Statewide Opioid Reporting Directive (SWORD) 2023 Annual Report June 2022-May 2023





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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 first four years of state-wide operation, the SWORD program has collected 18,081 overdose cases, including 4,135 cases from June 1, 2022, to May 31, 2023. The collected data and mapping enable 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 4,135 suspected overdoses reported by EMS to the SWORD program between June 1, 2022, and May 31, 2023, a 9.7% decrease over the previous year. May 2023 marked the only month since February 2022 and October 2021 where the overdoses were more than the comparable month of the preceding year.
- Males accounted for 72% of the overdoses; and females accounted for 28%. The age group that experienced the most opioid overdoses were those between the ages of 30 and 44.
- Most overdoses occurred on Fridays with the peak overdose time of 2 P.M. to 9 P.M.
- Bystanders and other non-emergency providers administered naloxone prior to 911(EMS, Fire, Police) arrival in 21% of the overdose cases where 911 was called.
- The vast majority of nonfatal opioid overdose patients were transported to a hospital emergency department. 11% of nonfatal overdose patients who received naloxone refused transport.
- The majority of reported nonfatal overdoses occurred in residences (58%). 11% 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. SWORD estimates EMS compliance to be 70% statewide, but compliance may vary significantly by municipality. Another limitation is the underreporting of fatal overdose by EMS responders. It is estimated that SWORD contains only 13% of opioid overdose fatalities. EMS responders are often unable to determine cause of death because of the lack of paraphernalia (i.e., needle in arm, heroin bags, etc.) at the scene. In addition, patients who die after EMS transports to the hospital and overdose deaths where EMS was not called to respond are not reported.

SWORD Report Findings

Overview

Between June 1, 2022, and May 31, 2023, the SWORD program received EMS responder reports of 4,135 suspected overdoses. The following data and graphs illustrate suspected overdoses by month, suspected overdoses by day of the week and hour of day, age, gender, and naloxone administration.

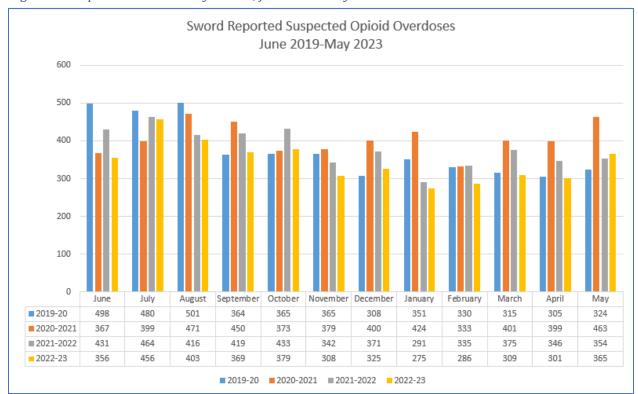


Figure 1: Suspected Overdoses by Month, June 2019-May 2023

Figure 1 illustrates SWORD reported opioid overdose by month. Since August 2021, monthly overdose totals were lower every month over the previous year with the exception of October 2021, February 2022, and May 2023.

Figure 2: Suspected Overdoses by Day of the Week and Hour of the Day, June 2022-May 2023

	Sunday	Monday	Tuesday	Wed	Thurs	Fri	Sat
12:00 AM	24	16	15	19	19	20	19
1:00 AM	18	13	15	9	8	29	11
2:00 AM	18	12	11	15	18	15	19
3:00 AM	11	13	15	16	14	17	16
4:00 AM	11	13	15	13	11	13	11
5:00 AM	14	7	14	6	16	11	10
6:00 AM	10	15	13	12	10	22	15
7:00 AM	13	21	9	16	15	19	20
8:00 AM	13	16	12	20	16	26	11
9:00 AM	20	20	18	28	27	21	13
10:00 AM	21	16	16	26	21	34	20
11:00 AM	32	24	23	21	21	30	21
12:00 PM	21	18	28	31	33	42	29
1:00 PM	27	34	33	31	21	41	31
2:00 PM	36	37	35	36	34	40	24
3:00 PM	33	33	31	37	35	38	35
4:00 PM	49	32	31	43	25	38	36
5:00 PM	26	43	27	50	42	35	32
6:00 PM	35	29	32	37	45	40	37
7:00 PM	25	31	38	34	38	43	43
8:00 PM	28	35	33	30	33	35	48
9:00 PM	22	32	23	33	36	37	29
10:00 PM	22	38	21	23	29	44	33
11:00 PM	29	13	13	22	24	26	25

Figure 2 illustrates the peak time of suspected overdoses occurred between 12:00 P.M. and 11:00 P.M on Fridays. Most overdoses in any one-hour period occurred on Wednesdays from 5:00 P.M. to 6:00 P.M. and Sundays between 4:00 P.M. to 5:00 P.M.

Figure 3: Suspected Overdose by Age and Gender, June 2022-May 2023

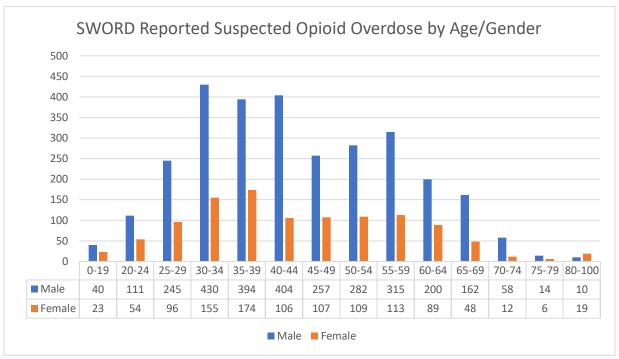


Figure 3 illustrates that more males than females experienced an overdose. Most overdoses occurred among people between the ages of 30 and 44.

Figure 4: Who Administered First Naloxone, June 2022-May 2023

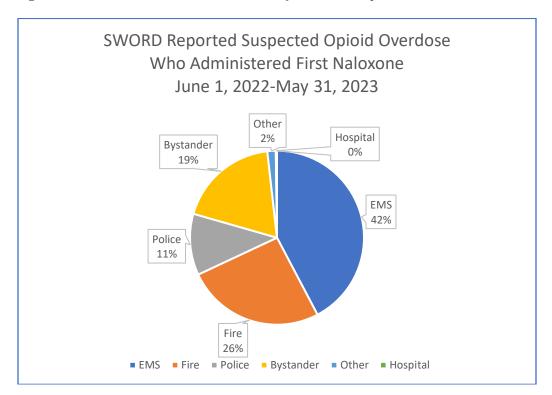


Figure 4 illustrates that Bystanders (19%) and Other (2%) non-emergency providers (2%) administered naloxone in 21% of cases where 911 was activated. EMS, Fire, and Police administered naloxone first in 79% of the cases.

Data Trends and Analysis

Overdoses

• EMS SWORD-reported opioid overdoses decreased 9.7% (June 2022 through May 2023), over the previous 12 months.

Bystander Naloxone Administrations

• Bystanders first administration of naloxone increased to 19% of the overdoses where 911 was called. This is up from 16% over the previous year. (We have no reliable way of tracking how many times bystanders administered naloxone and 911 was not called).

Overdose Age

- The median age of all reported opioid overdoses increased to 42. The median age of reported opioid overdoses in SWORD years one to three was 38, 40 and 41.
- There were 31 reported overdoses among children ages 0-17, down from 41 the previous year. In SWORD year one there were 12 and 29 in year two.
- There were six reports of children, two and under, who were victims of opioid overdoses, down from eleven the previous year. This compares to only three children two and under in year two and four in year one.

Gender

• Males constituted 72% of all overdoses versus 28% for females. The ratios in previous years were similar. (Year 1-74%/26%, Year 2-74%/26%, and Year 3-71%/29%).

Transports

• The percentage of patients who received naloxone and refused transport to the hospital increased to 11%. This is up from 7% in year three and 5% in year two.

Naloxone Leave Behind

• There were 81 reports of naloxone kits left behind with patients and their families. This is a new program that has only been initiated in a small number of cities and towns.

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 26, 2023.