

Impact of a Mobile Harm Reduction Program on Sterile Syringe and Naloxone Use in San Joaquin County

INTRODUCTION

In 2022, San Joaquin County had approximately 2,319 unhoused/unsheltered individuals, with 66% residing in Stockton¹. Studies have found that approximately 75% of unhoused individuals reported drug use of any kind and 12% reported opioid use². Additionally, drug overdose deaths increased in the United States by more than 30% from 2019 to 2020.³ Transmission rates of infections associated with injection drug use have also been increasing. Harm reduction services, including syringe exchange and naloxone distribution, have been shown to reduce the rates of disease transmission and drug overdose death within communities.

In 2016, the rate of drug-induced deaths was 56% higher in San Joaquin County than the California state average. Developed in July 2020, The Stockton Harm Reduction Program (SHRP) provides sterile syringes and injection equipment, condoms, naloxone, hygiene products, and referrals for health and housing services to people in San Joaquin County.

The purpose of this study is to determine the impact of a mobile harm reduction program on usage of sterile syringes and naloxone by program participants.

METHODS AND COHORT CHARACTERISTICS

Data were collected using standardized intake forms utilized by the SHRP. Baseline data were collected at the start of the program from July 2020 to August 2020. Follow-up data were collected from December 2021 to January 2022 and from July 2022 to August 2022 to analyze three calendar years of programmatic data. People aged 18 or older who participated in syringe services were included.

Table 1. 2022 Participant Demographics	
Mean Age (Years)	50.50
Gender	
Female	30.64%
Male	67.90%
Gender Not Reported	1.47%
Race	
White/Caucasian	31.67%
Asian	3.99%
African American or Black	23.94%
American Indian or Alaska Native	0.75%
Native Hawaiian or PI	□
Other or Multiple Races	8.23%
Ethnicity	
Hispanic	31.42%

RESULTS

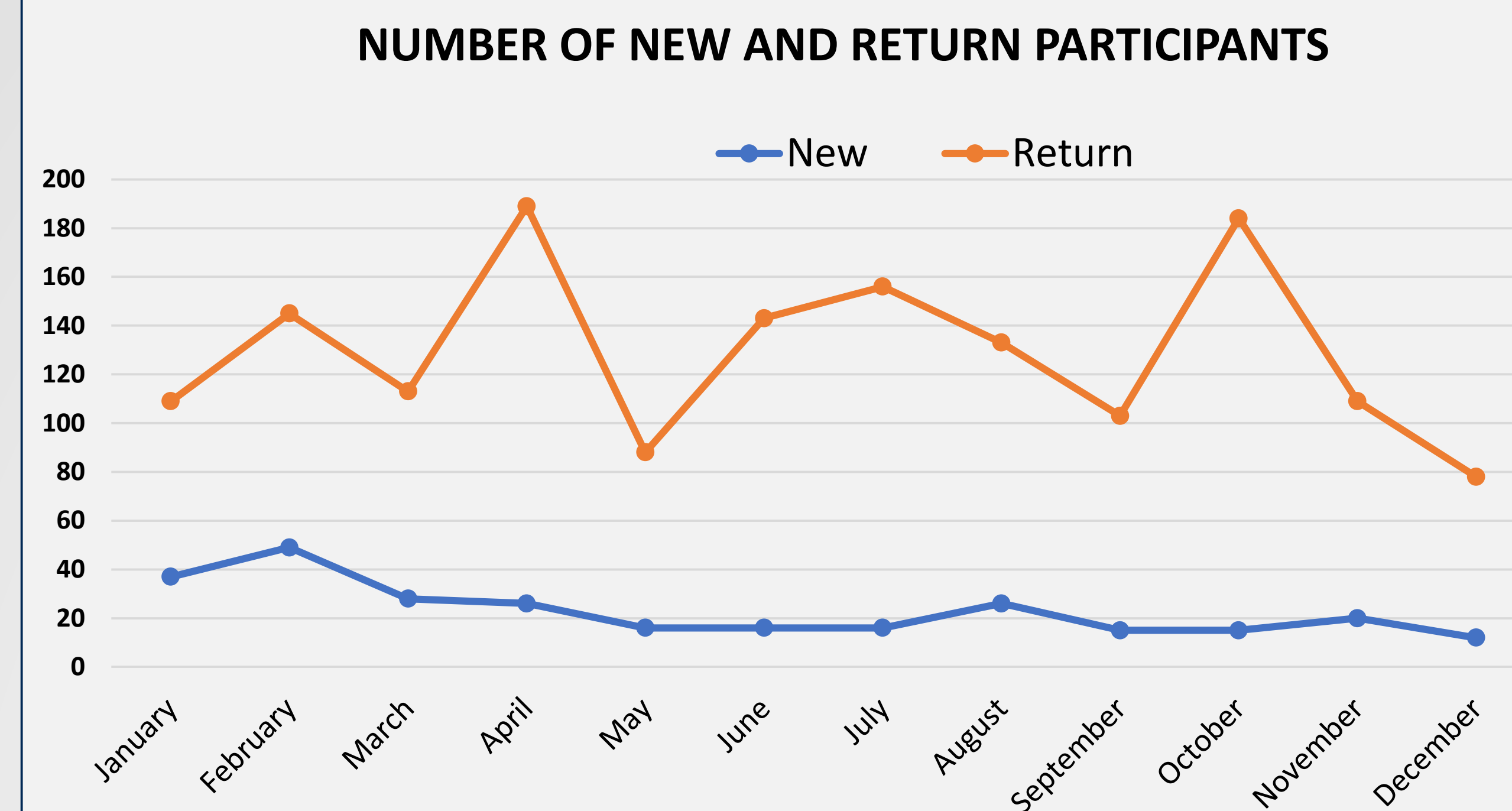


Figure 1. Number of repeat participants vs new participants over 2022; Return participants utilized our services an average of 5 times in 2022.

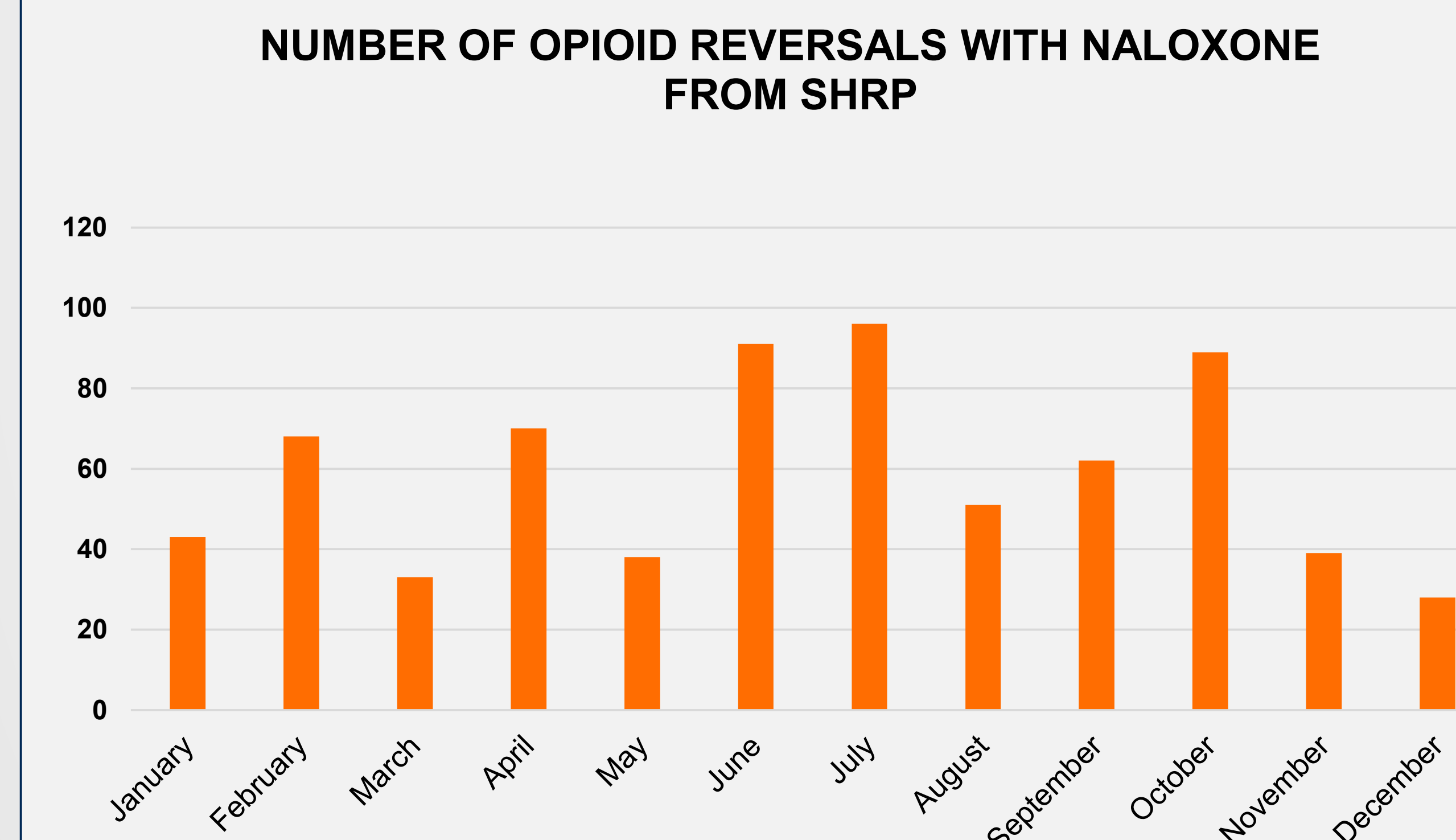


Figure 2. Number of opioid overdose reversals using naloxone provided by SHRP in 2022

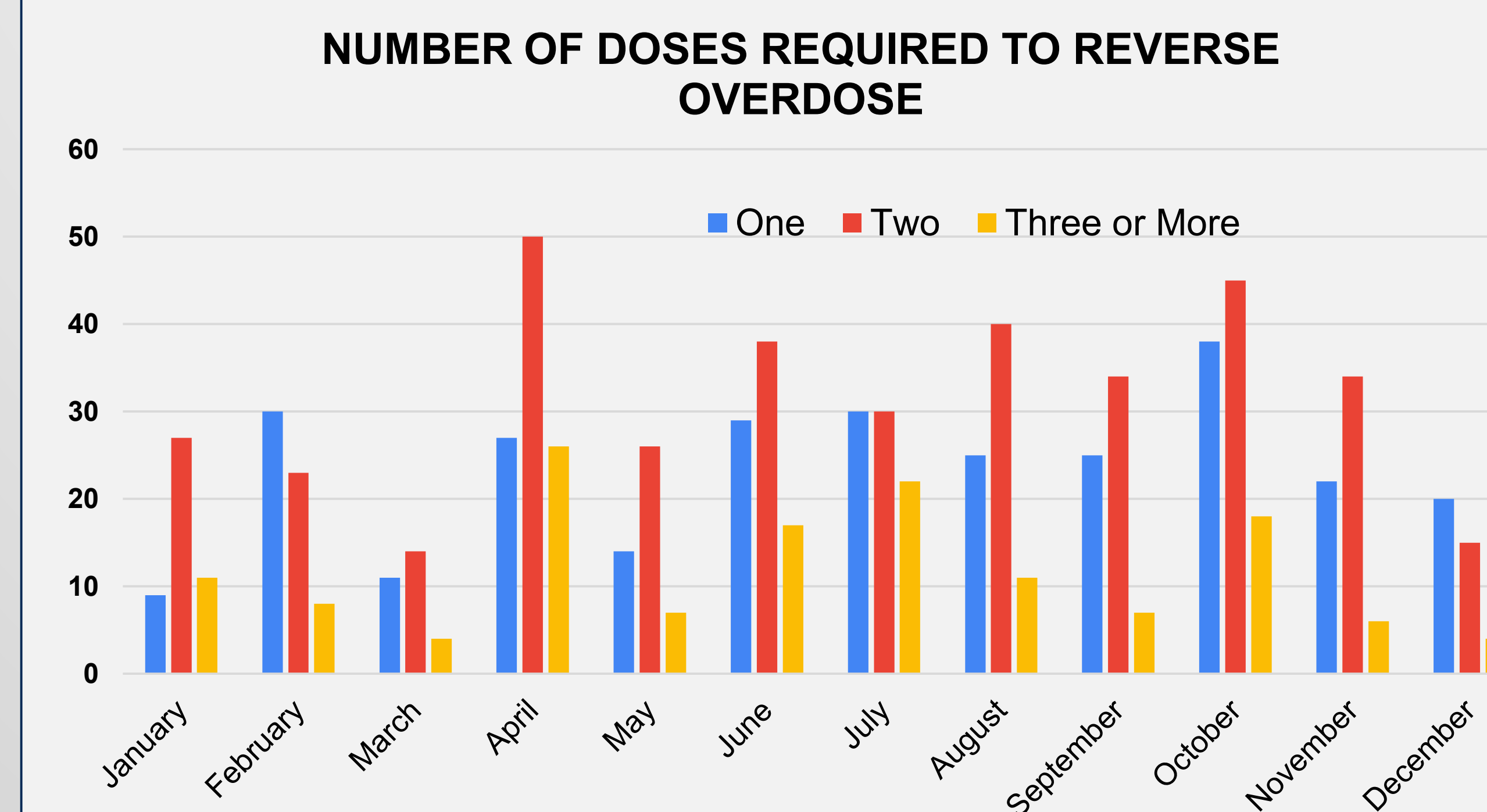


Figure 3. Number of naloxone doses reported needed to reverse an overdose in 2022

RESULTS (Cont'd)

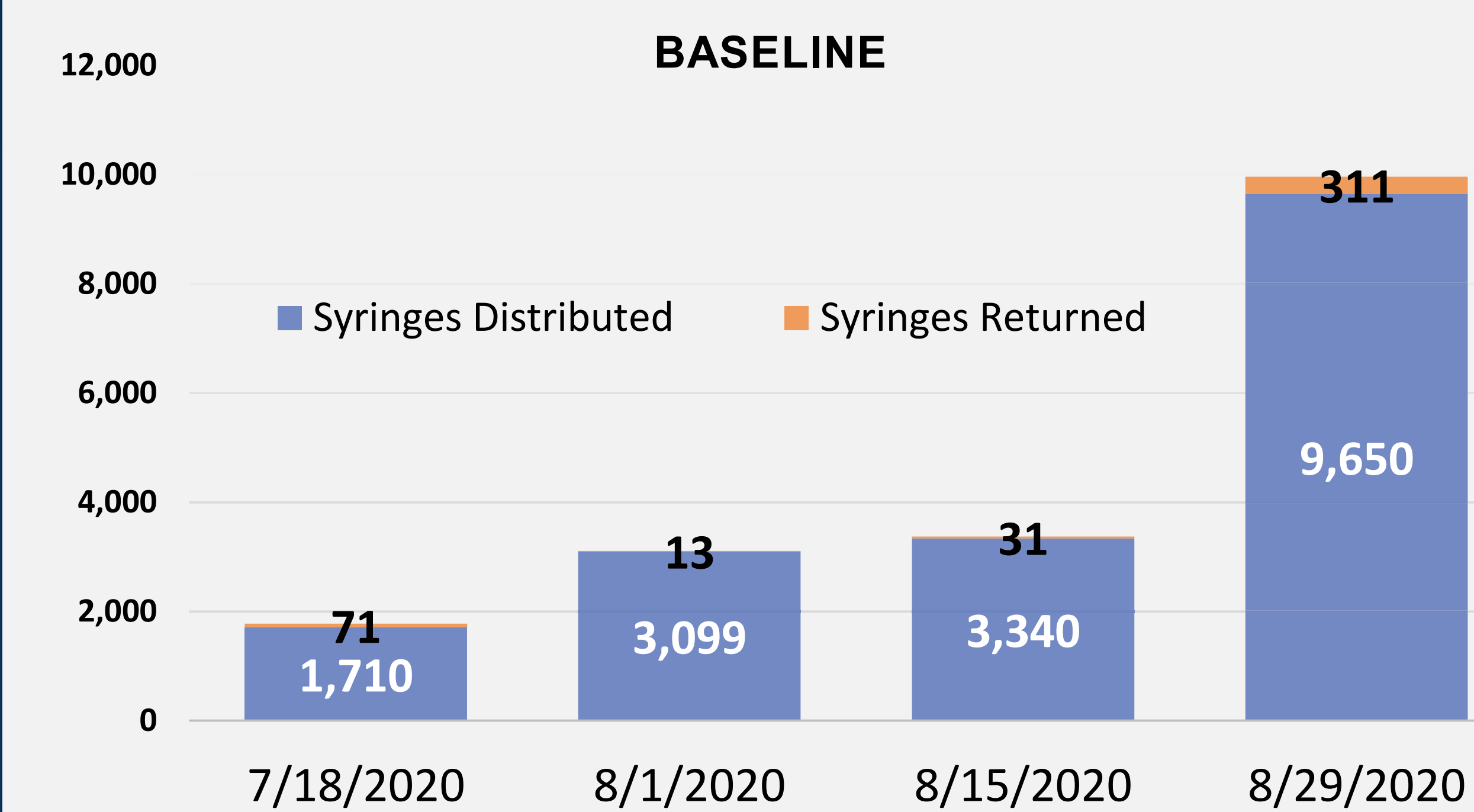


Figure 4. Number of syringes distributed, and syringes returned at program initiation. On average, 2.4% of syringes were returned at baseline.

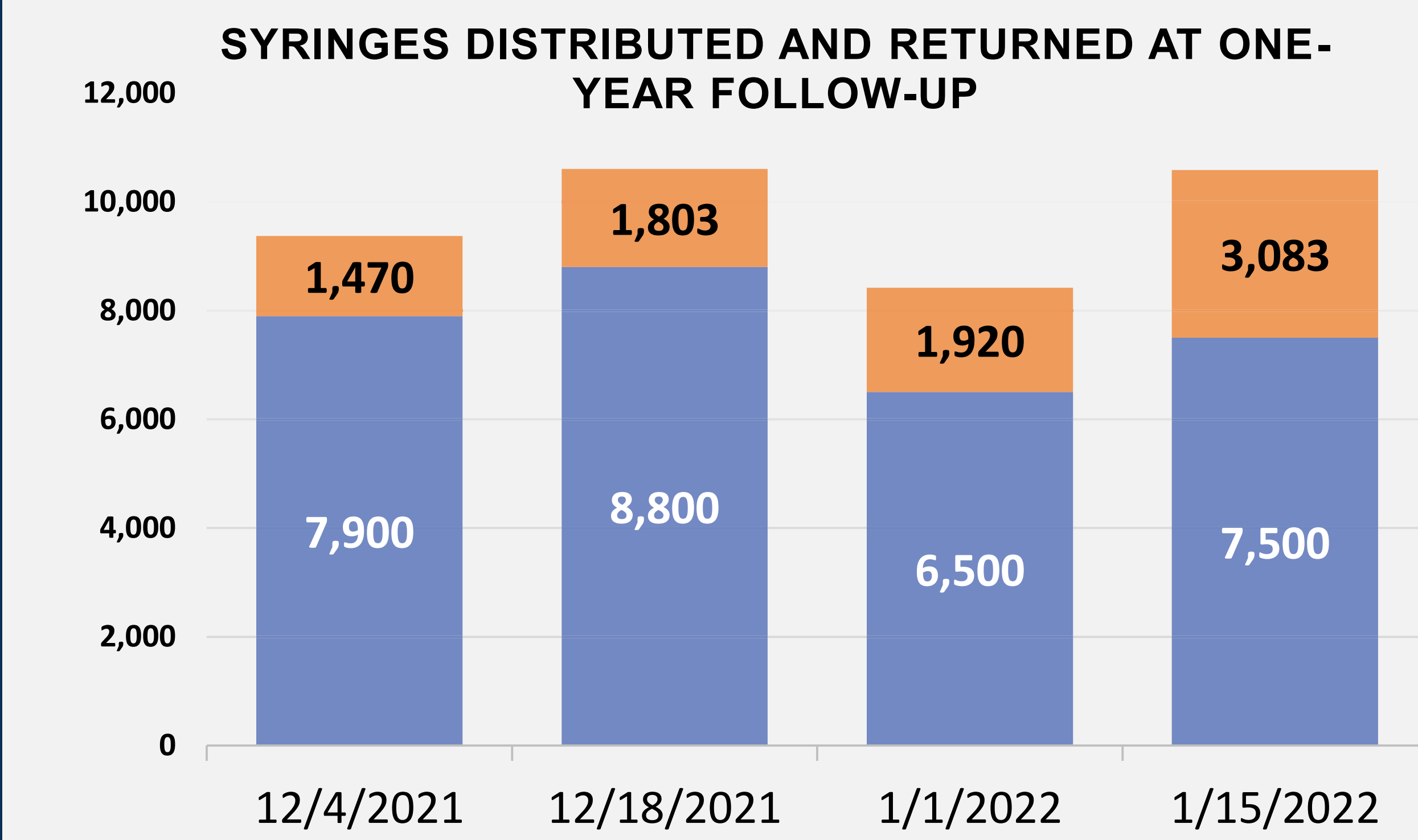


Figure 5. Number of syringes distributed, and syringes returned at one-year follow-up. On average, 27.0% of syringes were returned after one year.

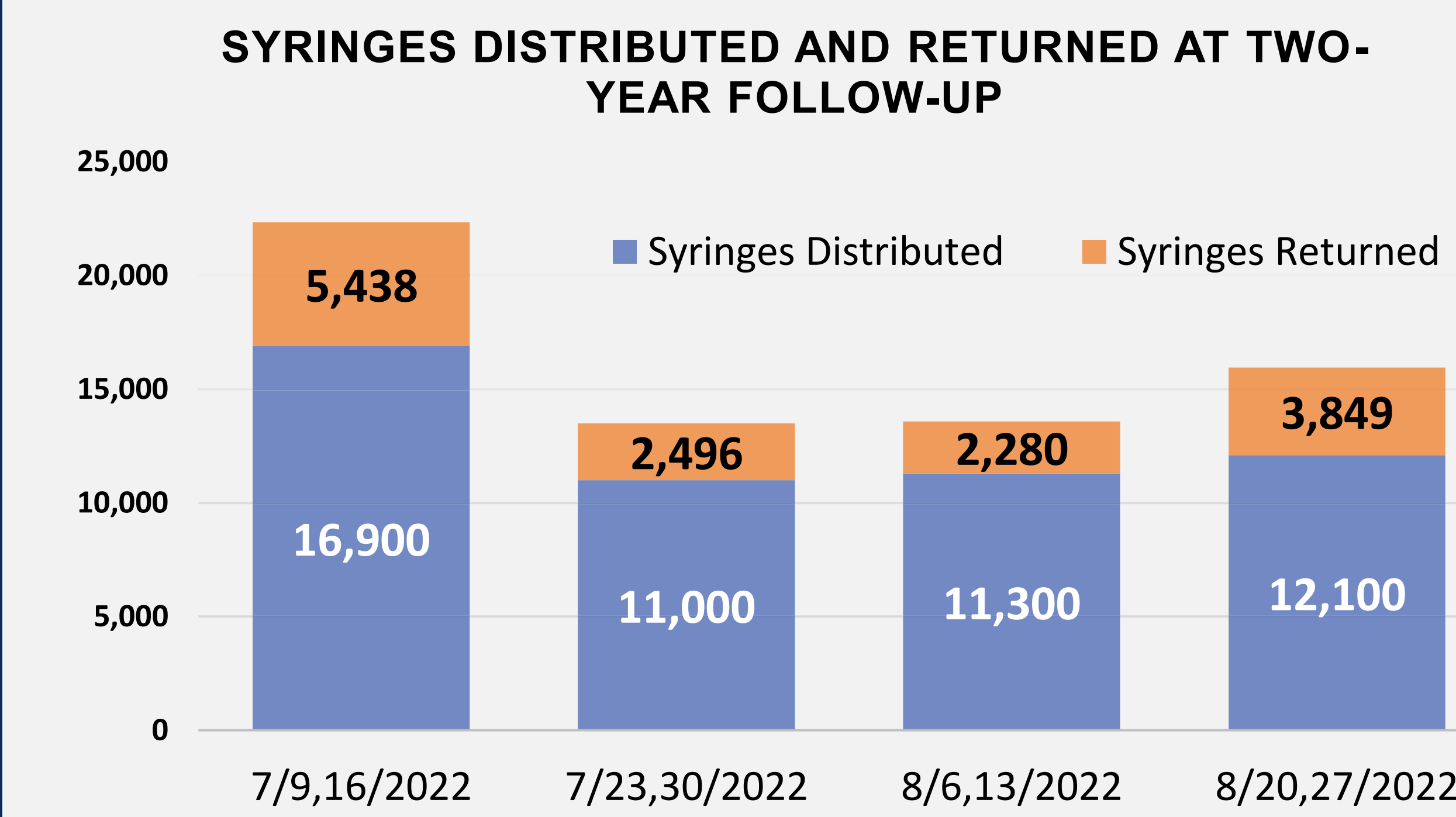


Figure 6. Number of syringes distributed, and syringes returned at two-year follow-up. On average, 27.0% of syringes were returned after two years.

CONCLUSIONS

A total of 706 known opioid overdoses were reversed using naloxone provided by SHRP. This number shows the importance of this harm reduction service in San Joaquin County. On average, 38.76% of reversals required one dose of naloxone, 49.66% required two doses, and 18.84% required three or more doses. **With the rise of use of fentanyl and other synthetic opioids, naloxone distribution will continue to save lives.**

In 2022, SHRP served an average of 23 new participants per month and 129 return participants per month. There is a continued need for harm reduction programming in Stockton and San Joaquin County.

Monthly	Distributed	Returned
Baseline	16,089	2.4%
1 year	23,200	27.0%
2 years	23,400	27.0%

Harm reduction programs can be effective at training participants on effective disposal of used syringes, with over a 10-fold increase in proportion of syringes returned to the program within one-year of program initiation and sustained proportions of returned syringes at two years. This indicates a continued need for syringe exchange services. **Future directions can focus on increasing the proportion of syringes returned to SHRP for safe disposal.**

REFERENCES

- Cheshire, A., & Mendelson, B. (2022). San Joaquin continuum of care report on the point in time count of the sheltered and unsheltered homeless. *San Joaquin Continuum of Care*.
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- Centers for Disease Control and Prevention. (2022). *Understanding the Opioid Overdose Epidemic*.

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