 1, 2020 to May 31, 2021. The collected data and mapping enables local, state and federal public health and public safety agencies to respond in a timely manner to overdoses in their respective communities.

When SWORD/ODMAP triggers a spike alert, based on a preset number of overdoses in a county in any 24 hour period, Department of Public Health (DPH) epidemiologists review the following: SWORD Toxicall narratives (EMS), DPH Syndromic Surveillance System (Emergency Department visits), and Medical Examiner (OCME) data. Based on this review, if a threat is determined, DPH will issue a public health advisory.

## SWORD Highlights

- There were 4,859 suspected overdoses reported by EMS to the SWORD program between June 1, 2020 and May 31, 2021, **an 8% increase over the previous year**. Beginning in September 2020, SWORD reported overdoses were higher every month over the preceding year.
- Males accounted for 74% of the overdoses; and females accounted for 26%. The age group that experienced the most opioid overdoses were those between the ages of 30 and 44.
- When the drug of exposure was known: 81% of the overdoses were due to heroin or fentanyl powder, 17% due to pills (including possible counterfeit pills containing fentanyl) and 2% due to methadone or Suboxone®.
- Bystanders administered naloxone in 16% of the overdose cases where 911 was called.
- The vast majority of opioid overdose patients were transported to a hospital emergency department. Only 5% of those who received naloxone refused transport.
- Majority of reported overdoses occurred in a residence of any type (61%). 37% of reported overdoses occurred in a public area and 15% occurred in a motor vehicle.

## Limitations

The SWORD database is not a complete database of all opioid overdoses in Connecticut. It includes only those overdoses where 911 is called and EMS responders report the overdose to CPCC. The database is dependent on EMS compliance with reporting the event, which is estimated to be at 70%, but may vary significantly by municipality. Another limitation to the data is the underreporting of fatal overdose by EMS responders. We estimate that SWORD contains only 20 to 30% of opioid overdose fatalities. This is due to the following: EMS responders often unable to determine cause of death due to the lack of paraphernalia (i.e., needle in arm, heroin bags, etc.) at the scene and patients who die after EMS transports to the hospital. Lastly, the SWORD database does not include overdoses where 911 was not called.

## SWORD Report Findings

### Overview

Between June 1, 2020 and May 31, 2021 the SWORD program received 4,859 suspected overdoses, (non-fatal and fatal) reported by EMS responders. The following selected data and graphs illustrate the following findings: suspected overdoses by month, suspected overdoses by day of the week and hour of day, age and gender, and naloxone administration.

Figure 1: Suspected Overdoses by Month, June 2019-May 2021

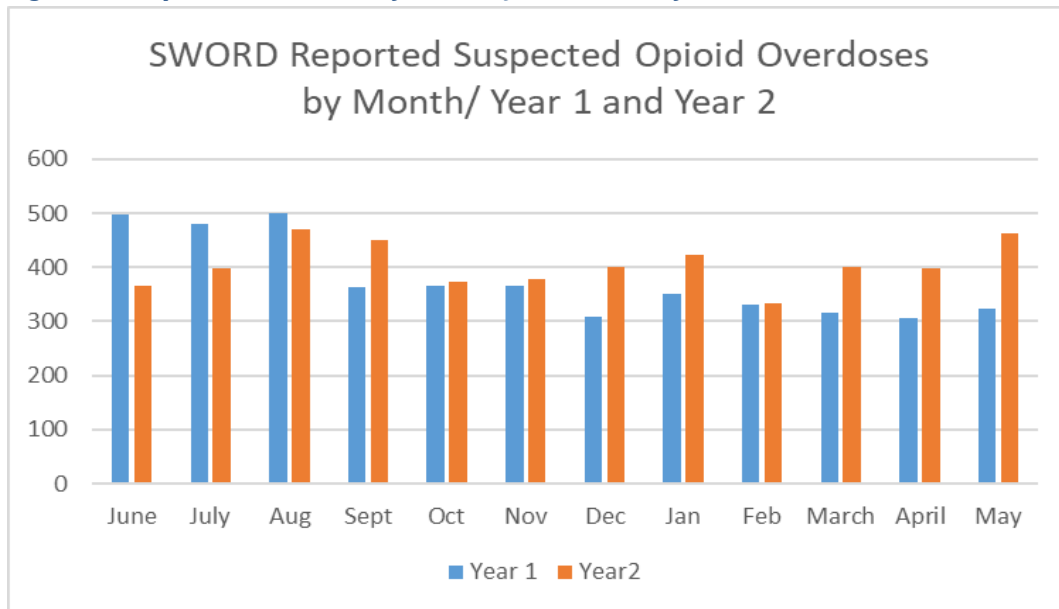


Figure 1 illustrates the suspected opioid overdose by month in comparison from Year 1 (June 1, 2019 to May 31, 2020) to Year 2 (June 1, 2020 to May 31, 2021). Since September 2020, suspected overdoses reports were higher each month than the previous year. This figure shows that suspected overdoses have been the highest in August.

Figure 2: Suspected Overdoses by Day of the Week and Hour of the Day, June 2020-May 2021

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
12:00 AM	28	16	27	24	27	27	35
1:00 AM	28	15	23	23	24	20	30
2:00 AM	16	10	12	18	16	22	21
3:00 AM	11	12	11	9	14	18	22
4:00 AM	17	10	10	12	13	5	12
5:00 AM	12	10	14	14	14	14	13
6:00 AM	9	8	13	11	10	13	14
7:00 AM	22	15	14	10	11	21	13
8:00 AM	8	21	11	20	21	15	12
9:00 AM	19	9	24	21	23	20	23
10:00 AM	21	19	19	23	19	25	28
11:00 AM	34	22	28	31	30	32	23
12:00 PM	39	30	36	30	23	26	35
1:00 PM	33	37	31	43	42	43	37
2:00 PM	44	34	35	40	36	47	35
3:00 PM	44	33	31	35	41	70	41
4:00 PM	44	43	45	42	35	42	30
5:00 PM	39	42	51	49	48	46	46
6:00 PM	26	50	43	44	46	54	41
7:00 PM	35	42	41	44	47	49	42
8:00 PM	48	33	39	41	69	48	41
9:00 PM	41	34	32	57	49	43	37
10:00 PM	31	36	24	40	43	35	40
11:00 PM	27	30	40	39	22	33	36

Figure 2 illustrates that the peak time for suspected overdoses occurred between 1:00 P.M. and 10:00 P.M. The most overdoses occurred on Fridays from 3:00 P.M. to 4:00 P.M., Thursdays from 8:00 P.M. to 9:00 P.M.

and Wednesdays from 9:00 P.M. to 10:00 P.M. Less overdoses occurred in the early morning hours of each day of the week.

Figure 3: Suspected Overdose by Age and Gender, June 2020-May 2021

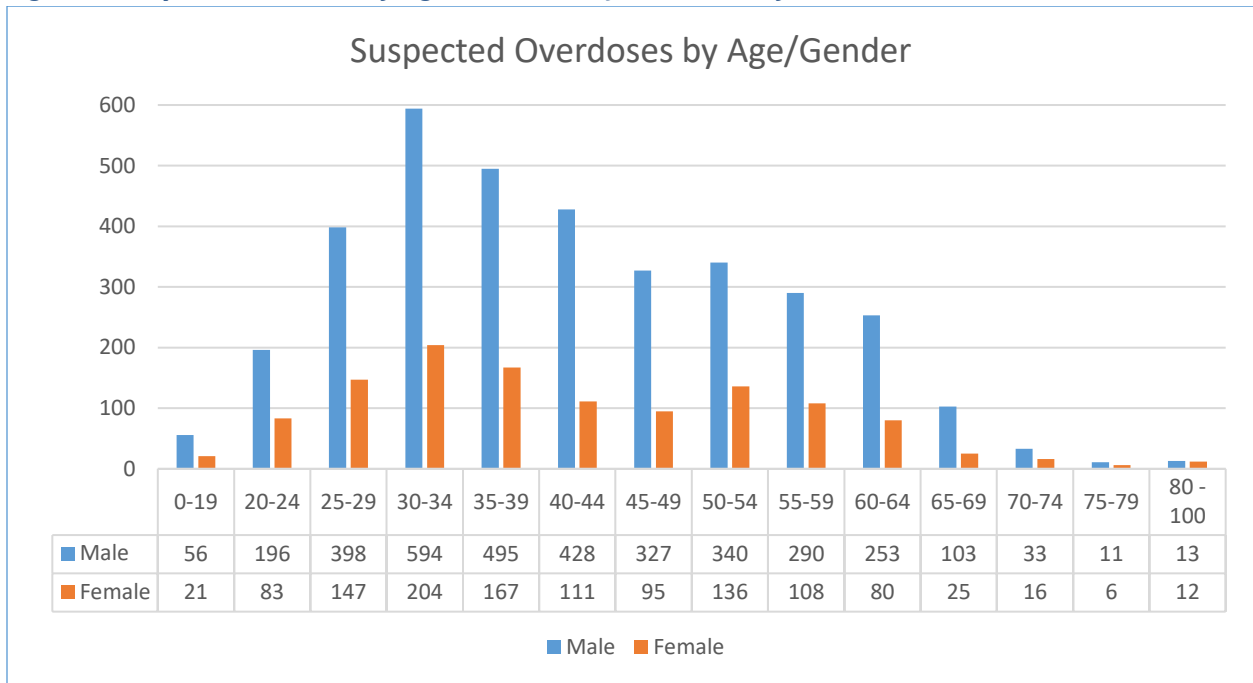


Figure 3 shows that more males than females that experienced an overdose. Most overdoses occurred in people between the ages of 30 and 44.

Figure 4: Who Administered First Naloxone, June 2020-May 2021

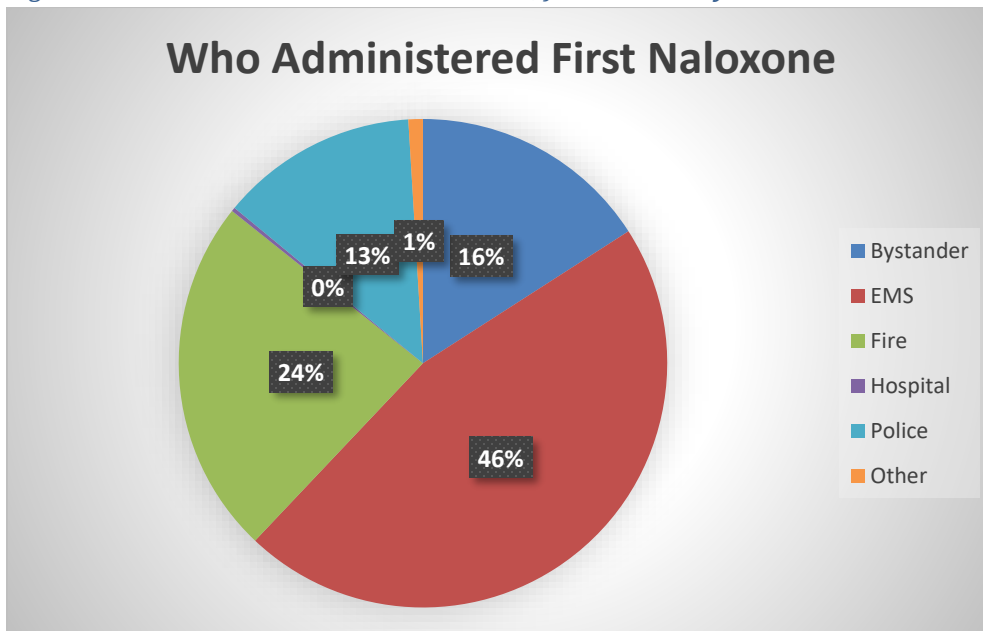


Figure 4 shows that EMS and Fire most often administered naloxone first. Bystander naloxone administrations have increased since last year, from 15% to 16%.

## Data Analysis and Trends

- SWORD has received increasing reports of overdoses attributed to cocaine contaminated with fentanyl, as well as, counterfeit pills of Xanax® and Percocet®, that likely include fentanyl.
- There were several reports of children, three and under, who were victims of fentanyl poisoning and required naloxone for resuscitation.
- Of the reported fatal overdoses, 16% had at least one SWORD reported nonfatal overdose within the past year prior to their death; 12% had three or more SWORD reported overdoses; 2% had a SWORD reported overdosed within a week prior to their death. Only one patient had a SWORD reported overdose in the previous week and refused transportation to the hospital.
- We have identified a small shift in overdose opioid drug of exposure (when the drug of exposure is known) from powdered heroin and/or fentanyl (84%, down from 87%) to the use of prescription pills, including likely fentanyl-contaminated counterfeit pills (14%, up from 11%), while overdoses on methadone and/or Suboxone® remained at 2%.

For fuller data report, access the report PowerPoint at this link: <https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/ems/pdf/SWORD/SWORD-newsletters/2021/Second-SWORD-Annual-Report-Slides.pdf>

## About SWORD

SWORD is a collaboration between the Connecticut Department Public Health (DPH) Office of Emergency Medical Services (OEMS) and Injury and Violence Prevention and Surveillance Unit, the Connecticut Poison Control Center (CPCC) at UConn Health, the High Intensity Drug Trafficking Areas (HIDTA) program, and Connecticut's emergency medical service providers.

*The data in this report was accessed on June 24, 2021.*