

Syndromic Surveillance Overview for Comprehensive Suicide Program

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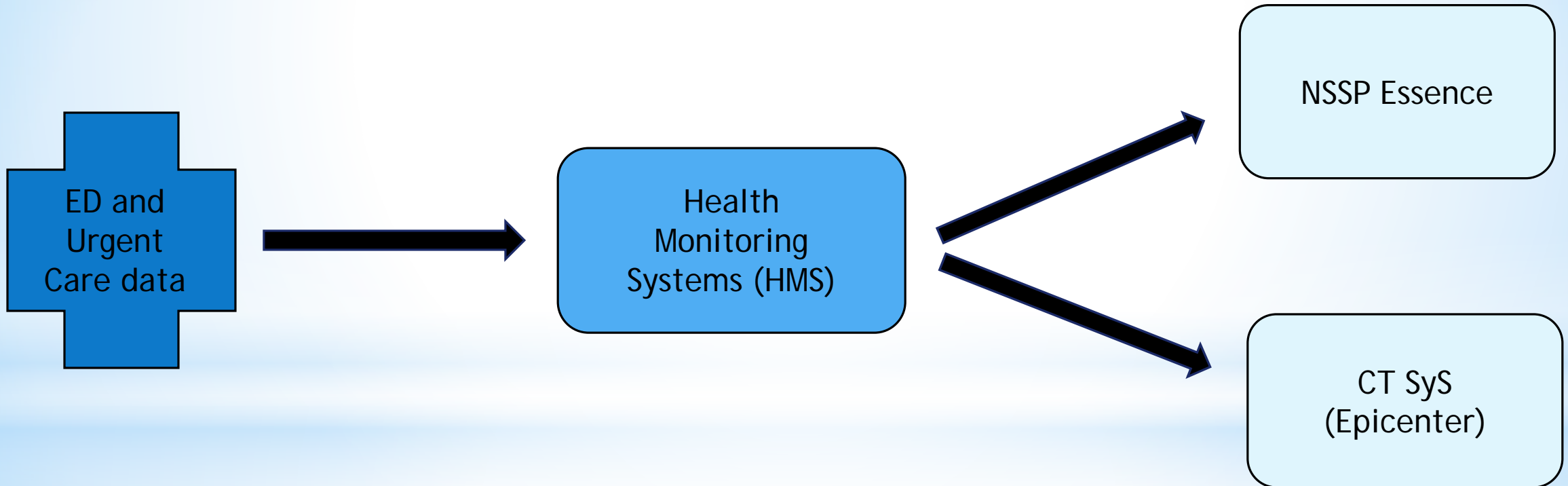
Syndromic Surveillance

Connecticut Department of Public Health

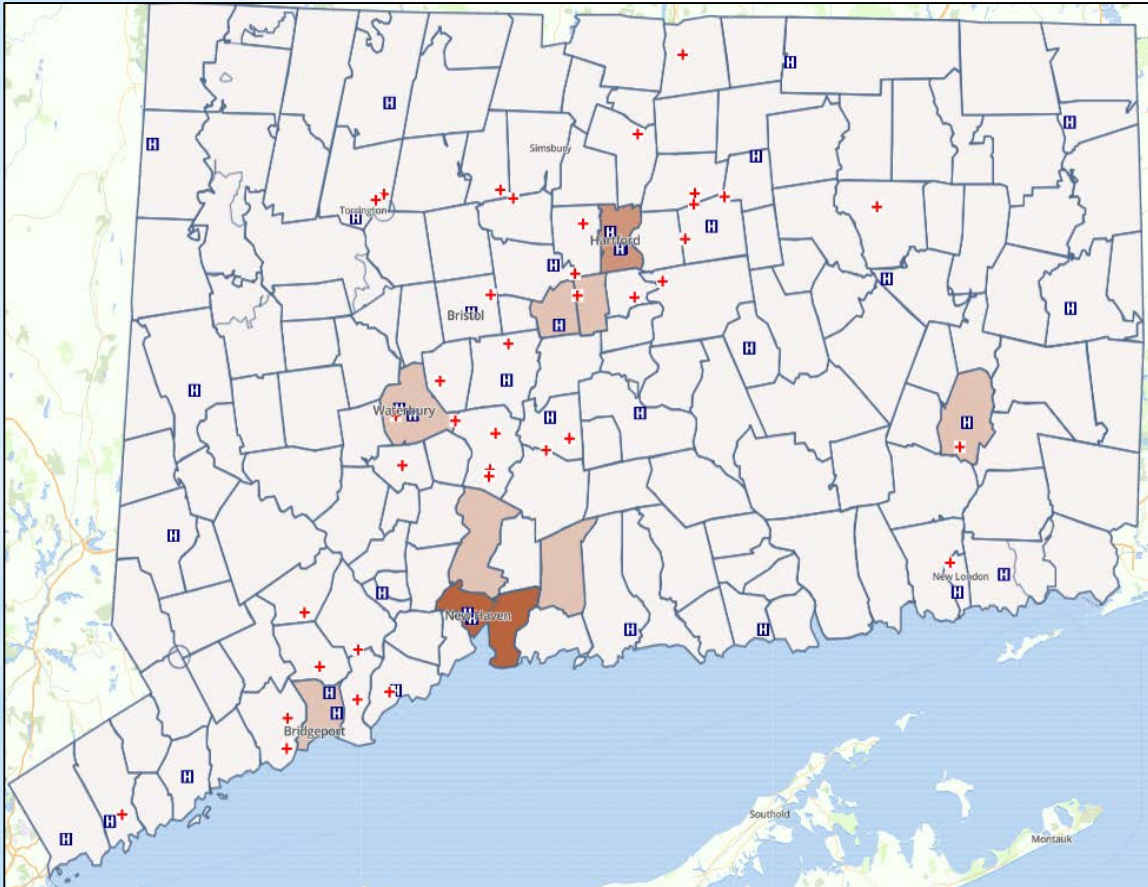
* What is Syndromic Surveillance (SyS)?

- * Public Health monitoring system for emergency department and urgent care center cases.
- * Monitors for illness symptoms and overdoses in patients that present for emergency or urgent care.
- * Data can be used to detect early signs of an outbreak, emerging disease, or mass overdose (near real-time data).
- * Collaborative surveillance between federal, state, and local health departments (LHDs).

* How is SyS Data Collected?



* Data Collected from EDs and Urgent Care Centers



38 Emergency Departments
37 Urgent Care Centers

- * Date and Time
- * DOB and Age
- * Gender
- * Resident Zip Code and County
- * Facility and Facility County
- * Race and Ethnicity
- * Discharge ICD-10 Codes
- * Disposition
- * Chief Complaint
- * Triage Notes

* Epicenter

- * Syndromic Surveillance data for CT Department of Public Health and Local Health Departments and Districts.
- * Categorizes cases into syndromes based on discharge ICD-10 codes, chief complaints, *and* triage notes.
- * Computer algorithm searches chief complaint *and* triage notes for key words and phrases to help categorize cases into CDC *and/or* Connecticut-defined syndromes.
 - * Search functions available to search for key words or phrases without using pre-defined syndromes

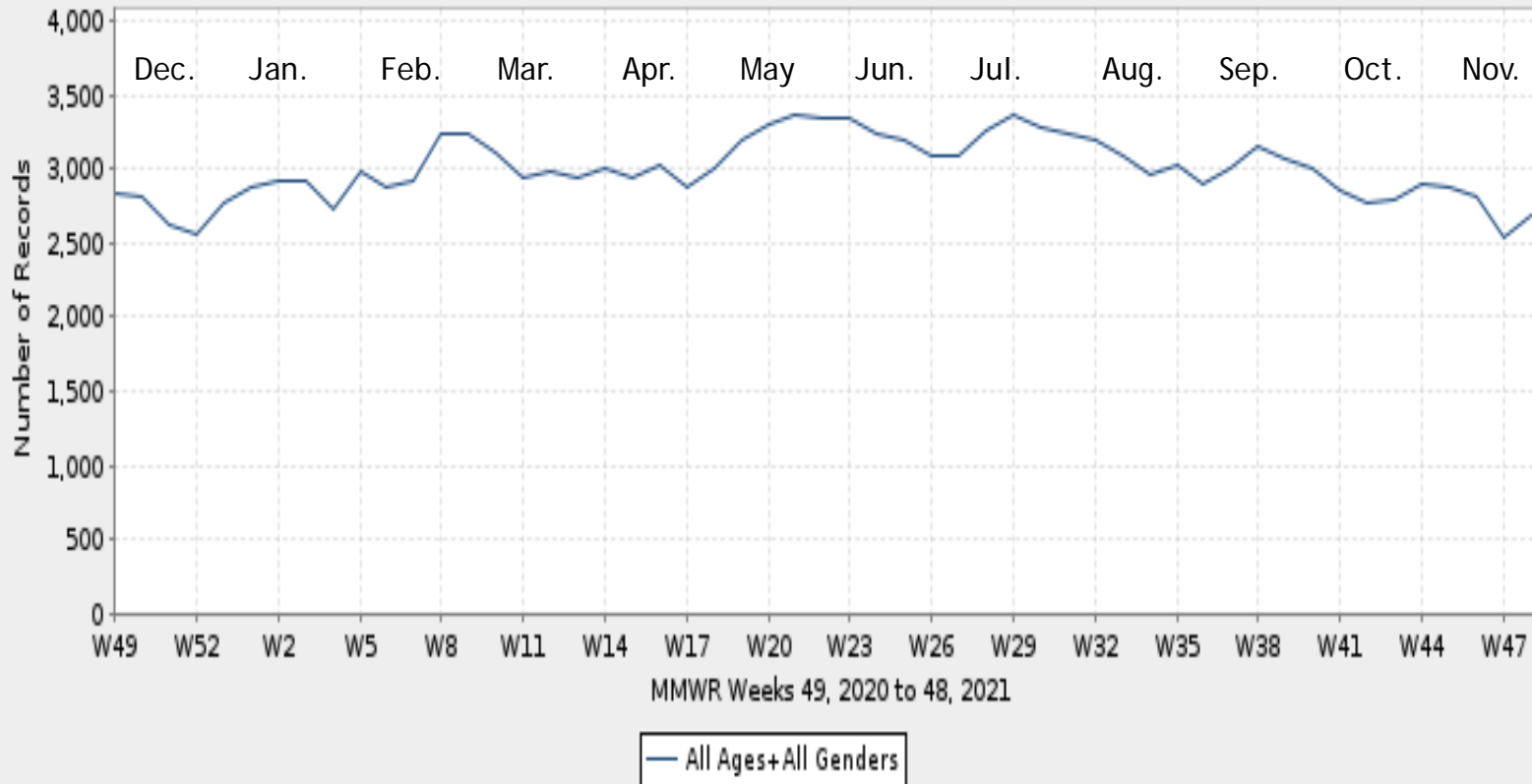
*Comprehensive Suicide Program

* CSP Classifications

- * Connecticut-defined classifications
 - * Mental Health
 - * Suicidal Ideation
 - * Suicidal Attempt
 - * Asphyxiation
 - * Firearm
 - * Intentional Overdose

* Mental Health

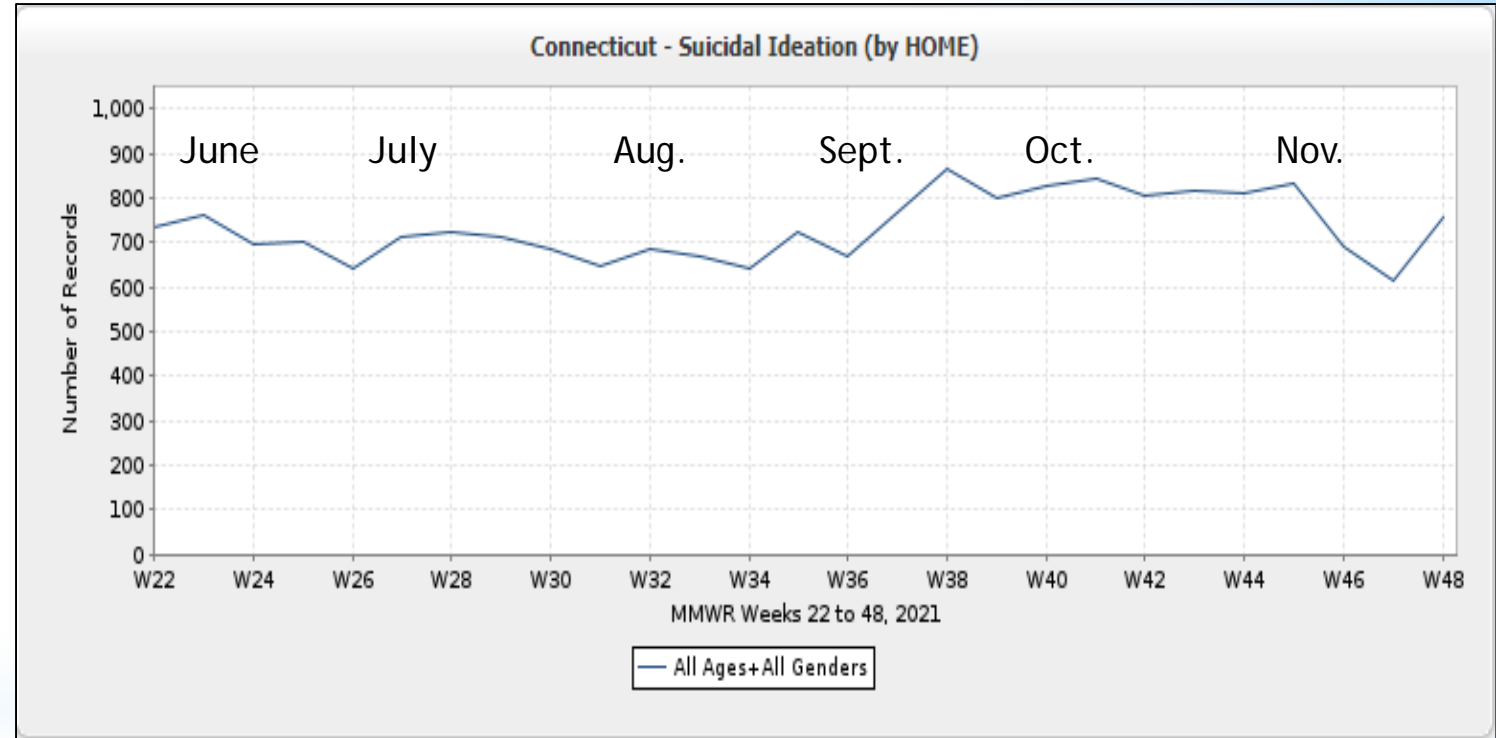
Connecticut - Mental Health (by HOME)



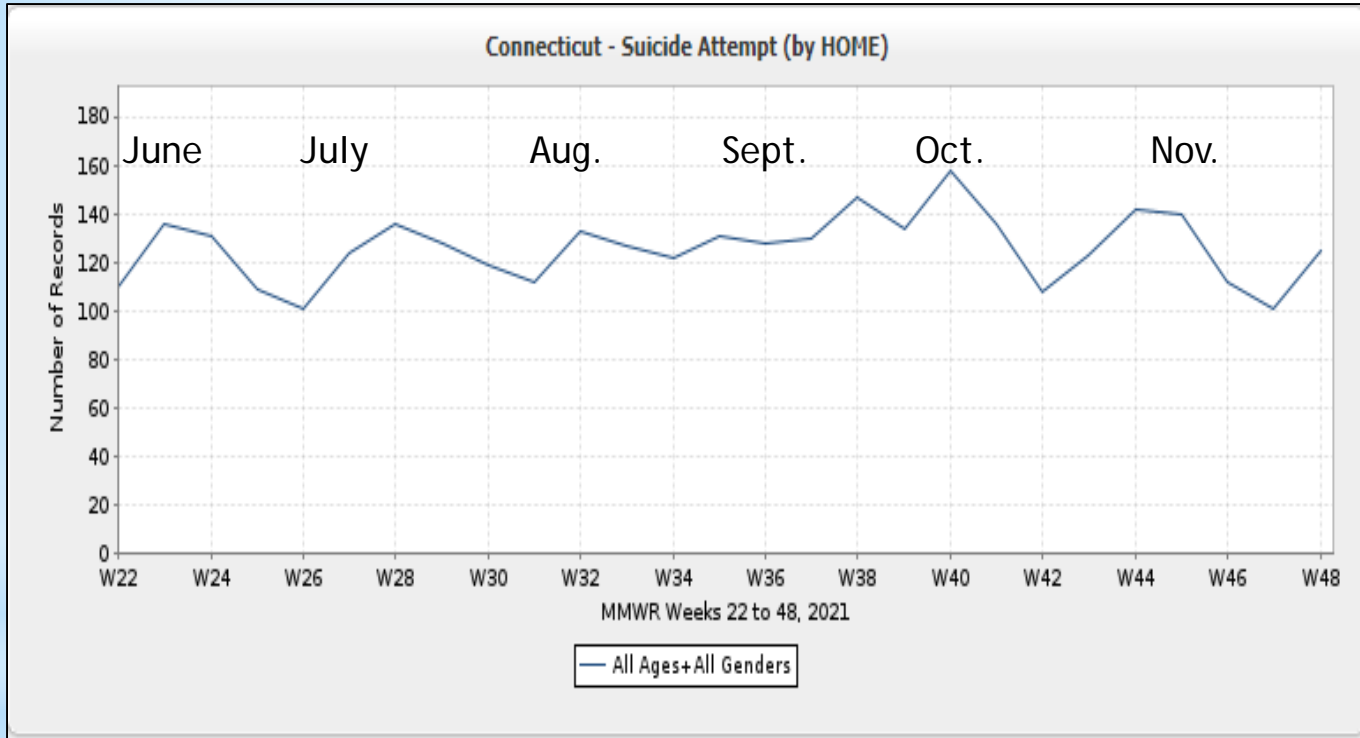
- * Work-in-progress.
- * About 70% sensitivity.
- * Anxiety, depression, OCD, suicidal ideation/attempt, hallucinations, and psychological evaluations.
- * Current definition still classifies some chest pain and SOB as "anxiety."

* Suicidal Ideation

- * About 85-90% sensitivity.
- * Specific ICD codes for SI (R45.851).
- * Key phrases for variations of "I want to die."
- * Difficult to remove unrelated cases if the triage notes include a detailed medical history with previous SI visits.

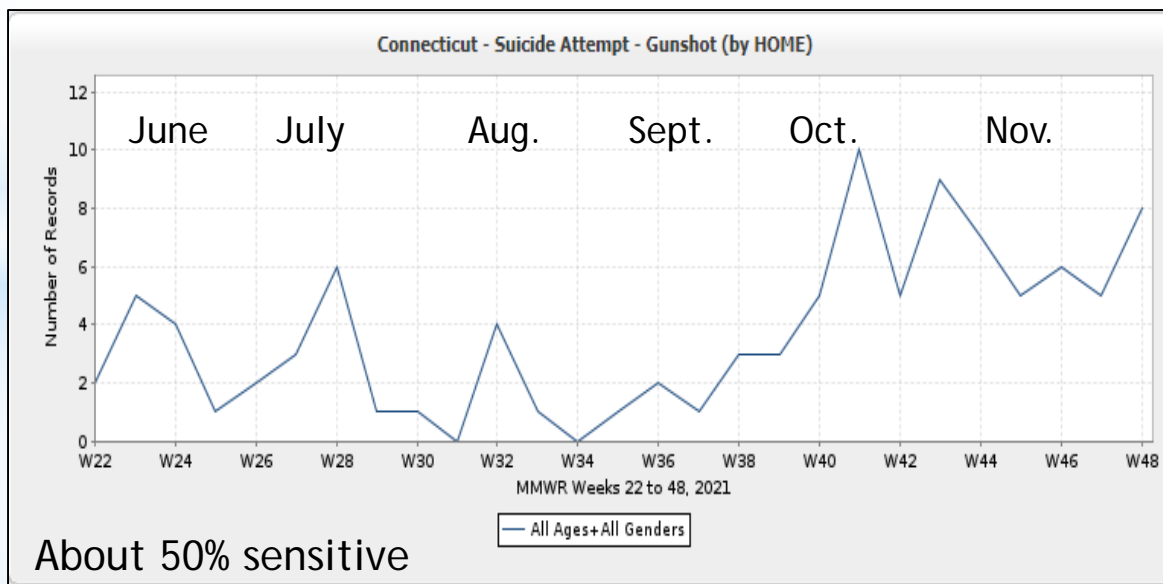
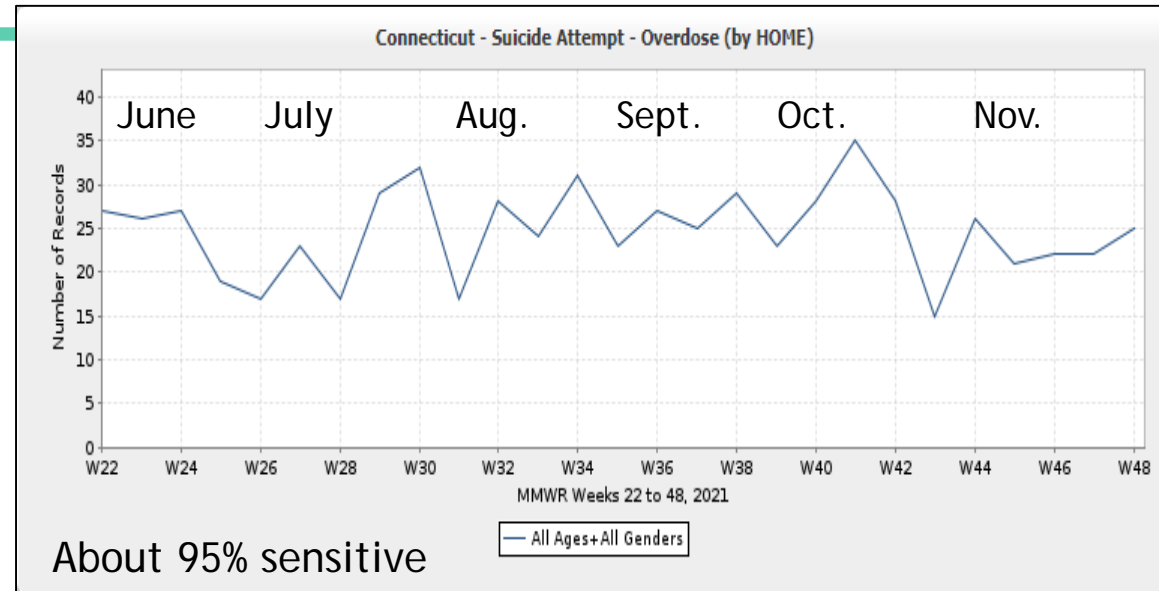
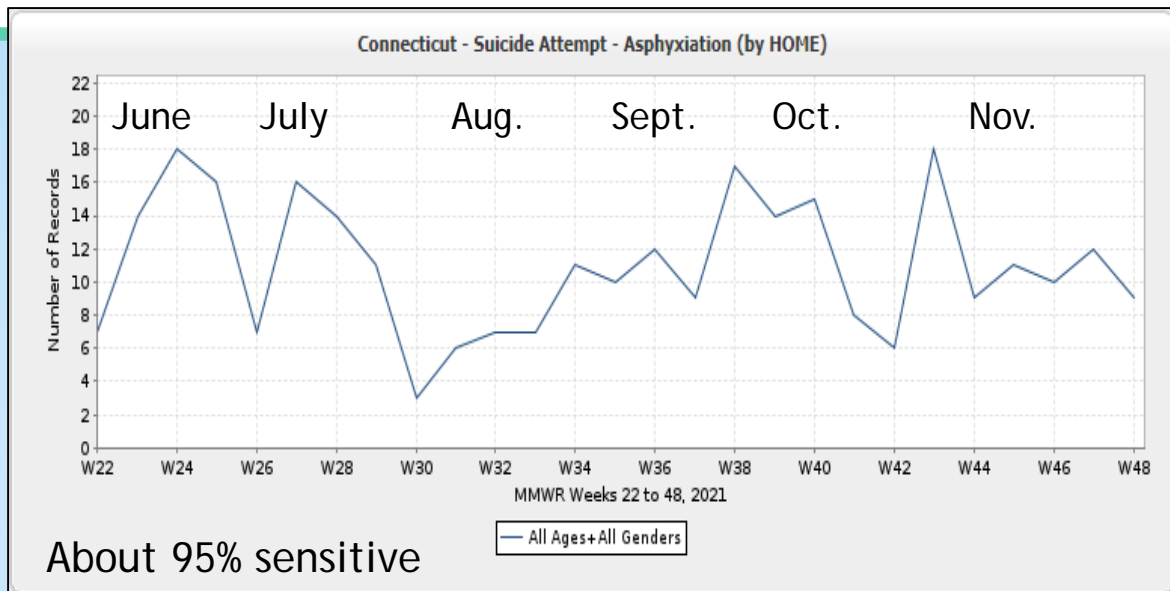


* Suicidal Attempt



- * About 90% sensitive.
- * ICD codes specific for SA (T14.91).
- * Key phrases include variations of "I tried to kill myself."
- * Difficult to remove unrelated cases with detailed medical notes of previous attempts.
- * Definition further divided into means of attempt, if available.

* Means of Suicide Attempt

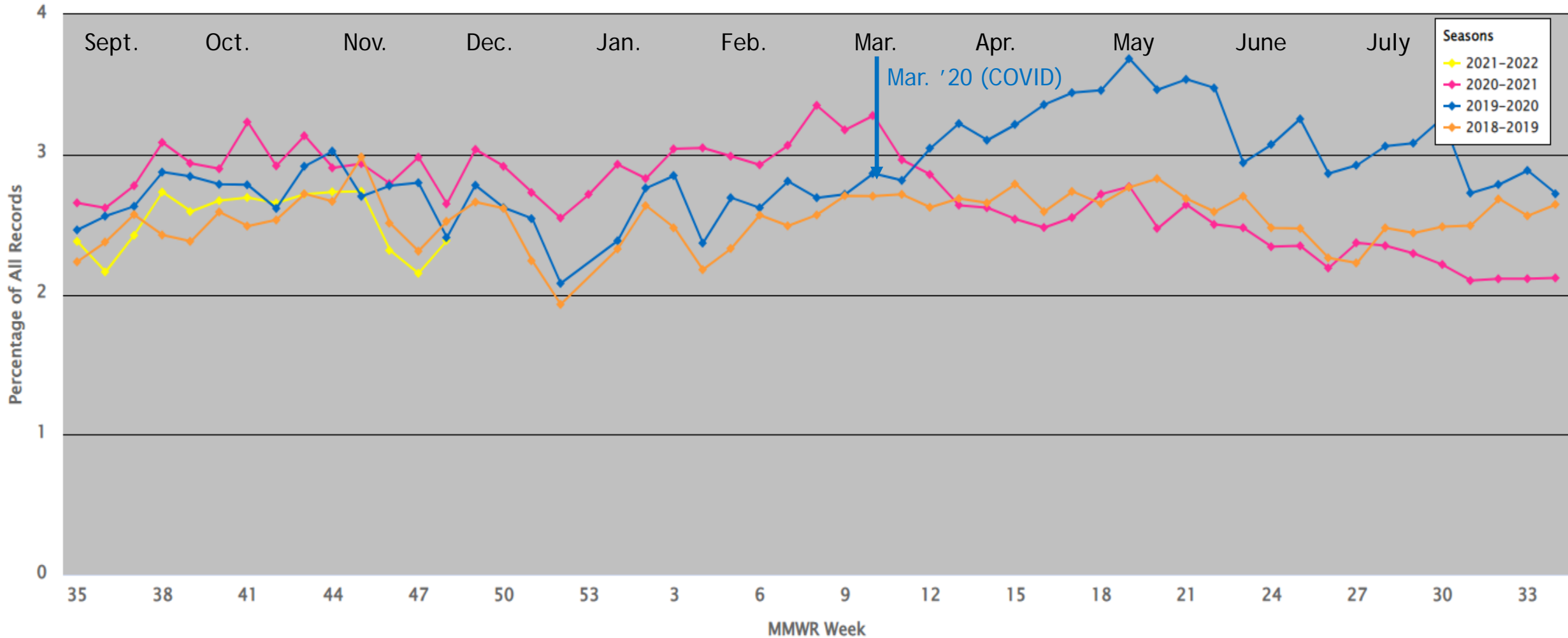


Weeks 22-Weeks 48:
 June - November

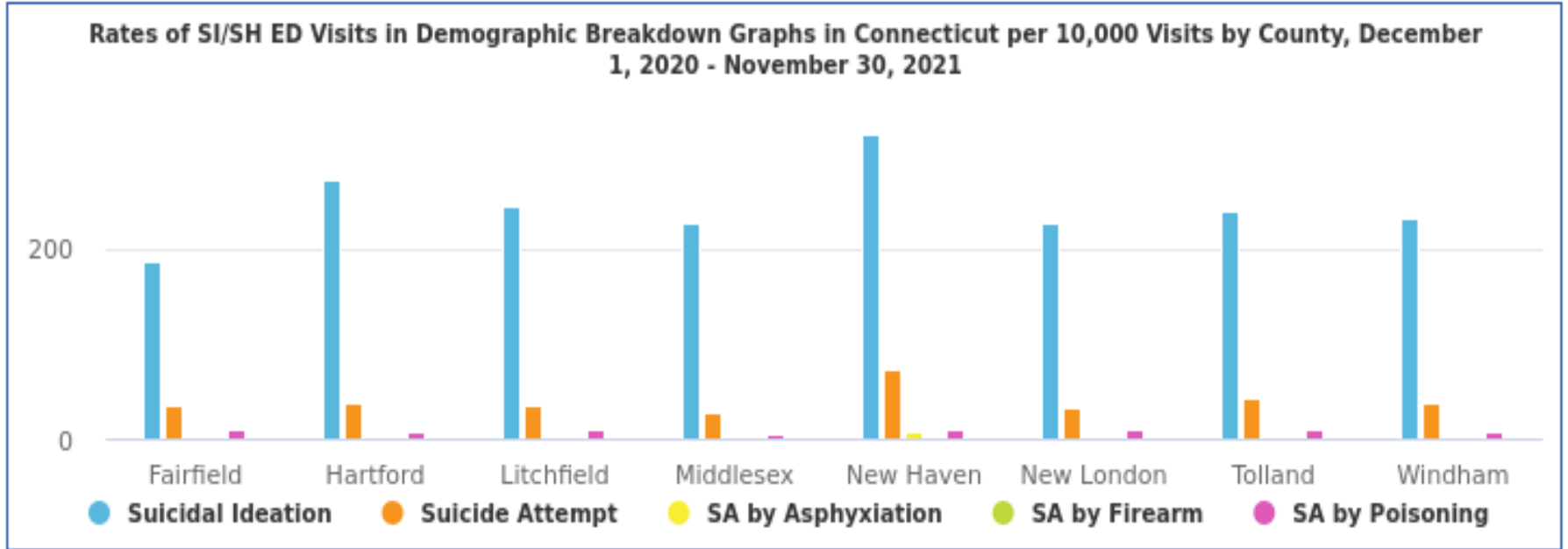
* Seasonal Trends

Connecticut Towns (Regional) EpiCenter Syndromic Surveillance System

Percentage of ED Visits for "Suicide Attempt" Connecticut Suicide, Suicidal Ideation (Classifier: Connecticut Suicide) Category, 2021-2022 Season Compared to Past Seasons



* CSP Monthly Publication- by County

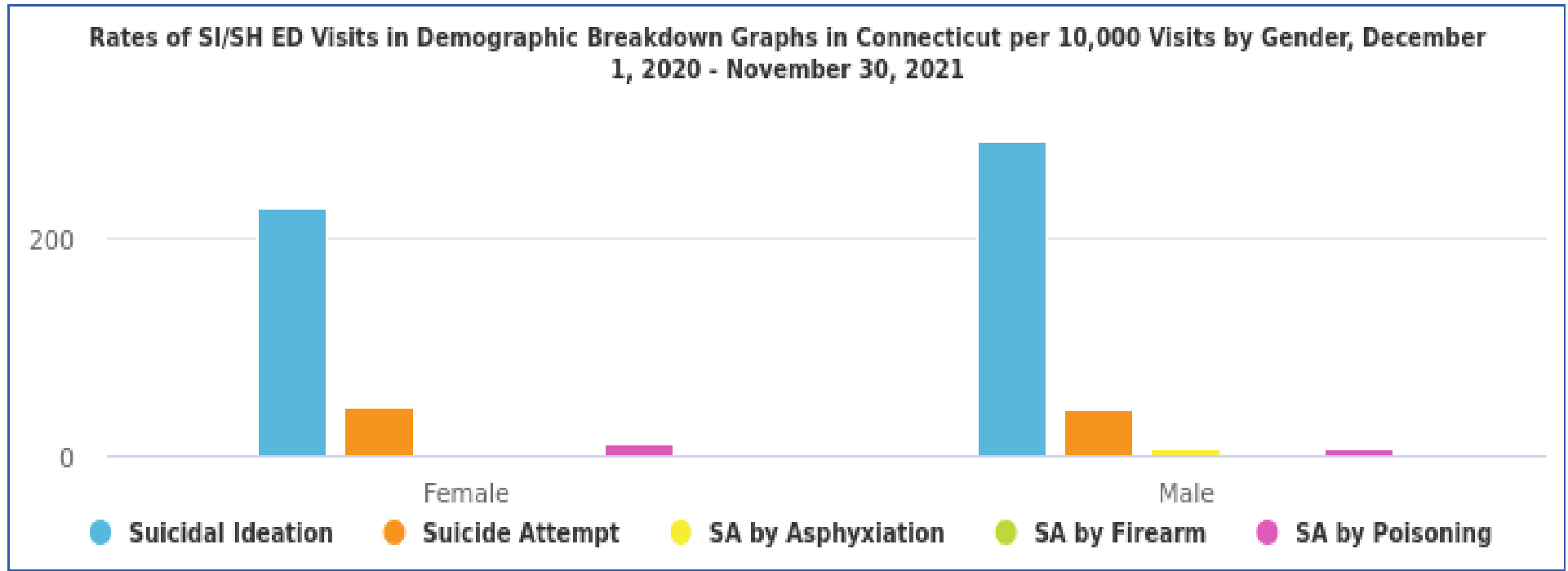


- ❖ Monthly report available through Epicenter.
- ❖ Counts and rates of SI and SA by county and LHD.
- ❖ Counts of how a suicide was attempted, when available.

COUNTY	SUICIDAL IDEATION	SUICIDE ATTEMPT	SA BY ASPHYXIATION	SA BY FIREARM	SA BY POISONING
Fairfield	185.6 (5680)	35.4 (1082)	2.9 (88)	.4 (12)	10.1 (308)
Hartford	272.0 (10731)	36.8 (1451)	3.4 (133)	.5 (19)	7.5 (294)
Litchfield	244.6 (1770)	34.3 (248)	2.5 (18)	a	10.8 (78)
Middlesex	227.2 (1465)	27.0 (174)	2.8 (18)	a	5.4 (35)
New Haven	318.7 (12035)	72.2 (2725)	6.4 (242)	2.7 (102)	10.2 (387)
New London	227.2 (2980)	32.1 (421)	2.9 (38)	.5 (7)	9.8 (129)
Tolland	239.2 (1137)	42.9 (204)	3.6 (17)	a	9.0 (43)
Windham	230.4 (1438)	36.5 (228)	3.0 (19)	a	8.8 (55)

In keeping with confidentiality regulations, numbers and rates are not disclosed for between one and five events ("a") and marked as "aa" when 6 or greater but suppressed to preserve censoring of an adjacent cell. Rates based on counts less than or equal to 20 are not calculated due to the instability of rates ("b"). These data are preliminary, and data quality and completeness may vary over time.

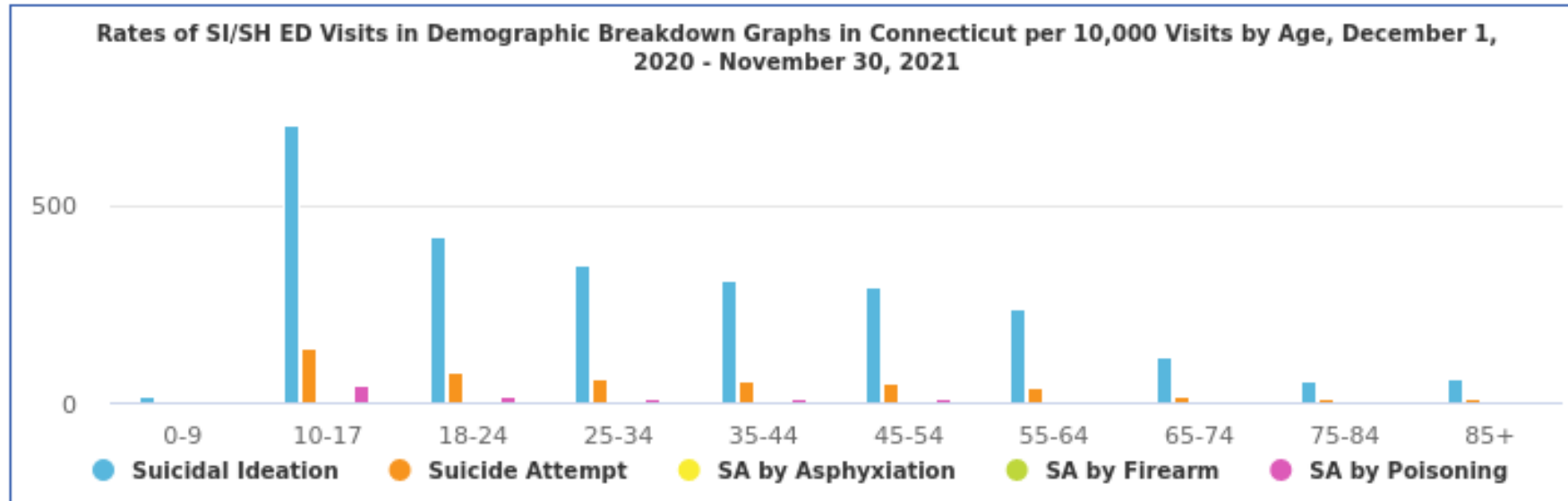
* CSP Monthly Publication- by Gender



GENDER (M/F)	SUICIDAL IDEATION	SUICIDE ATTEMPT	SA BY ASPHYXIATION	SA BY FIREARM	SA BY POISONING
Female	227.2 (17683)	46.3 (3603)	2.3 (180)	.5 (40)	11.1 (861)
Male	288.4 (19546)	43.2 (2930)	5.8 (393)	1.6 (110)	6.9 (468)

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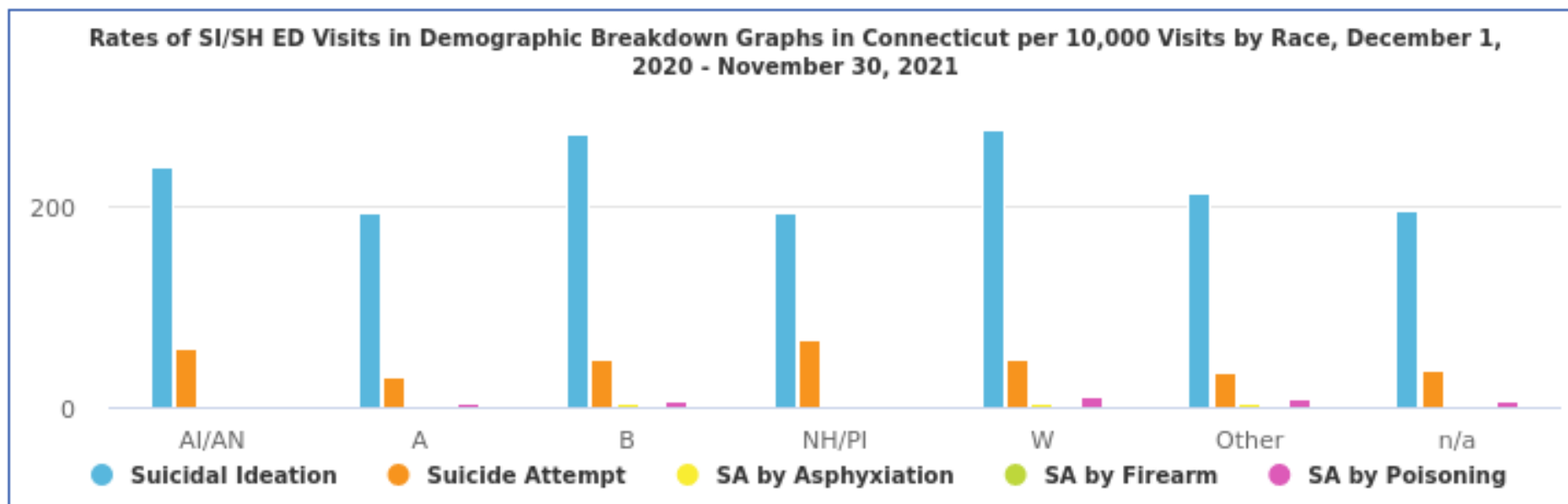
* CSP Monthly Publication- by Age



AGE	SUICIDAL IDEATION	SUICIDE ATTEMPT	SA BY ASPHYXIATION	SA BY FIREARM	SA BY POISONING
0-9	17.3 (203)	1.9 (22)	a	a	.0 (0)
10-17	702.4 (5553)	136.9 (1082)	aa	a	41.6 (329)
18-24	420.6 (5281)	76.9 (965)	6.3 (79)	1.2 (15)	19.2 (241)
25-34	348.5 (7276)	60.1 (1255)	6.8 (141)	1.1 (22)	10.8 (225)
35-44	312.5 (5933)	52.7 (1001)	5.8 (110)	1.2 (23)	9.7 (185)
45-54	295.5 (5258)	50.2 (894)	5.1 (91)	1.6 (28)	8.4 (150)
55-64	237.3 (4760)	40.9 (820)	2.6 (52)	2.0 (40)	5.8 (116)
65-74	116.5 (1775)	18.5 (282)	.7 (11)	.5 (7)	3.3 (51)
75-84	56.6 (670)	10.0 (119)	.5 (6)	.5 (6)	1.4 (16)
85+	61.3 (526)	10.8 (93)	1.4 (12)	a	1.9 (16)

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* CSP Monthly Publication- by Race

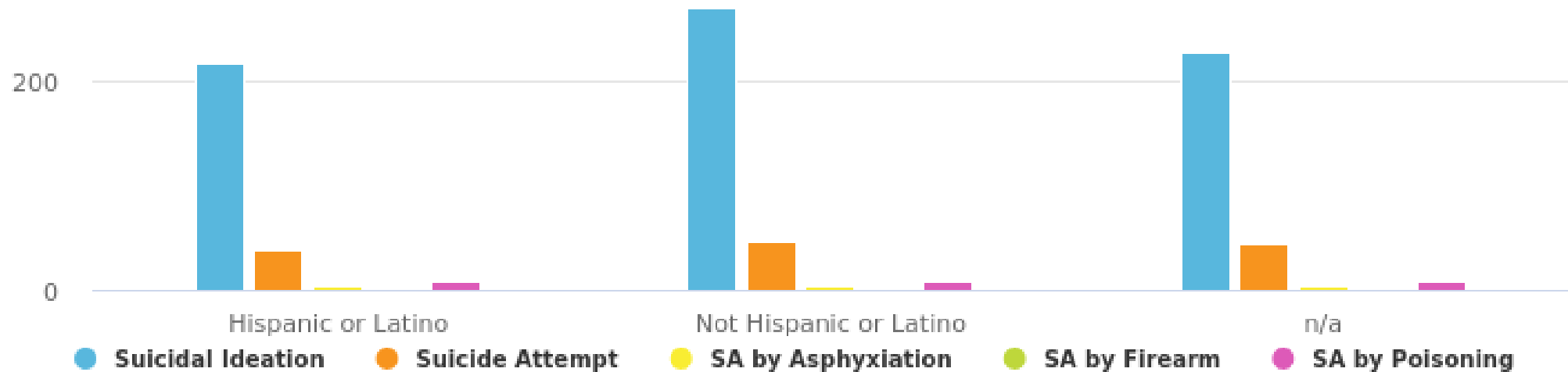


RACE	SUICIDAL IDEATION	SUICIDE ATTEMPT	SA BY ASPHYXIATION	SA BY FIREARM	SA BY POISONING
American Indian or Alaska Native (AI/AN)	239.7 (57)	58.9 (14)	a	.0 (0)	a
Asian (A)	195.0 (347)	29.8 (53)	a	a	5.1 (9)
Black or African American (B)	271.5 (6634)	47.6 (1162)	4.3 (105)	2.0 (49)	6.9 (168)
Native Hawaiian or Other Pacific Islander (NH/PI)	194.9 (43)	68.0 (15)	a	a	a
White (W)	276.2 (22010)	48.8 (3893)	3.8 (306)	1.0 (76)	10.6 (848)
Other	213.5 (5550)	35.3 (918)	4.3 (112)	.6 (15)	7.7 (201)
n/a	195.8 (2595)	36.1 (478)	3.2 (42)	.5 (6)	7.5 (99)

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* CSP Monthly Publication- by Race

Rates of SI/SH ED Visits in Demographic Breakdown Graphs in Connecticut per 10,000 Visits by Ethnicity, December 1, 2020 - November 30, 2021



ETHNICITY	SUICIDAL IDEATION	SUICIDE ATTEMPT	SA BY ASPHYXIATION	SA BY FIREARM	SA BY POISONING
Hispanic or Latino	217.9 (7124)	39.1 (1279)	4.5 (146)	.7 (23)	8.2 (269)
Not Hispanic or Latino	269.8 (28204)	46.6 (4873)	3.7 (391)	aa	9.4 (986)
n/a	228.3 (1908)	45.6 (381)	4.3 (36)	a	8.9 (74)

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Thank You!

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