Governor Dan McKee's Overdose Task Force
August 25, 2023

Fatal Overdose Target Setting Working Session

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Agenda

- Introduction

- Mini Data Academy: People, Place and Health Collective (PPHC), Brown University School of Public Health
  - Jesse Yedinak Gray, MPA; Assistant Dean of Education, Assistant Professor of the Practice, Department of Epidemiology, Brown University School of Public Health
  - Brandon Marshall, PhD; Professor of Epidemiology and Director, PPHC, Brown University School of Public Health

- Overdose Data Council

  Where We've Been to Current and Target Options
  - Kristen St. John, MPH; Principal Public Health Epidemiologist, Substance Use Epidemiology Program, Center for Health Data and Analysis (CHDA), Rhode Island Department of Health (RIDOH)
  - Macy Daly, MPA; Data Unit Reporting and Analytics Team Lead, Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals (BHDDH)

  Goal Setting to Save Lives
  - Christina Schulz, PhD; Health Program Administrator, Data and Analytics, Rhode Island Executive Office of Health and Human Service (EOHHS)

- Open Discussion and Feedback

- Next Steps: Where Do We Go From Here
  - Cathy Schultz, MPH; Director, Governor's Overdose Task Force, EOHHS

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DATA ACADEMY

Governor's Task Force
August 25, 2023

Jesse Yedinak Gray, MPA

Assistant Dean of Education

Assistant Professor of Practice, Epidemiology

Jesse_Yedinak@Brown.edu

Agenda

1. Community-Driven values

2. Data Storytelling

3. Plain Language: *public health data literacy*

4. Shared Language: *counts, rates, percentages*

5. Metrics: *adding more to the story*

1. Community-Driven Values

2. Data Storytelling

Data Storytelling:
3 Questions to ask

How is our story being told?
Personal stories, counts, rates, or percentages?

Is our story the same across all groups?
race, age, gender, location (talk about disparities or similarities)

Is there more to this story?
(add other data, benchmarks, timelines to guide action)

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place &
health
collective

BROWN
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The average reading level of an adult in the US is...

A. 5th grade

B. 7th grade

C. 10th grade

D. 12th grade

Quiz

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health
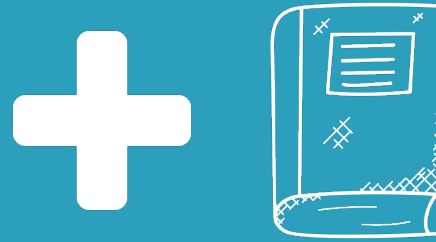collective

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Health information in the US is usually <u>written</u> at this reading level..

A. 5th grade

B. 7th grade

C. 10th grade

D. 12th grade

Health information in the US is usually <u>written</u> at this reading level..

A. 5th grade

B. 7th grade

C. 10th grade

D. 12th grade

Health literacy:

How we find, process, and understand the **health information** we need, **and then use it to guide our individual health decisions.**

Public Health Data literacy:

How we find, process and understand the **public health data** we need, **and then to use it to guide program changes & policy-level decisions.**

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3. Shared Language:
counts, percentages, rates

Quiz:

What statistic is being used here?

A. Count

B. Percentage

C. Rate

"There are 3 Dunkin' Donuts in West Greenwich"

"There are 21 Dunkin' Donuts in Providence"

PROVIDENT
data academy

Count = the total number of something

Counts are *the easiest for everyone* to understand.

Counts are something we can grasp quickly in our mind.

We only need to know if the count should go up, down, or stay the same.

Quiz:
What statistic is being used here?

A. Count

B. Percentage

C. Rate

"30% of people in West Greenwich live within a 5 minute drive of a Dunkin"

"100% of people in Providence live within a 5 minute drive of a Dunkin"

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Percentage = the part out of one hundred

Percentages help us understand the different parts of the whole (think slices of pizza or pie).

These are harder to understand, and require mental math for your reader.

Quiz:
What statistic is being used here?

A. Count

B. Percentage

C. Rate

"West Greenwich has 50 Dunkins' **per** 100,000 people"

"Providence has 12 Dunkins' **per** 100,000 people"

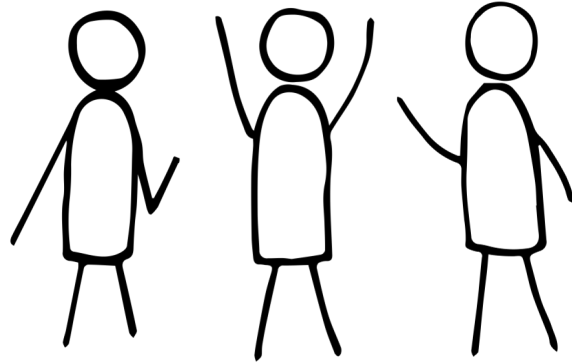# *Rate = a measure of something per some unit*

Rates help us compare the same issue in two different populations (think: apples to apples).

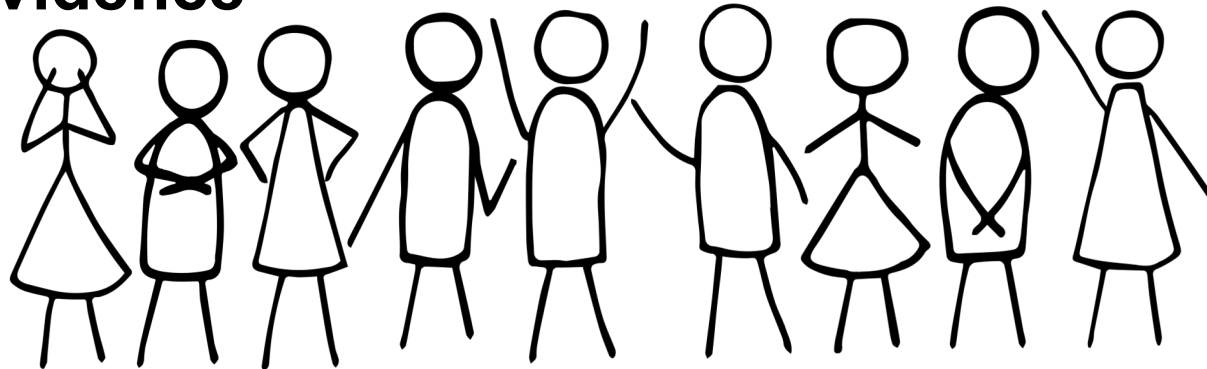In epidemiology we use "per 1000" or "per 100,000" to help us compare groups.

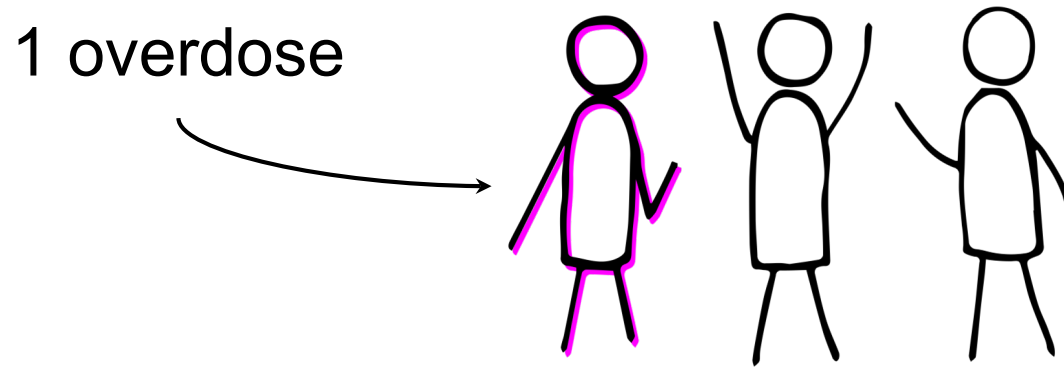*also requires mental math, can be hard to grasp
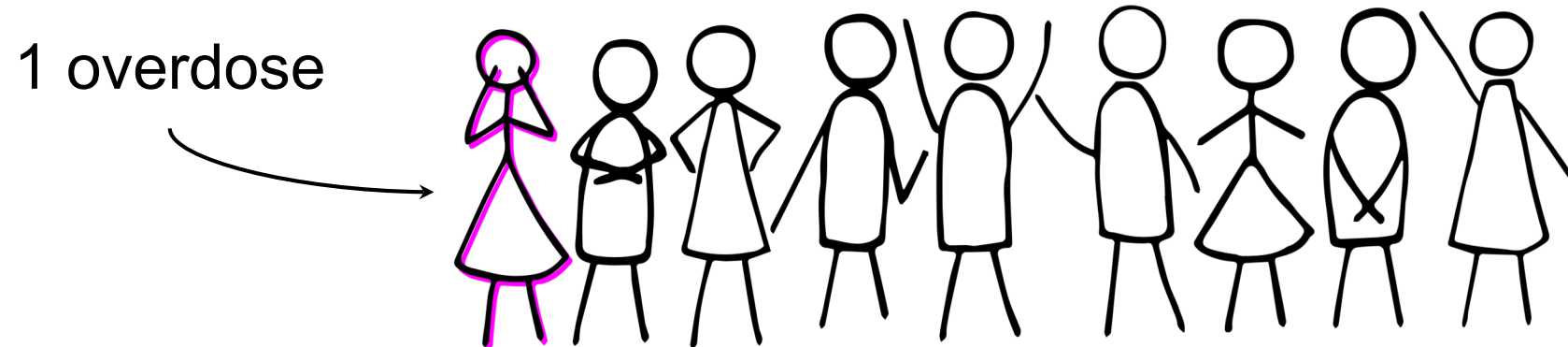
Population of West Greenwich

Population of Providence

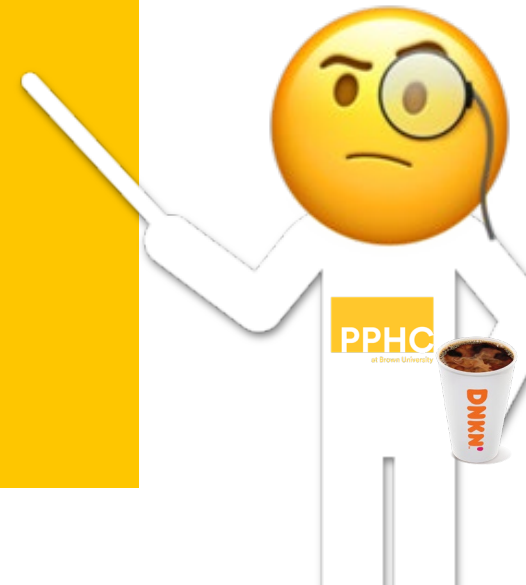# Population of Central Falls

1 overdose

Population of Providence

1 overdose

What about "rate per 100,000"??

How would we compare West Greenwich and Providence if they don't have 100,000 people!!

Rate "per 100,000" is a calculation that lets us add context to counts
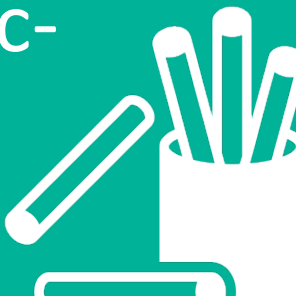
4. Metrics:
adding more to the story

Metric = a way to evaluate our plans

Metrics tell a story about action- where are we going next?

Metrics look at trends across the systems of care, and hold us accountable to making change.

But, metrics still make us do mental math! Use rates and percentages with caution for public-facing metrics.
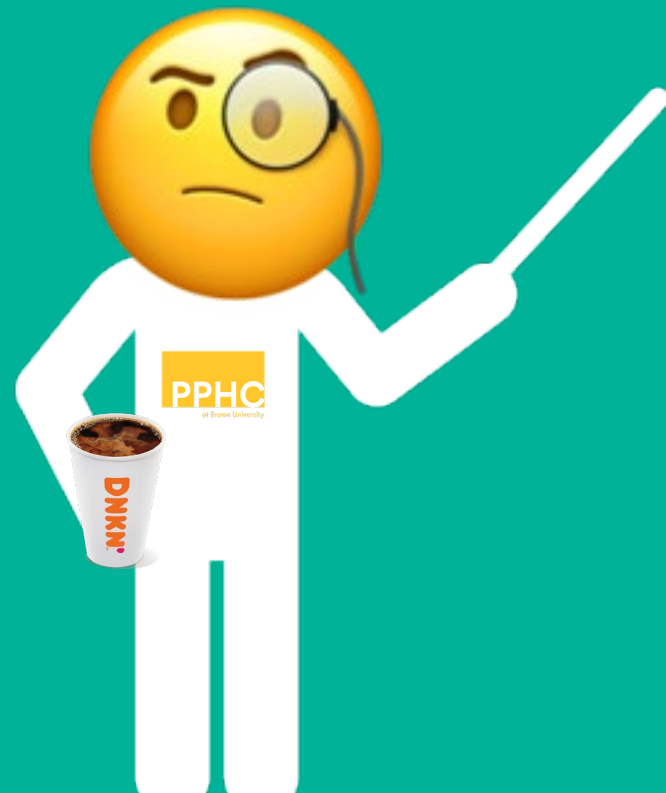
Our Main Goal:

Decrease the number of Overdose Deaths

Number of Drug Overdose-Related Deaths
(As of 8/24/2023)

Note: Most overdoses are confirmed within 3 months; however, sometimes toxicology test results take longer to confirm.

- Confirmed
- Unconfirmed

https://preventoverdoseri.org/the-action-plan/

Overdose Death Rate per 100,000 person-years by **Race and Ethnicity**, 2016 to 2022
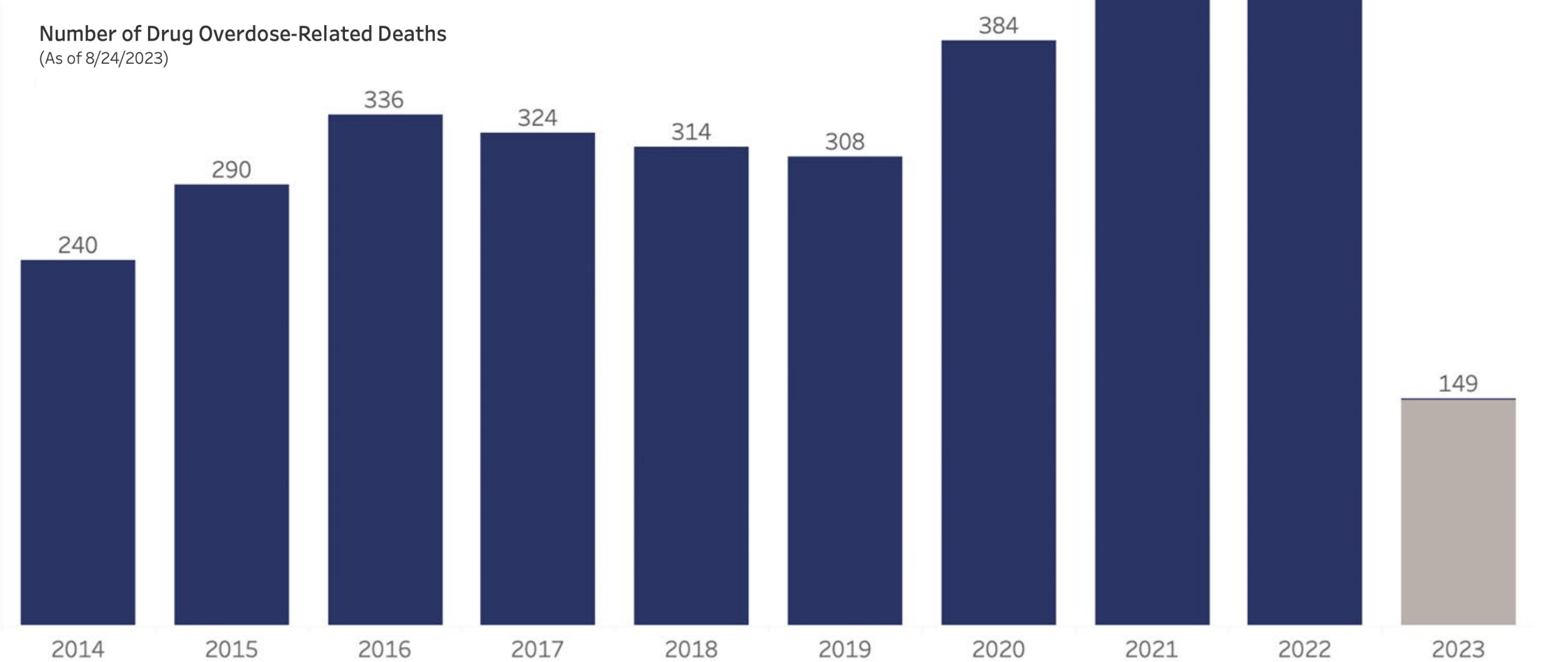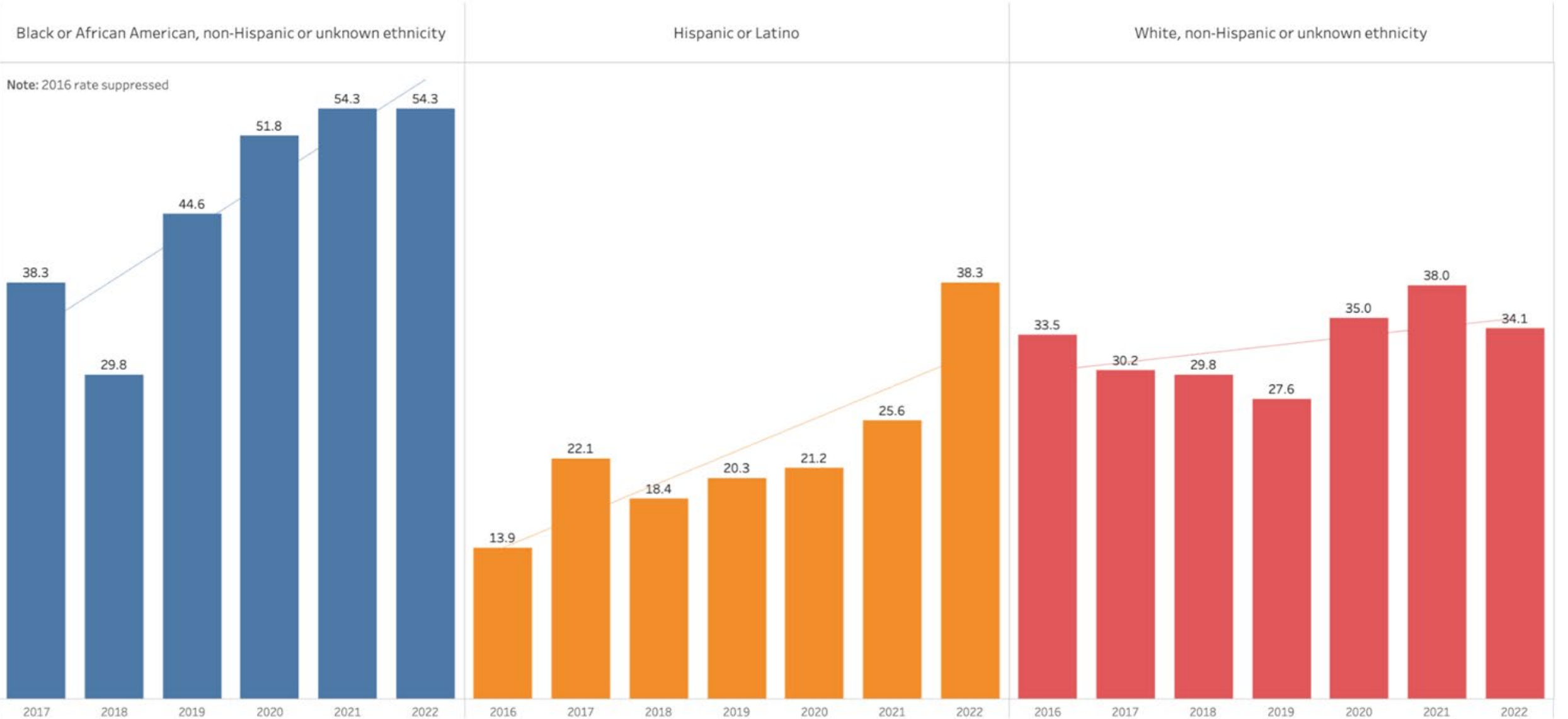
Note: Due to approximately 7% of accidental overdose deaths missing ethnicity from 2016 to 2021, the number of overdose deaths for Hispanic persons may be undercounted. Independent of Hispanic ethnicity status, health disparities remain when comparing overdose death rates for White individuals and Black individuals.

Black or African American, non-Hispanic or unknown ethnicity	Hispanic or Latino	White, non-Hispanic or unknown ethnicity

Black or African American, non-Hispanic or unknown ethnicity

Note: 2016 rate suppressed

2017	2018	2019	2020	2021	2022
38.3	29.8	44.6	51.8	54.3	54.3

Hispanic or Latino

2016	2017	2018	2019	2020	2021	2022
13.9	22.1	18.4	20.3	21.2	25.6	38.3

White, non-Hispanic or unknown ethnicity

2016	2017	2018	2019	2020	2021	2022
33.5	30.2	29.8	27.6	35.0	38.0	34.1

Note: Rates are calculated using CDC WONDER single-race population estimates for each year. 2019 estimates applied for 2020 rates. The rate is the number of deaths, divided by the total population for each category, multiplied by 100,000.

Note: "Hispanic or Latino" includes people who identify as any race. All other racial and ethnic groups include people who identify as non-Hispanic ethnicity or have unknown ethnicity.

https://preventoverdoseri.org/race-ethnicity-data/

Thank you.

- Join our next data academy in mid-September.

- Free, no prior experience needed.

- *Email maxwell_krieger@brown.edu for details.*

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Interested in more data academy?

References

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Osborn, C. Y., Paasche-Orlow, M. K., Davis, T. C., & Wolf, M. S. (2007). Health literacy: An overlooked factor in understanding HIV health disparities. American Journal of Preventive Medicine, 33(5), 374-378. http://dx.doi.org/10.1016/j.amepre.2007.07.022

Rebeiro, P. F., McPherson, T.D., Goggins, K.M., Turner, M., Bebawy, S.S., et al. (2018). Health Literacy and Demographic Disparities in HIV Care Continuum Outcomes. AIDS and Behavior, published online 20 March 2018. https://doi.org/10.1007/s10461-018-2092-7

Mishra V, Dexter JP. Comparison of Readability of Official Public Health Information About COVID-19 on Websites of International Agencies and the Governments of 15 Countries. JAMA Netw Open. 2020;3(8):e2018033. doi:10.1001/jamanetworkopen.2020.18033

Yedinak Gray JL, Krieger MS, Joseph R, Levin S, Edwards S, Bailer DA, Goyer J, Daley Ndoye C, Schultz C, Koziol J, Elmaleh R, Hallowell BD, Hampson T, Duong E, Shihipar A, Goedel WC, Marshall BD. Public Health Dashboards in Overdose Prevention: Rhode Island's Framework for Public Health Data Literacy, Partnerships, and Action. JMIR Preprints, under peer review. 08/08/2023. http://doi.org/10.2196/preprints.51671

O'Flahavan L. The Bite, the Snack and the Meal. Inc. Published June 29, 2001. https://www.inc.com/articles/2001/06/23143.html

Cano M. Drug Overdose Deaths Among US Hispanics: Trends (2000-2017) and Recent Patterns. Subst Use Misuse. 2020;55(13):2138-2147. doi: 10.1080/10826084.2020.1793367. Epub 2020 Jul 25. PMID: 32715827.

PreventOverdoseRI.org

Illustrations by Esther Moon

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Overdose Data Council: Where We've Been to Current

Kristen St. John, MPH; Principal Public Health Epidemiologist, Substance Use Epidemiology Program, Center for Health Data and Analysis (CHDA), Rhode Island Department of Health (RIDOH)
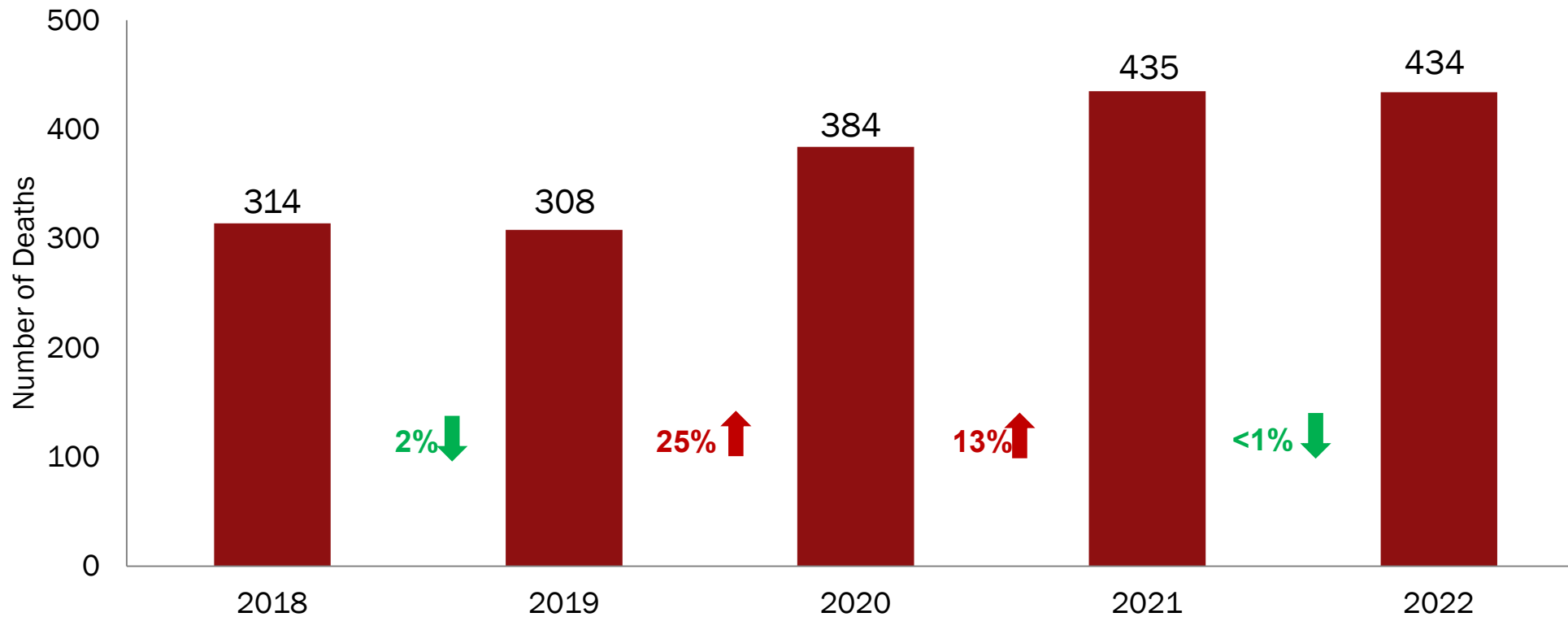
Macy Daly, MPA; Data Unit Reporting and Analytics Team Lead, Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals (BHDDH)

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Overall Fatal Overdose

- All Fatal Overdoses

- All Overdose Death Rates by Race

# All Fatal Overdoses, January 2018-December 2022

The number of people who lost their lives to a fatal overdose for which <u>any drug</u> contributed to cause of death in 2022 was <u>less than 1%</u> <u>lower</u> than in 2021.

Number of Deaths

- 2018: 314
- 2019: 308 (2% ↓)
- 2020: 384 (25% ↑)
- 2021: 435 (13% ↑)
- 2022: 434 (<1% ↓)

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All Overdose Death Rates by Race
(CDC Wonder Totals as Denominator)

From 2021-2022, the rates of overdose deaths have remained the same for Black Rhode Islanders and have increased for Hispanic (50%) Rhode Islanders. Rate increases were most pronounced from 2019 to 2021 for white and Black Rhode Islanders and from 2021 to 2022 for Hispanic Rhode Islanders.

Rate per 100,000, by Race

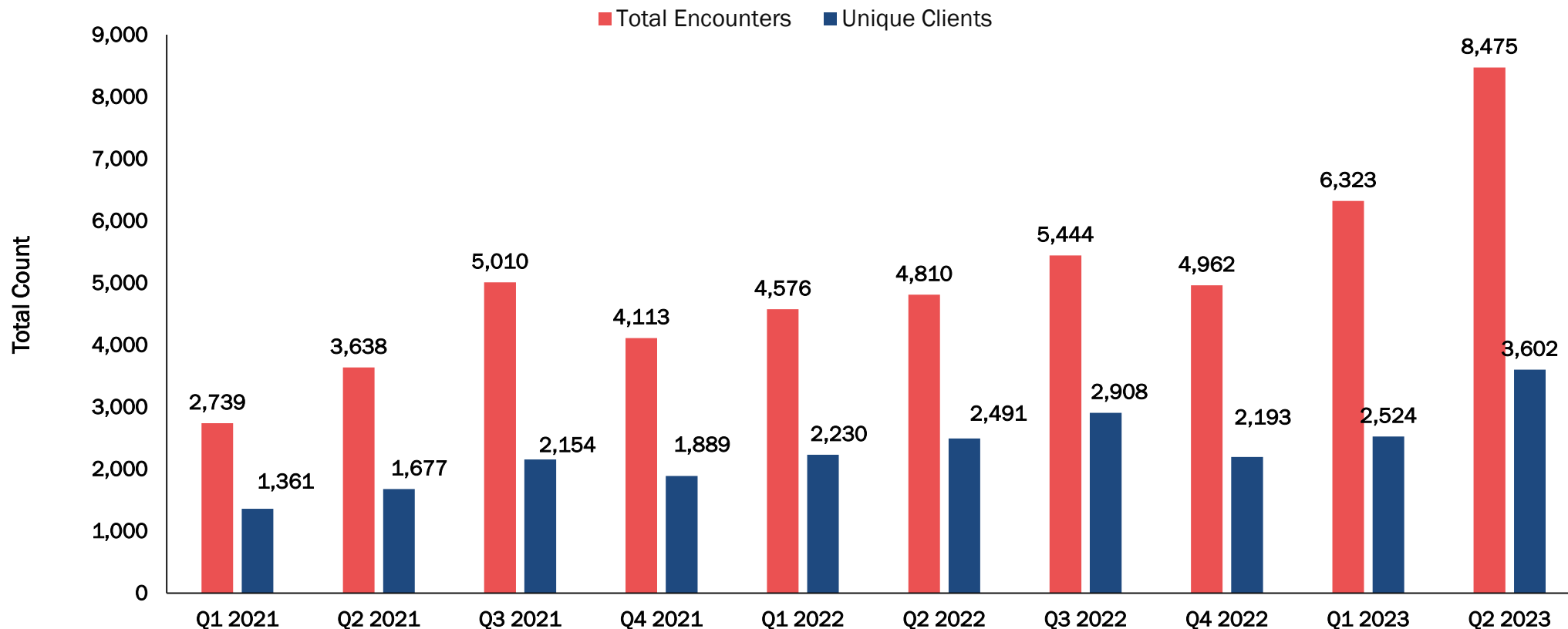●— White   ●— Black   ●— Hispanic or Latino
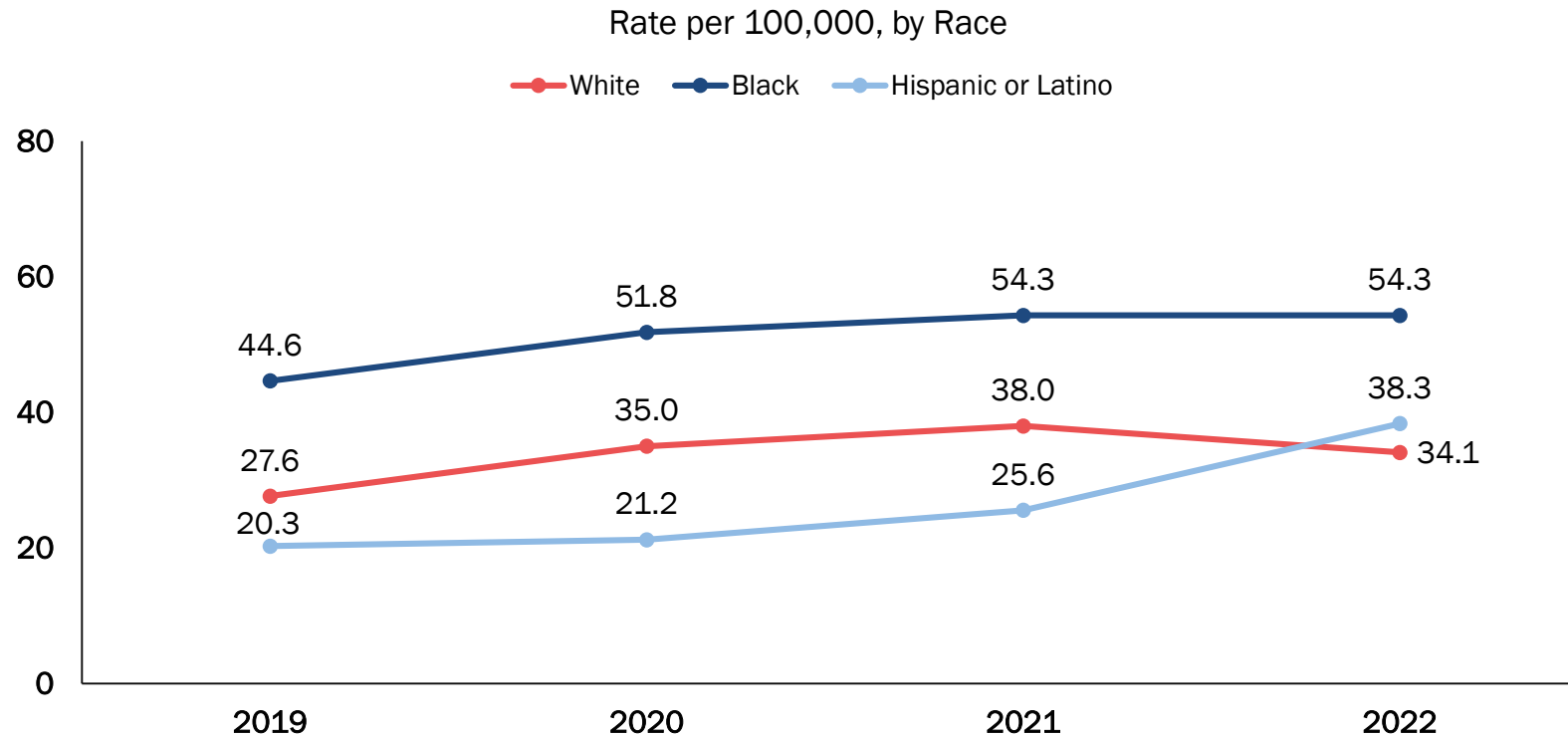
'Asian/PI', 'American Indian', and 'Multiracial' race categories were hidden due to yearly counts of less than 11. 'Other', 'Unknown', and 'Declined' race categories were also hidden since they were not present in the CDC Wonder data, and therefore a rate could not be calculated.

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Harm Reduction

- Total Count of Encounters and Unique Clients Served

- Rate of Unique Clients Served per 100,000 Residents by Race and Ethnicity

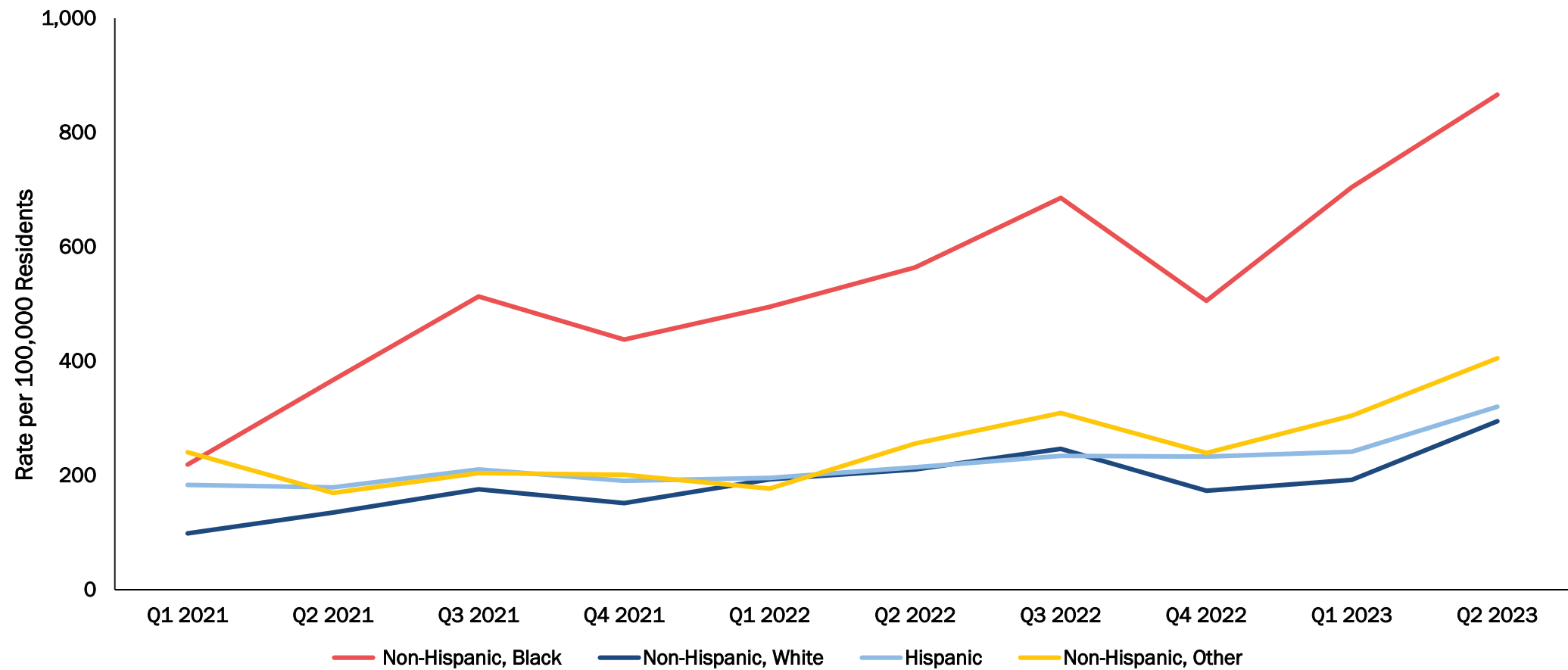# Total Count of Encounters and Unique Clients Served

The greatest number of encounters and unique clients served occurred in Quarter 2 2023 with 8,475 and 3,602, respectively.

NOTE: Clients with unknown or unidentified client codes were not included in the count of unique clients each quarter. Prepared by Sarah Ogundare Source: Harm Reduction Dataset, CHP/CHHSTE, RIDOH

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Rate of Unique Clients Served by Race and Ethnicity

Since Quarter 2 2021, non-Hispanic, Black clients were served at the highest rates.

Rate per 100,000 Residents

Legend: Non-Hispanic, Black — Non-Hispanic, White — Hispanic — Non-Hispanic, Other

X-axis: Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q1 2022, Q2 2022, Q3 2022, Q4 2022, Q1 2023, Q2 2023

Y-axis: 0, 200, 400, 600, 800, 1,000

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Note: Clients with unknown or unidentified client codes were not included in the count of unique clients each quarter. The non-Hispanic, Other group includes clients who identified as Native American or Alaskan Native, Native Hawaiian or Pacific Islander, Asian, more than one race, or not specified. Prepared by Sarah Ogundare. Source: Harm Reduction Dataset, CHP/OHHSTE, RIDOH
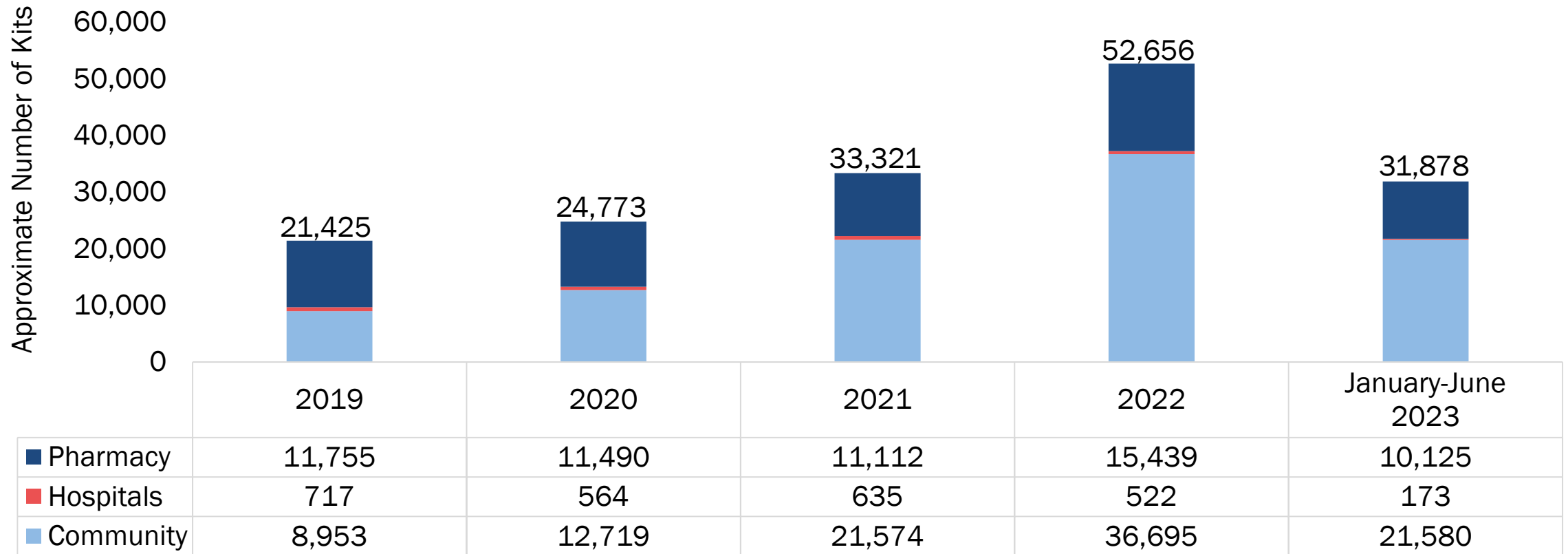
Rescue

- Number of Naloxone Kits Distributed, All Sources

- Naloxone Kit Distribution by Race and Ethnicity, Community and Hospital

# Number of Naloxone Kits Distributed, All Sources January 1, 2019-June 30, 2023

In the last three years, community-based organizations distributed more naloxone kits than any other year on record.

	2019	2020	2021	2022	January-June 2023
■ Pharmacy	11,755	11,490	11,112	15,439	10,125
■ Hospitals	717	564	635	522	173
■ Community	8,953	12,719	21,574	36,695	21,580

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Naloxone Kit Distribution by Race and Ethnicity
Community and Hospital Distribution, January 1, 2019-June 30, 2023

The greatest number of kits were distributed to individuals who identified as Non-Hispanic and white.

Legend: ■ 2019 ■ 2020 ■ 2021 ■ 2022 ■ January- June 2023
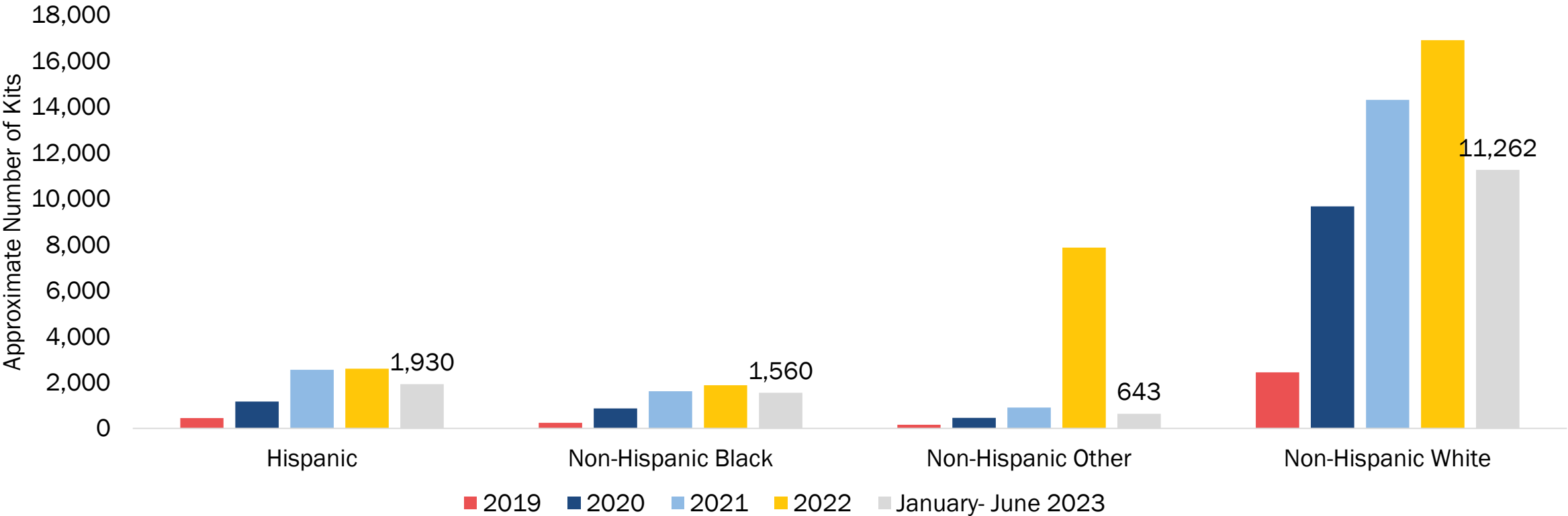
NOTE: Unknown race and ethnicity were not included and accounts for approximately 8-65%, depending on the year. PDMP data do not contain race/ethnicity information and were excluded. Source: Naloxone Distribution Dataset, Rhode Island Department of Health (RIDOH). Data updated as of August 9, 2023. Prepared by Kristen St. John. https://preventoverdoseri.org/naloxone-data/

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Treatment

- Patients Dispensed Buprenorphine for Medication Assisted Treatment (MAT)

- Rates of Sustained Buprenorphine Receipt per 100,000 by race

- Rates of Any Methadone MAT Enrollment, Receipt per 100,000

- Rates of Any Methadone MAT Enrollment by Race and Ethnicity, Receipt per 100,000

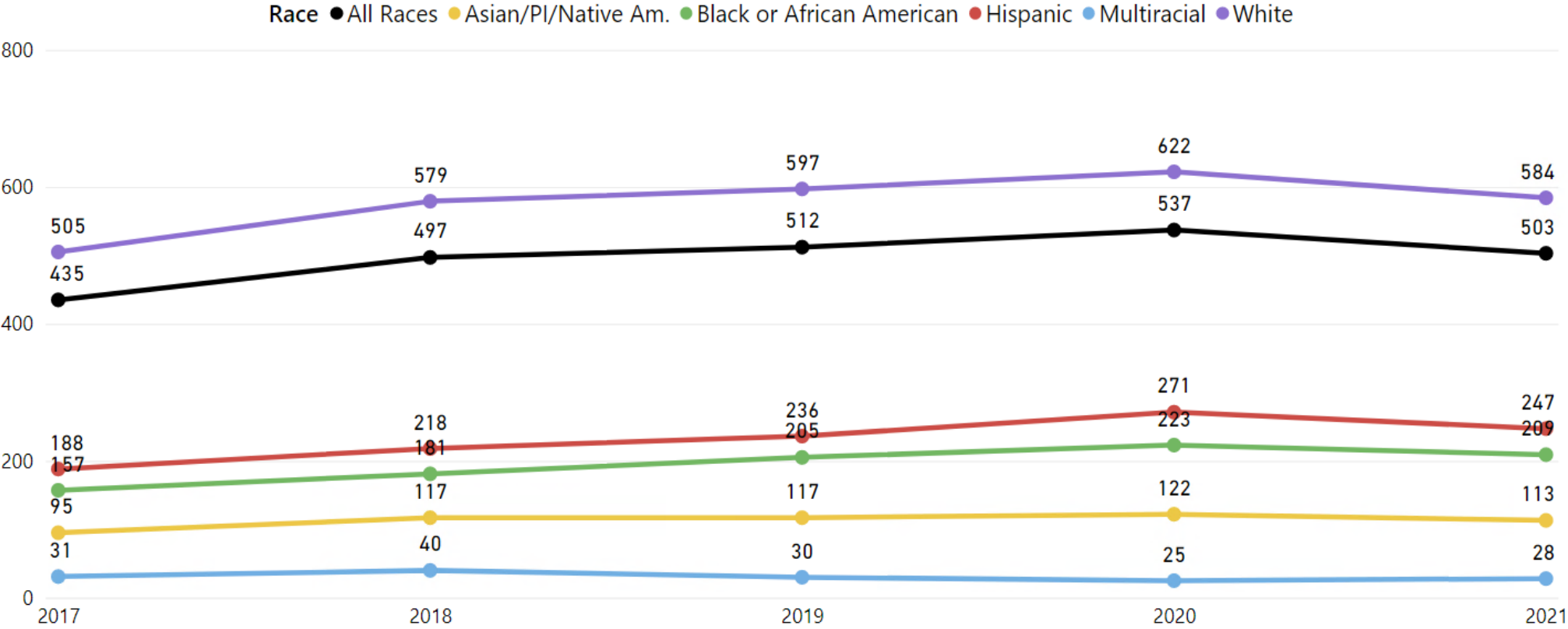# Patients Dispensed Buprenorphine, January 2017-June 2023

As of June 2023, the number of unique patients who were dispensed buprenorphine has reached 90% of what was dispensed in all of 2022.
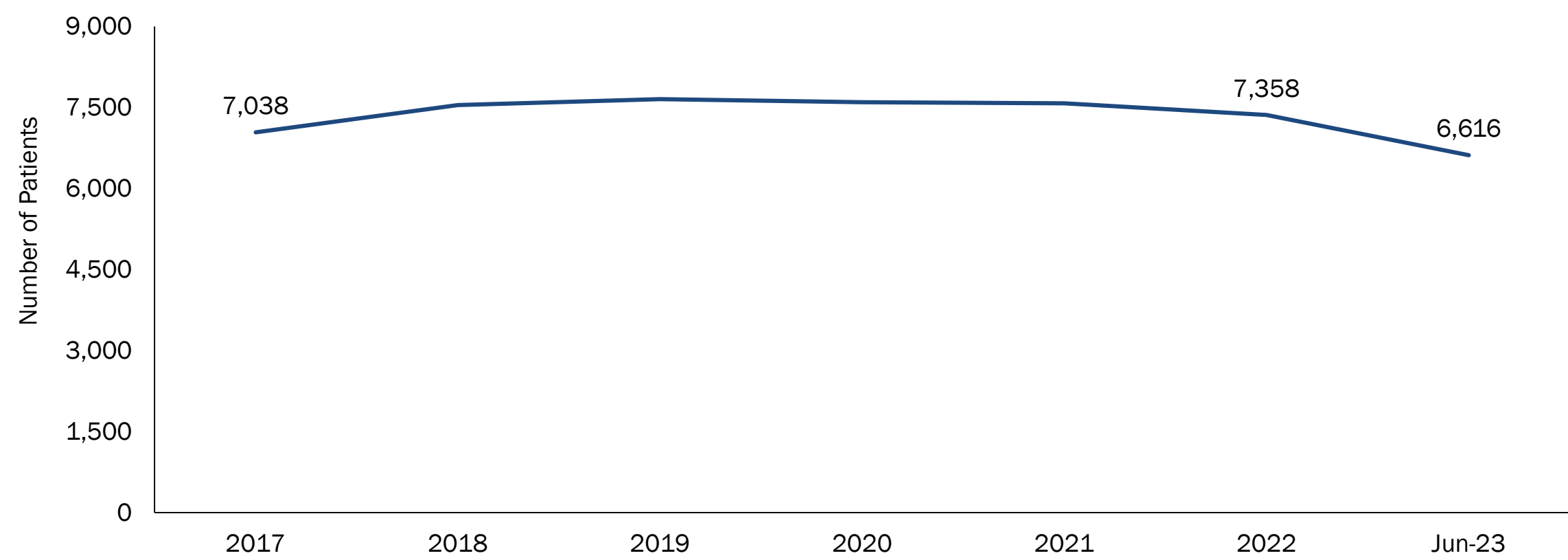
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# Rates of Sustained Buprenorphine Receipt per 100,000

The rate of individuals who remained on buprenorphine for more than 6 months was at least 2-2.5 times greater among individuals who identified as white compared to individuals who identified as any other race. These rates decreased slightly between 2020-2021.

Race ● All Races ● Asian/PI/Native Am. ● Black or African American ● Hispanic ● Multiracial ● White

Race	2017	2018	2019	2020	2021
White	505	579	597	622	584
All Races	435	497	512	537	503
Hispanic	188	218	236	271	247
Black or African American	157	181	205	223	209
Asian/PI/Native Am.	95	117	117	122	113
Multiracial	31	40	30	25	28

In the Buprenorphine data, a new Race field was created that combined the separate Race and Hispanic ethnicity fields into one field where Hispanics were considered as a separate race. It should be noted that records where the Hispanic ethnicity was listed as "unknown" were not mapped to the new Race field. The rates were calculated by dividing the number of individuals receiving Buprenorphine for each racial group (numerator) by the State's total population for each racial group (denominator) from CDC Wonder (http://wonder.cdc.gov/single-race-single-year-v2019.html), multiplied by 100,000.

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Unique Individuals Enrolled in Methadone MAT, 2017-2022

From 2017 to 2022, the number of patients receiving methadone MAT at some point during the year increased by 4%. Similar to buprenorphine dispensing data, as of June 2023, the number of patients who received some methadone MAT treatment has reached 90% for all of 2022.
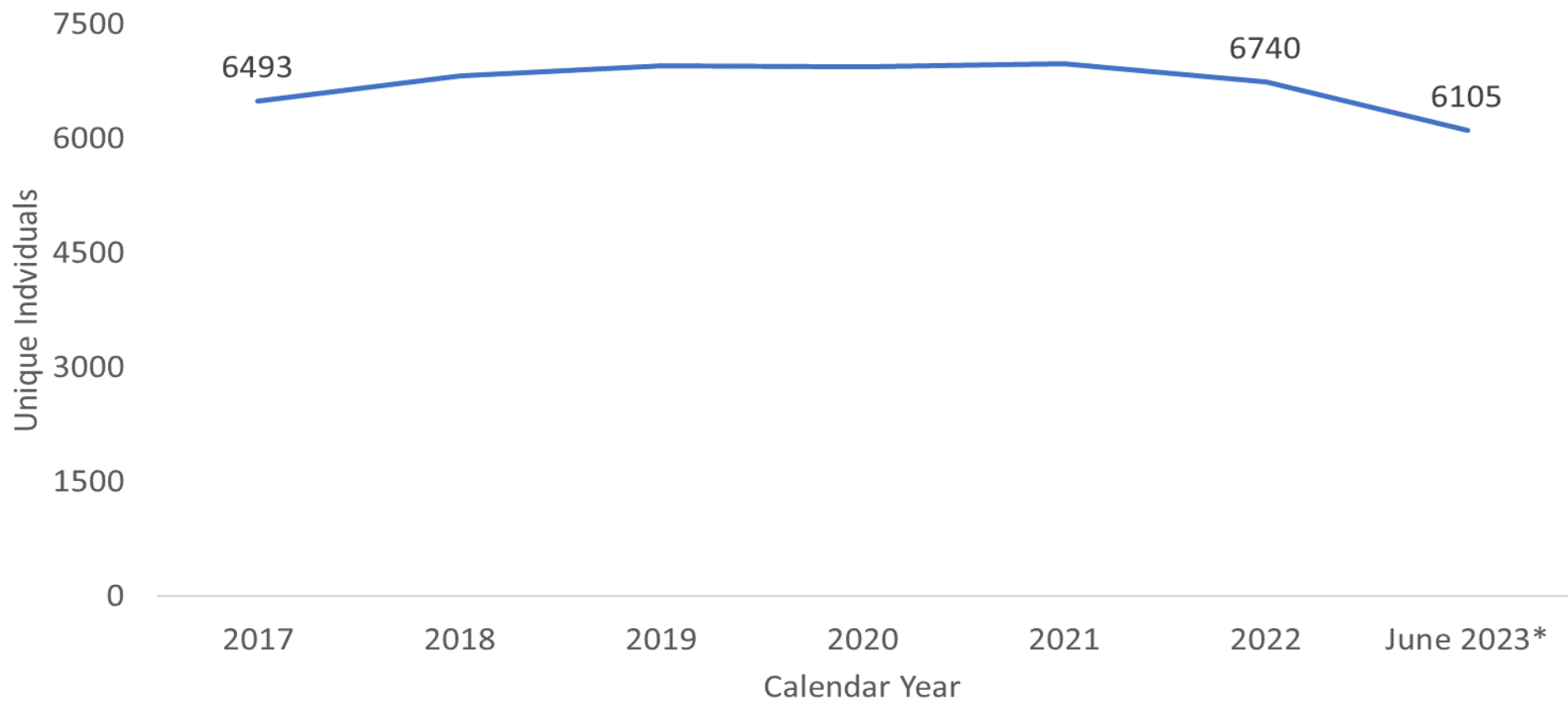
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Rates of Any Methadone MAT Enrollment by Race and Ethnicity Receipt per 100,000

Any methadone MAT receipt rate was at least two-fold greater among white Rhode Islanders as compared to other races. Rates decreased for white, Black, and Hispanic Rhode Islanders and increased for Asian/PI/Native American/Multiracial individuals.
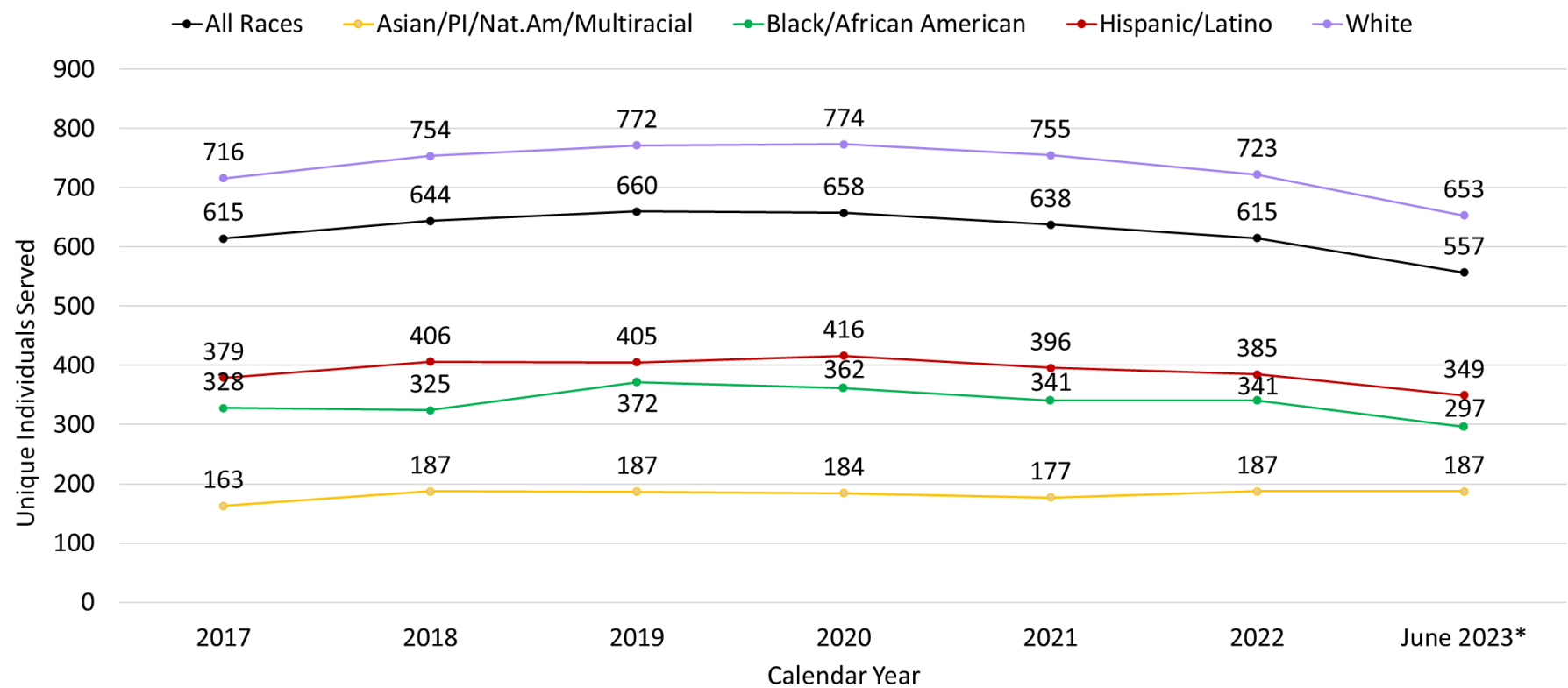

Hispanic/Latino includes people who identify as any race but selected Yes for Hispanic. All other racial and ethnic groups include people who identify as non-Hispanic ethnicity or have unknown ethnicity. Population denominator based on CDC WONDER single-race population estimates for each year; 2021 estimate applied for 2022 and 2023 rates. Due to small numbers, Asian, Hawaiian/Pacific Islander, Native American, and Multiracial individuals are combined into one graph, which can be seen on the right.

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Recovery

- Newly Credentialed Certified Peer Recovery Specialists

- Recovery House Discharges (by Reason and Housing Stability)

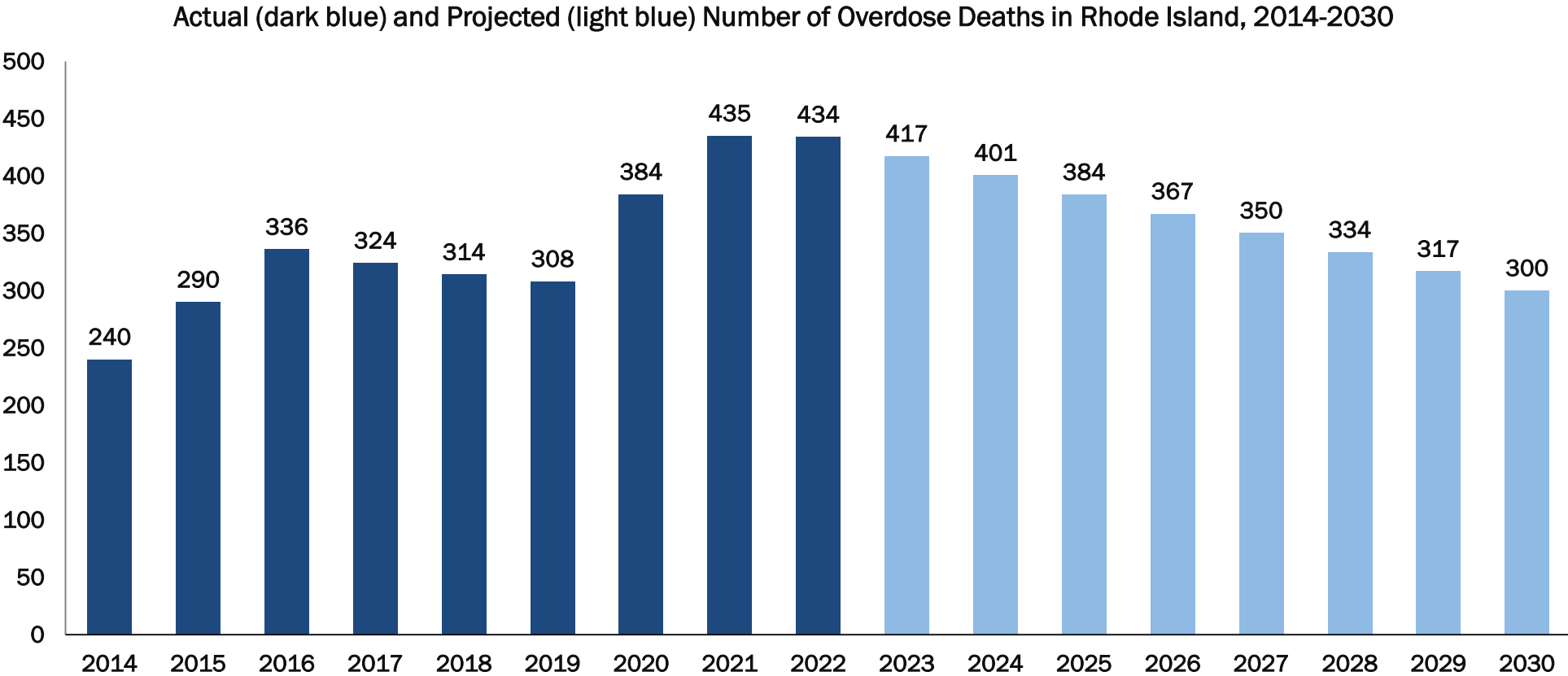- Recovery Housing Clients by Race and Ethnicity

Recovery

Newly Credentialed and Total CPRS by CY
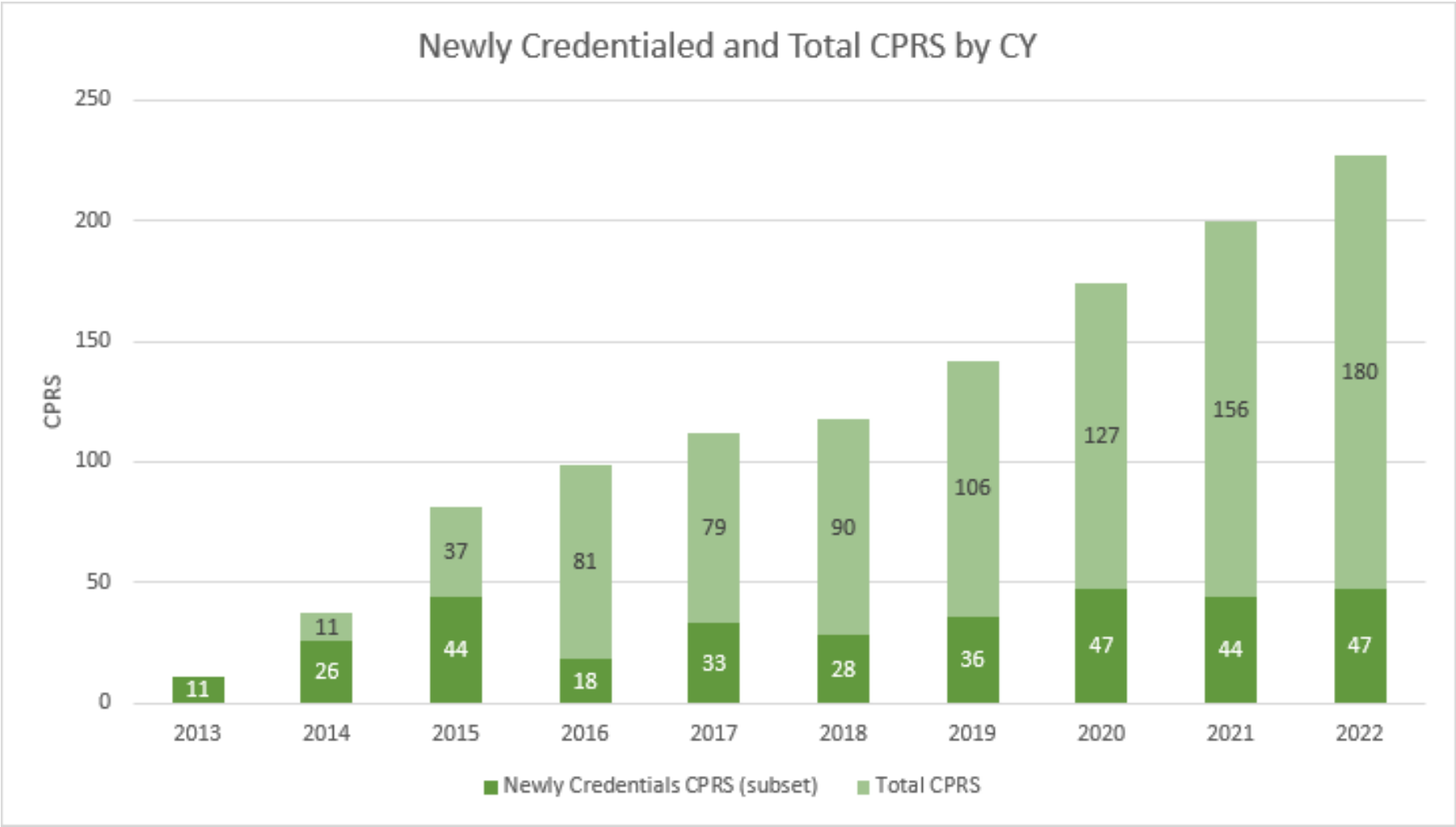
Goal Setting to Save Lives

Identifying a Statewide Goal for Fatal
Overdose Deaths to Achieve by 2030

Christina Schulz, PhD; Health Program Administrator, Data and Analytics,
Rhode Island Executive Office of Health and Human Service (EOHHS)
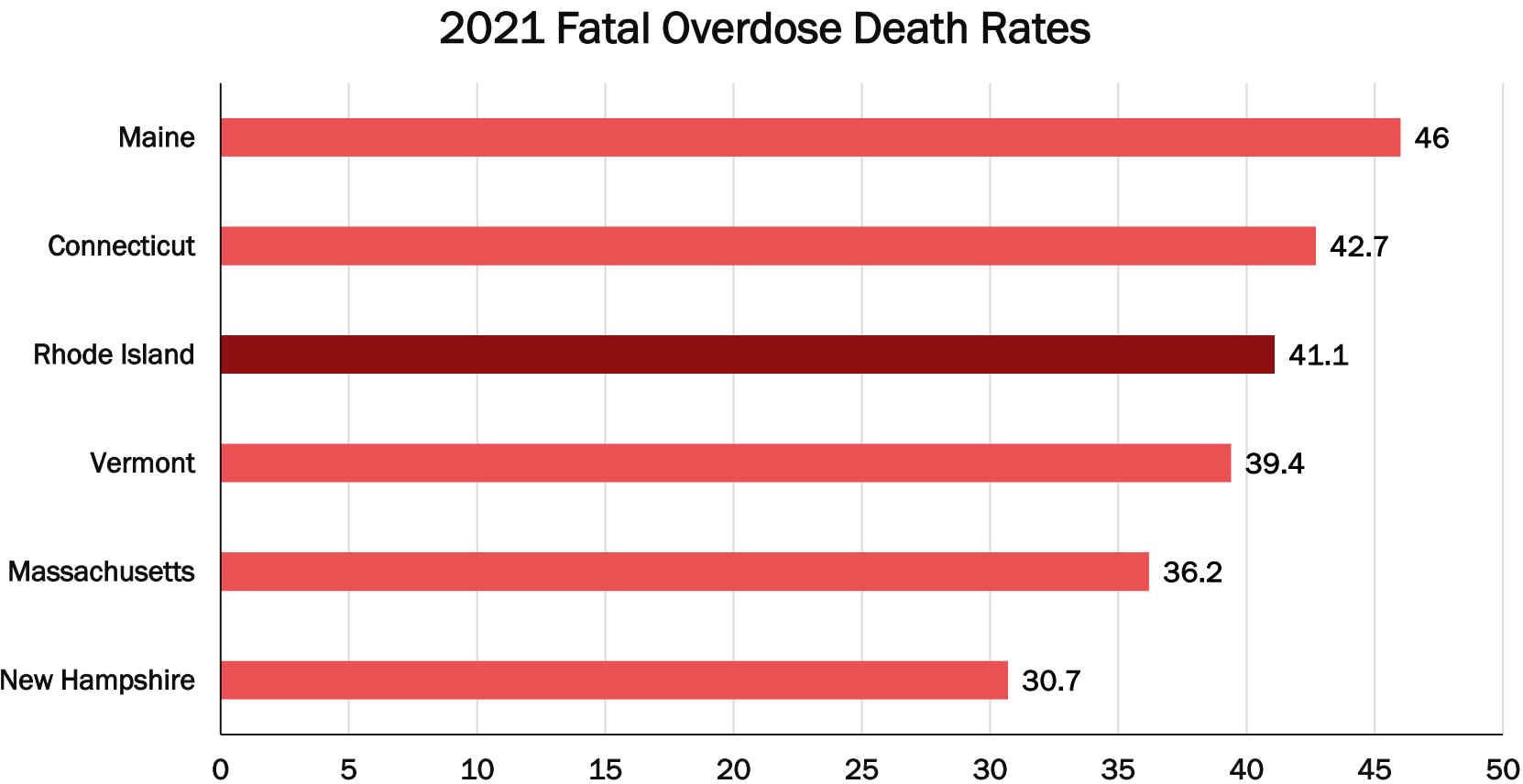
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A) Aligning with CDC's Healthy People 2030

National Healthy People 2030 Goal: by 2030 return fatal overdose rates to 2018 levels. The RI Healthy People 2030 goal below would be slightly more rigorous (300 deaths) and aim for a 31% reduction (slightly below 2018 levels).

Actual (dark blue) and Projected (light blue) Number of Overdose Deaths in Rhode Island, 2014-2030

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B) Achieving the Lowest Overdose Death Rate in New England

By 2030, having the lowest death rate among the New England states. This goal would be relative, and as such, could vary based on regional trends as time goes on.

2021 Fatal Overdose Death Rates

State	2021 Fatal Overdose Death Rate
Maine	46
Connecticut	42.7
Rhode Island	41.1
Vermont	39.4
Massachusetts	36.2
New Hampshire	30.7

Open Discussion and Feedback

Where Do We Go from Here?

Build out the existing data refresh into a PBI dashboard that is refreshed monthly.

- A comprehensive environmental scan of Task Force pillars

- Unified, cross-agency platforms– both internal data hubs and external dashboards – for the collection, real-time reporting, and dissemination/consumption of overdose metrics

Next Steps

What are our next steps and how will we get there?

- Submit the recommended target to the Governor's Office

- Continue to focus on sub-targets by race/ethnicity

- Develop and implement an evaluation plan to track, analyze, and share findings

- Collectively work toward saving lives, supporting families and communities, and improving people's lives