



# Suicide Data Trends in Massachusetts, 2020

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Massachusetts Department of Public Health

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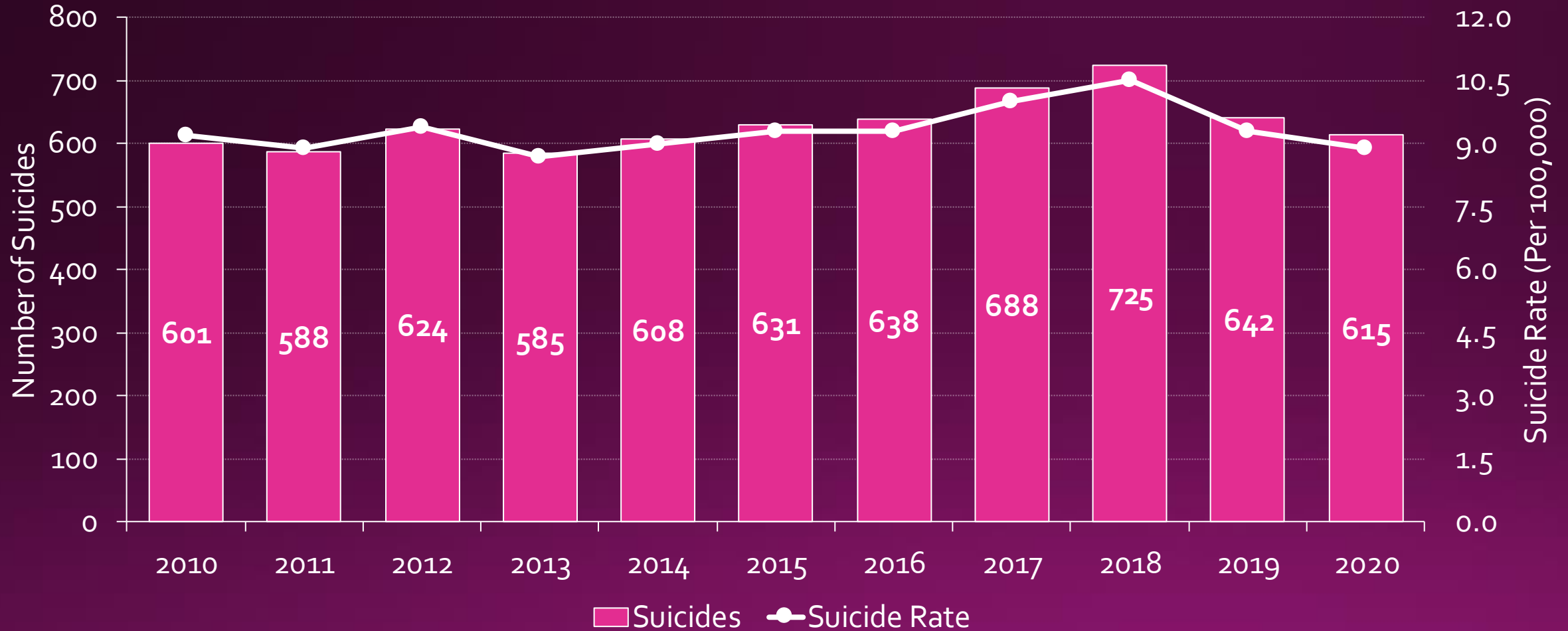
# Overview

Suicide Death Trends  
2010-2020

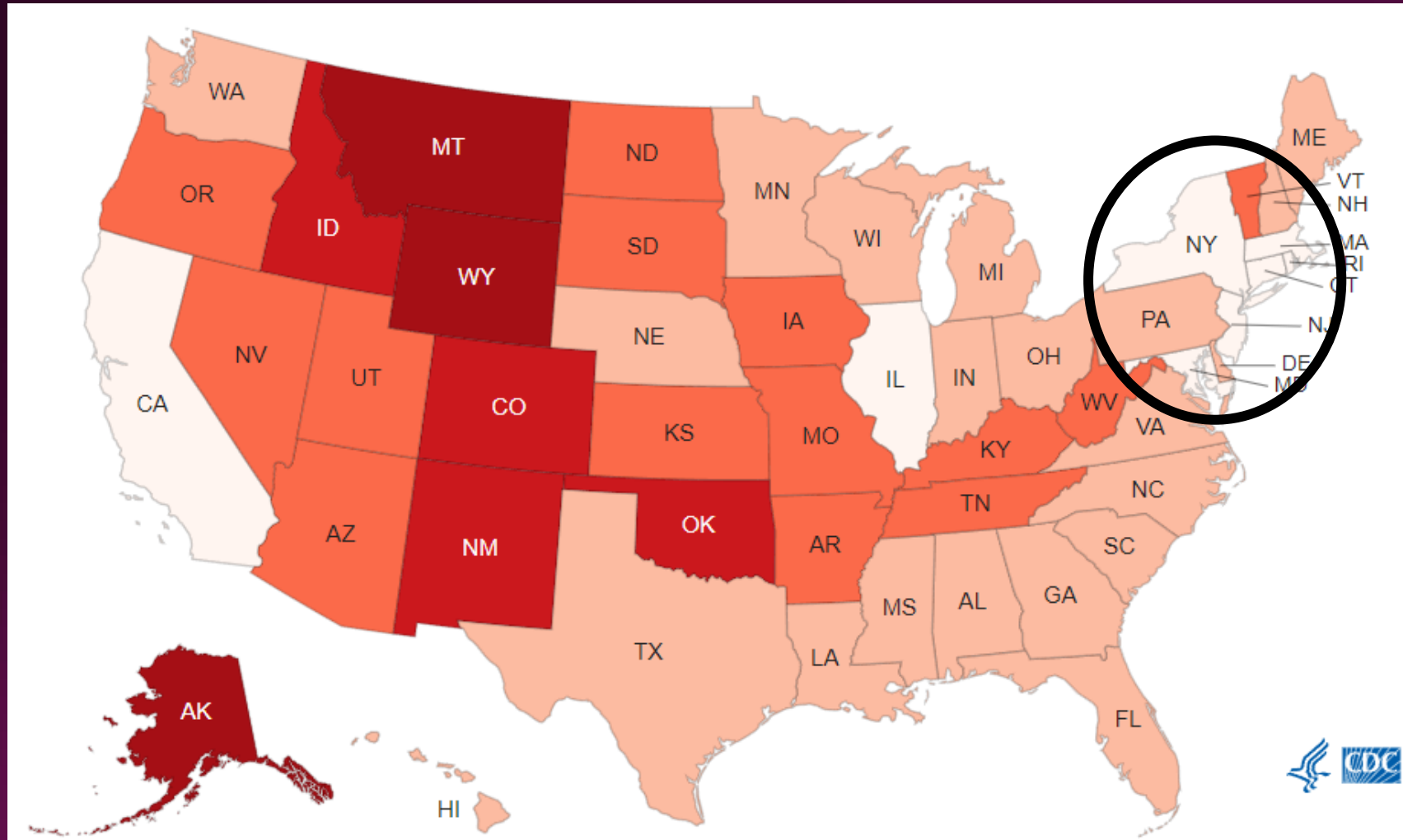
ED Visit Trends  
2019-2022

Characteristics of  
Suicide Deaths  
2020

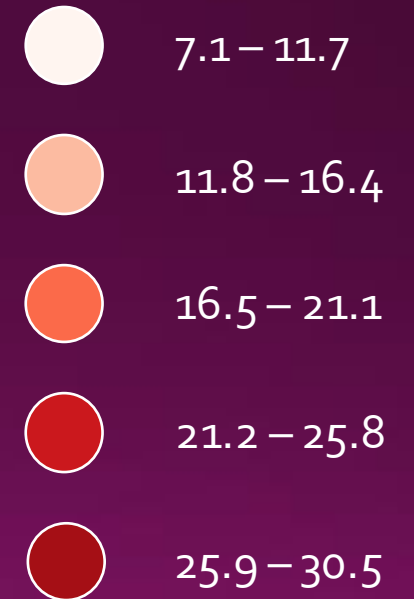
# Suicides and Suicide Rates in MA, 2010-2020



# Age-Adjusted Suicide Rates by State, 2020

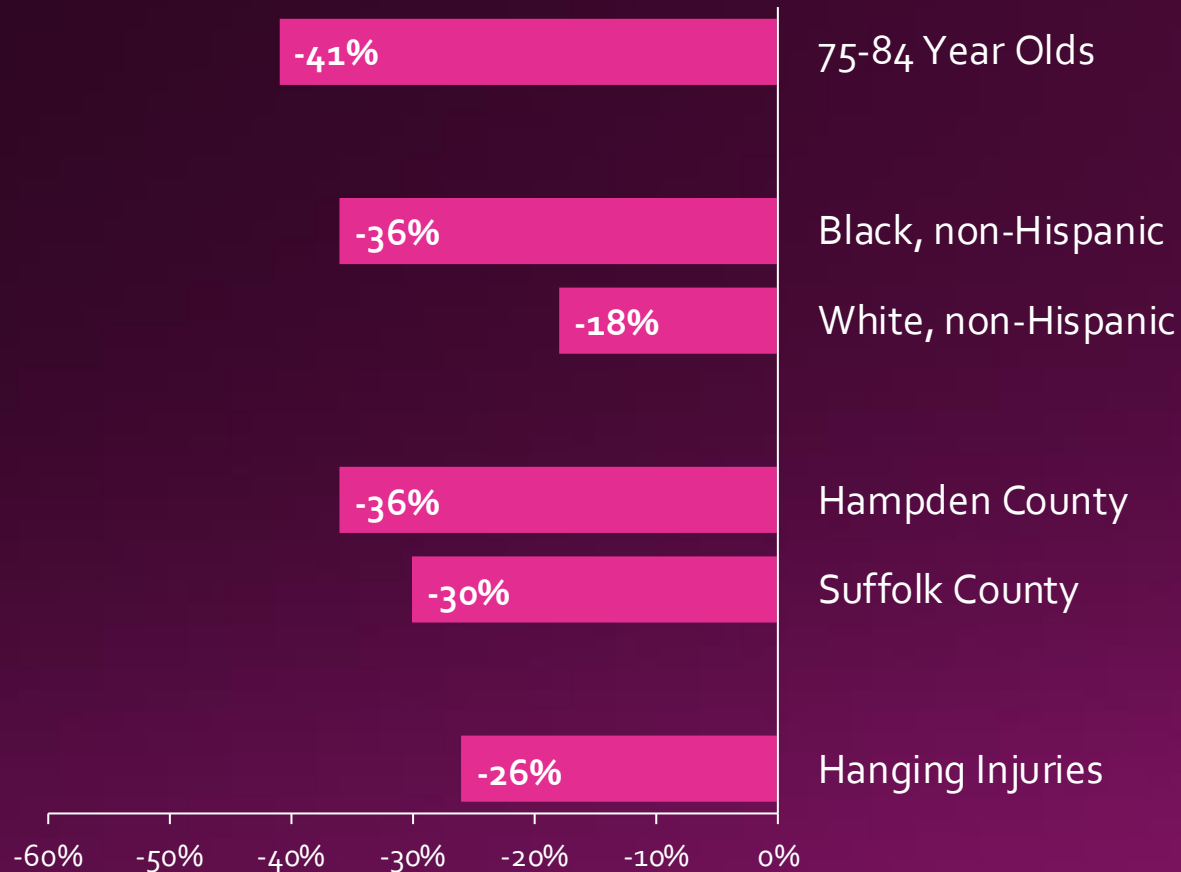


Age-Adjusted Suicide Rate (Per 100,000)

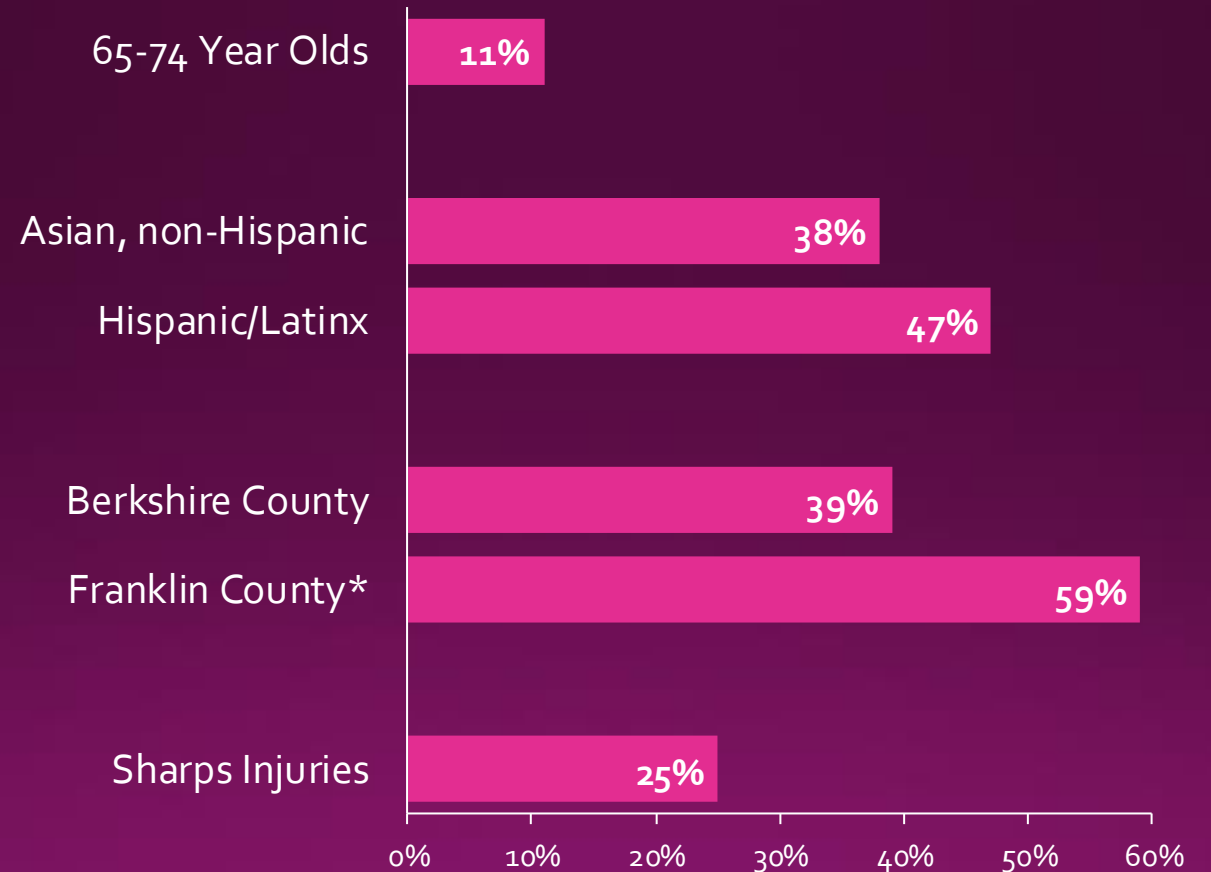


# Changes in Suicide Rates, 2018-2020

## Groups with Decreased Rates



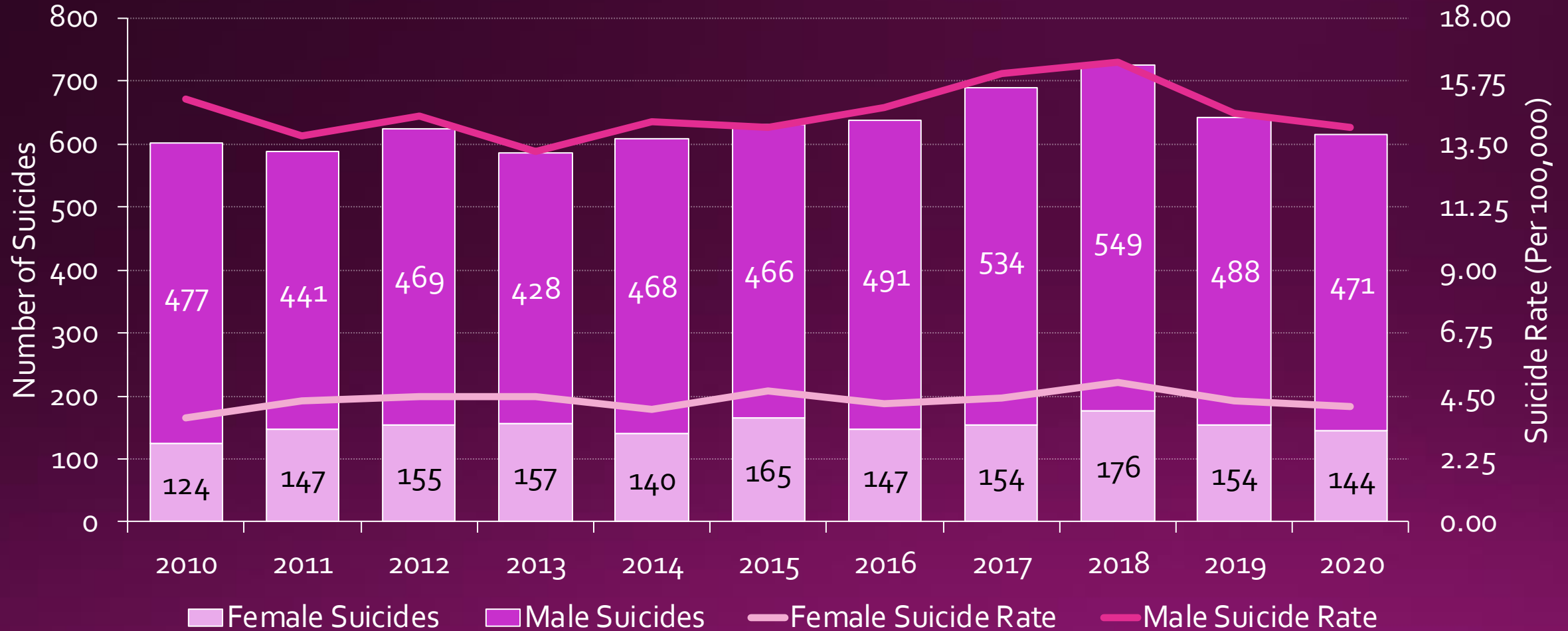
## Groups with Increased Rates



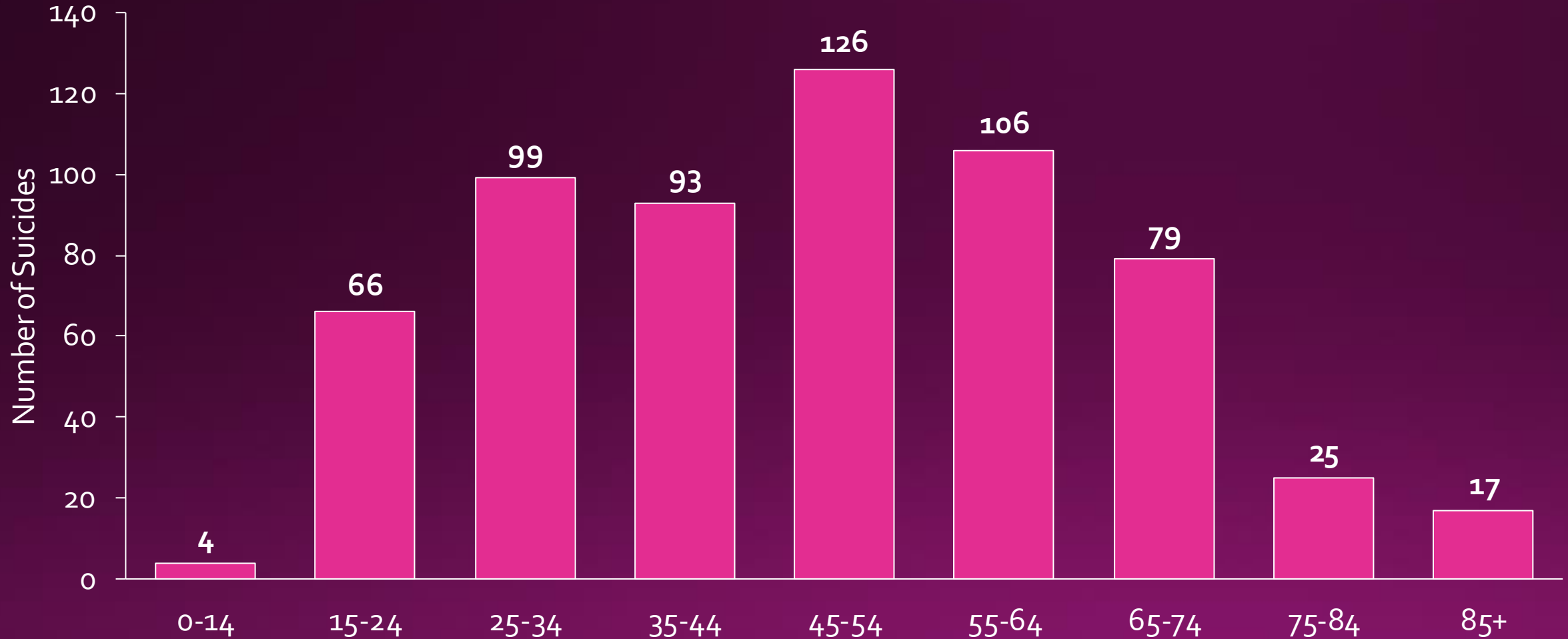
\*Rates based on counts less than 20 are considered unstable and should be interpreted with caution

Sources: Massachusetts Violent Death Reporting System (MAVDRS), Massachusetts Department of Public Health; National Center for Health Statistics Vintage 2020 postcensal estimates

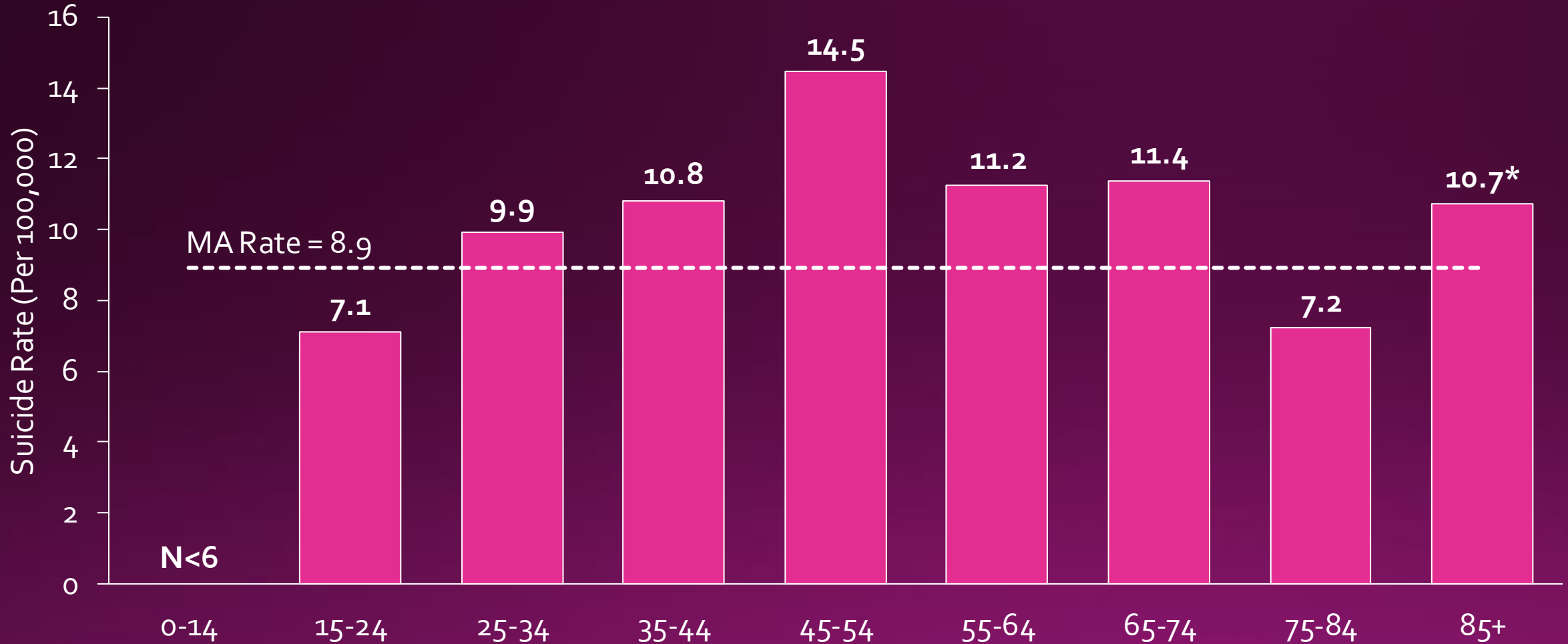
# Suicides and Suicide Rates by Sex in MA, 2010-2020



# Suicides by Age in MA, 2020



# Suicides Rates by Age in MA, 2020

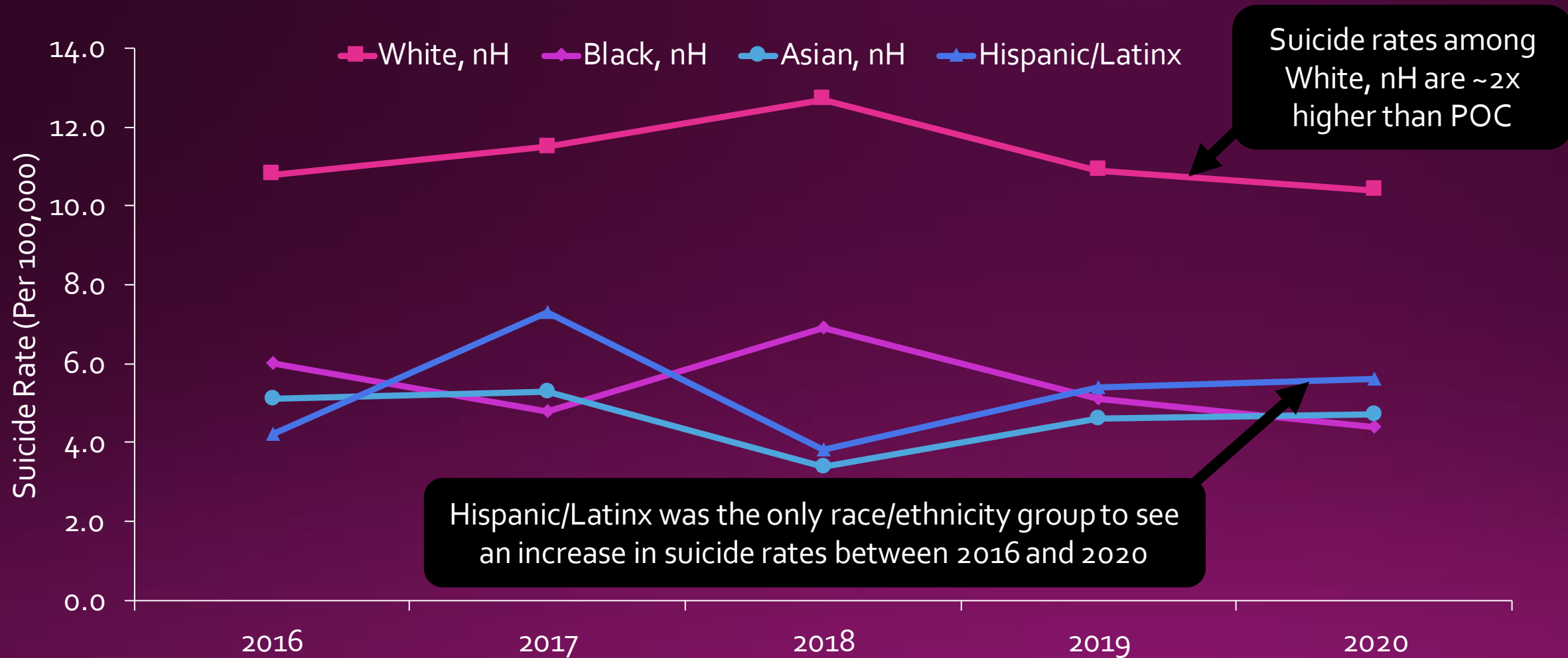


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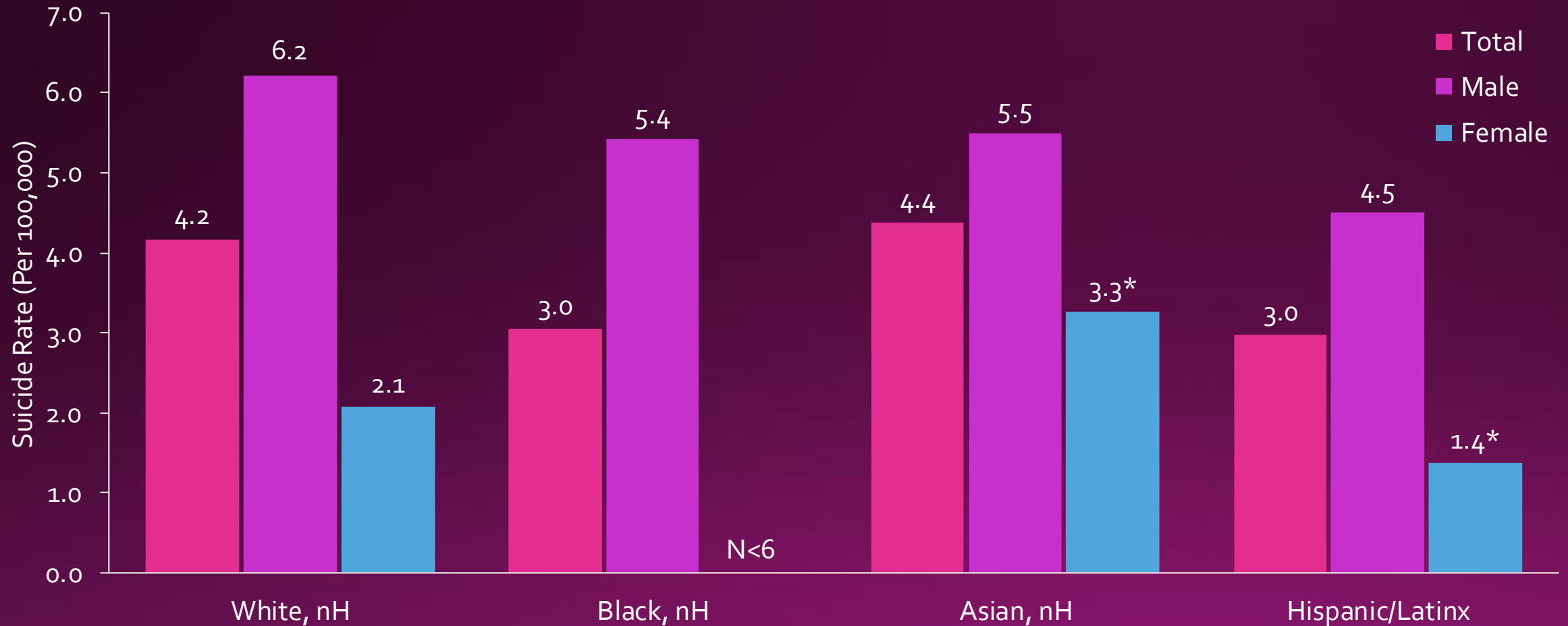
Sources: Massachusetts Violent Death Reporting System (MAVDRS), Massachusetts Department of Public Health; National Center for Health Statistics Vintage 2020 postcensal estimates



# Suicide Rates by Race/Ethnicity in MA, 2016-2020



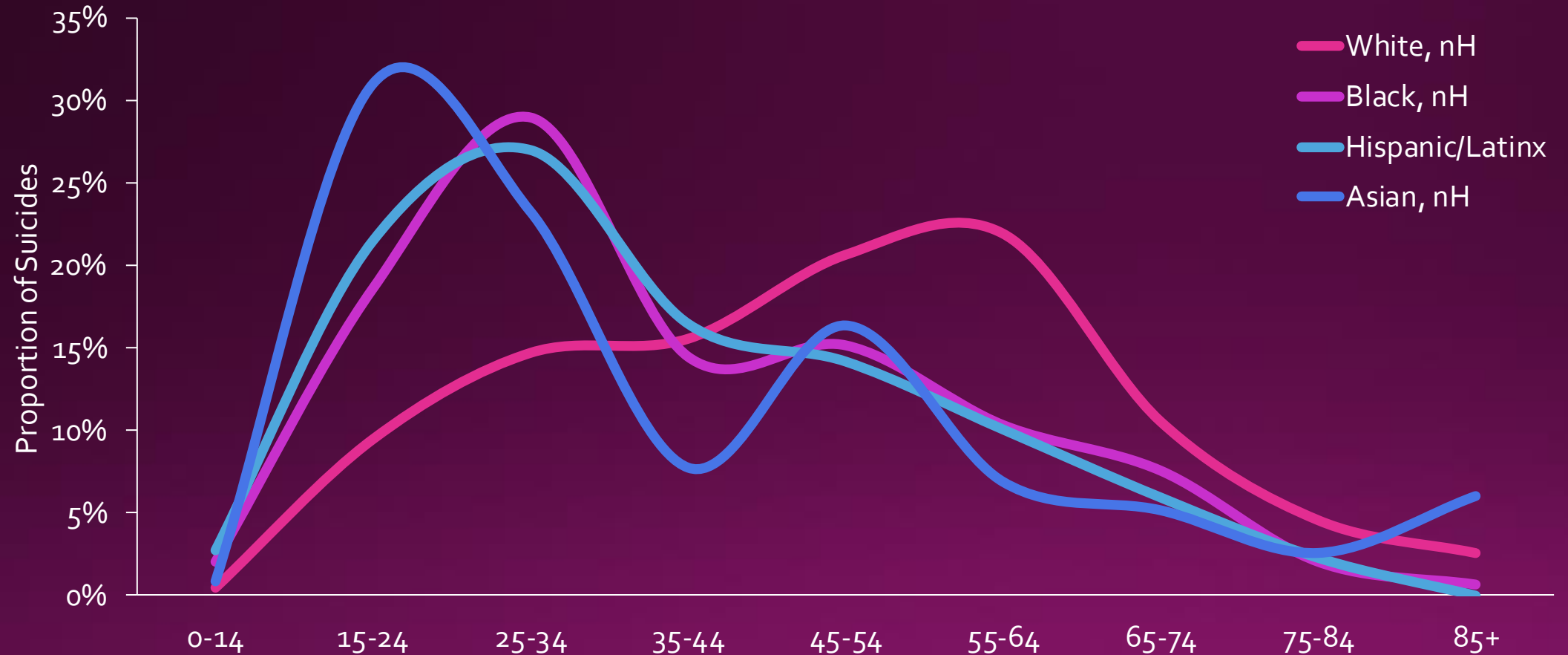
# Suicide Rates by Race/Ethnicity among Youth Under Age 25 in MA, 2016-2020



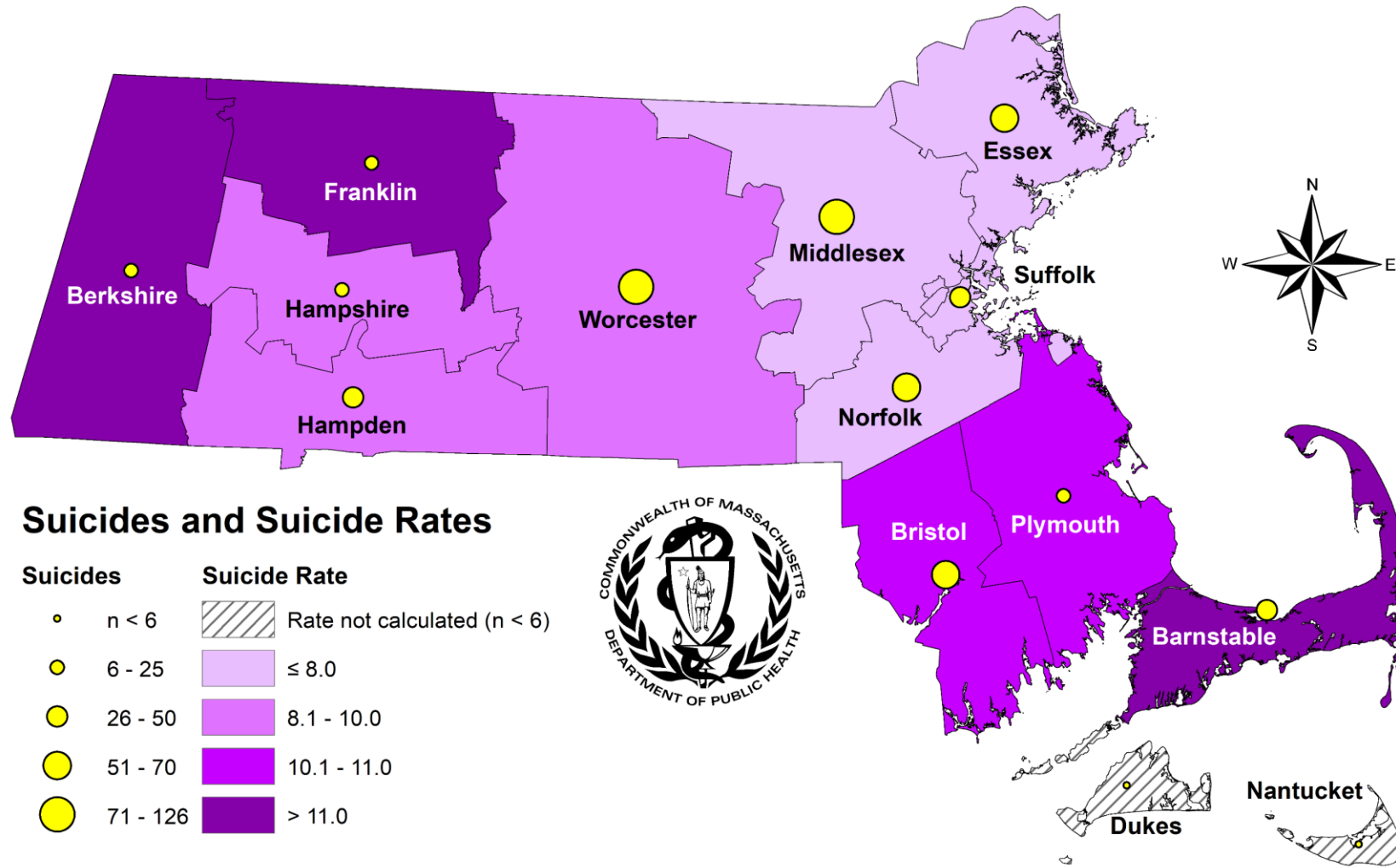
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Sources: Massachusetts Violent Death Reporting System (MAVDRS), Massachusetts Department of Public Health; National Center for Health Statistics Vintage 2020 postcensal estimates

# Age Distribution of Suicides by Race/Ethnicity, 2016-2020



# Suicide Rates by County in MA, 2020

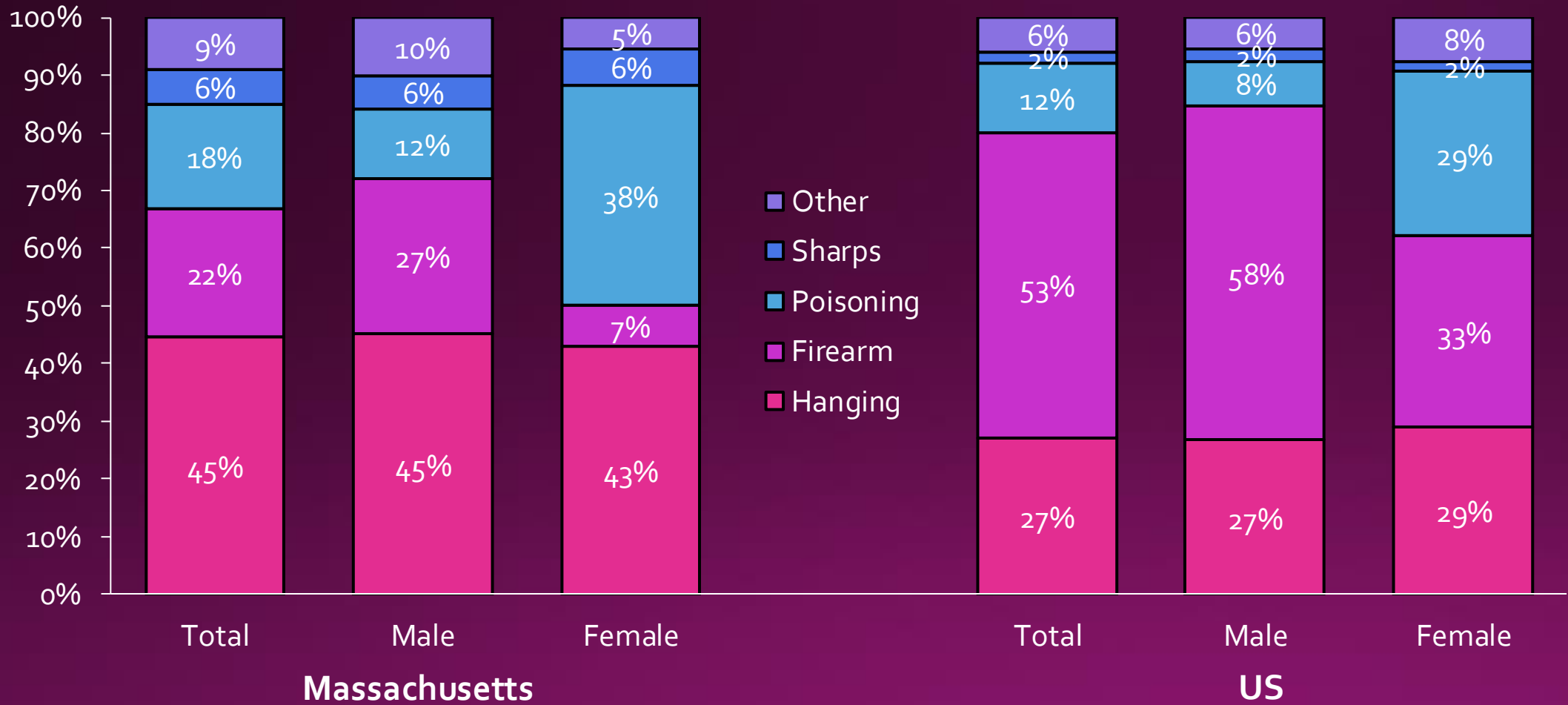


Data Sources: Massachusetts Violent Death Reporting System (MAVDRS),  
 Massachusetts Department of Public Health  
 Rates are calculated based on county of injury

Geographic data supplied by:  
 Massachusetts Executive Office of Environmental Affairs, MassGIS

Coordinate System: Massachusetts Mainland State Plane Meters (NAD83)

# Suicides by Mechanism of Injury in MA and US, 2020



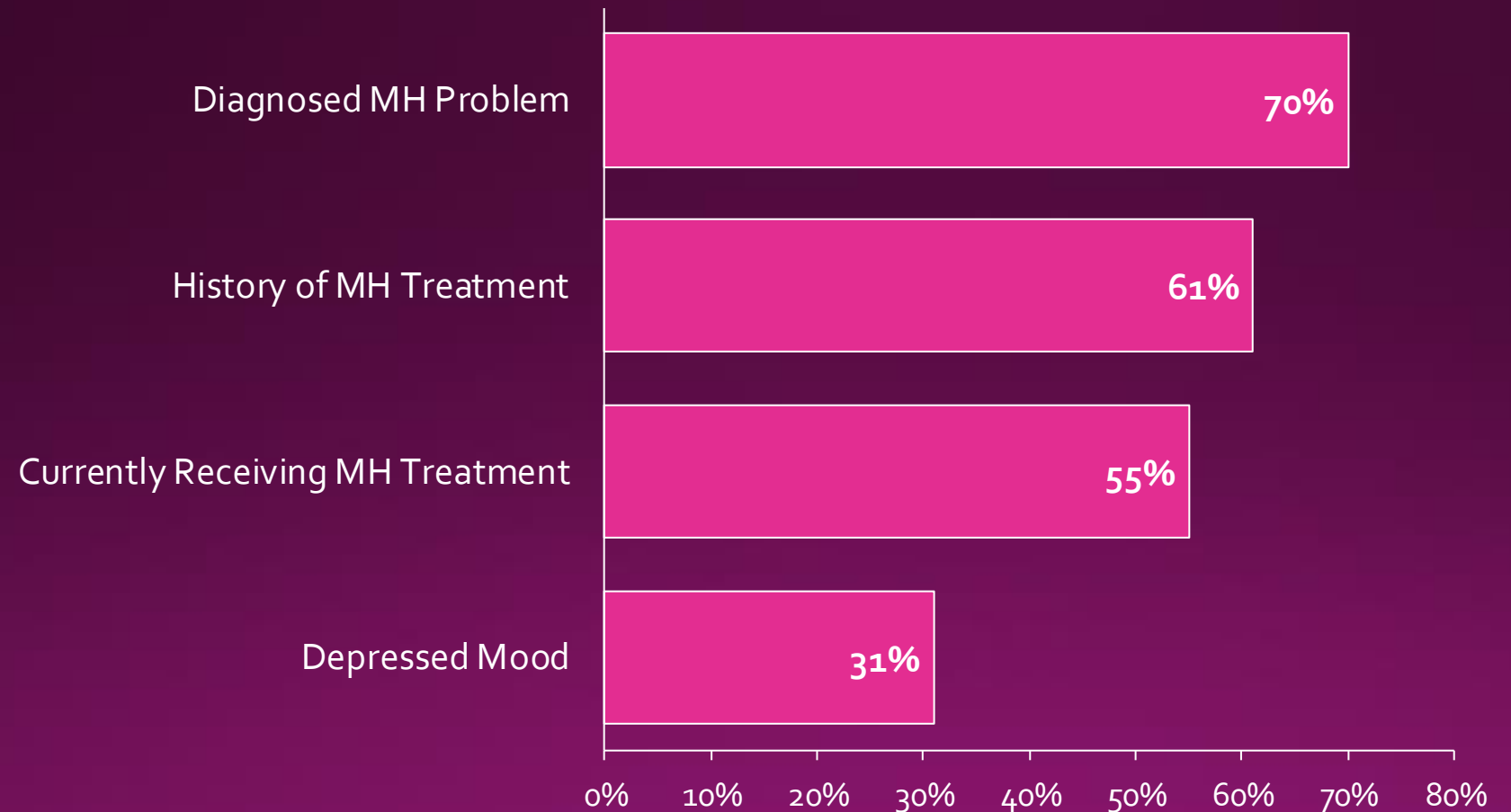
# Circumstances Associated with Suicides in MA, 2020

98% of suicide decedents had at least one known circumstance

Among those with a diagnosed MH problem:

83% had a history of MH treatment

78% were currently receiving MH treatment

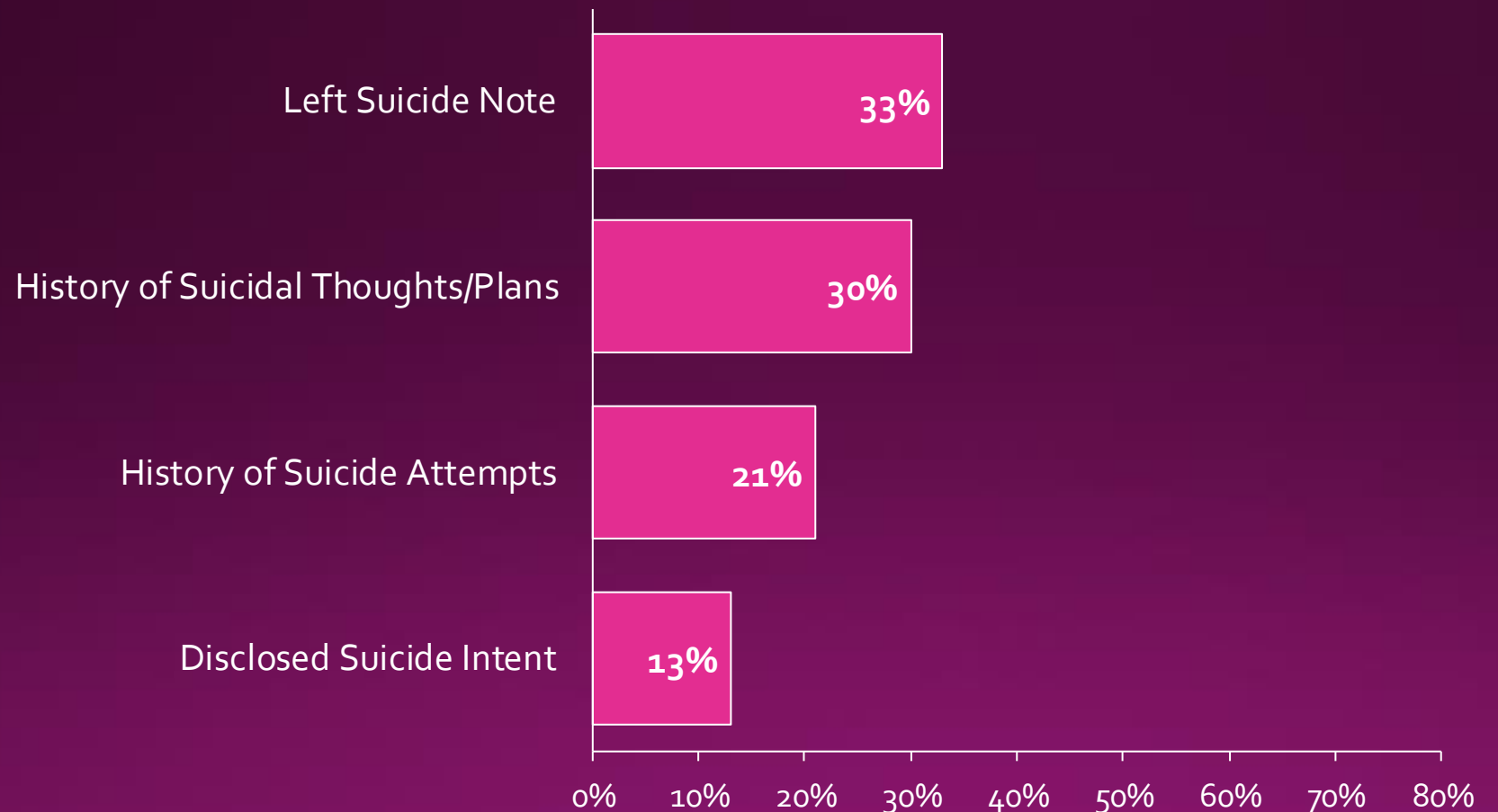


# Circumstances Associated with Suicides in MA, 2020

98% of suicide decedents had at least one known circumstance

Females were significantly more likely to have a history of suicide attempts compared to males (36% vs. 17%)

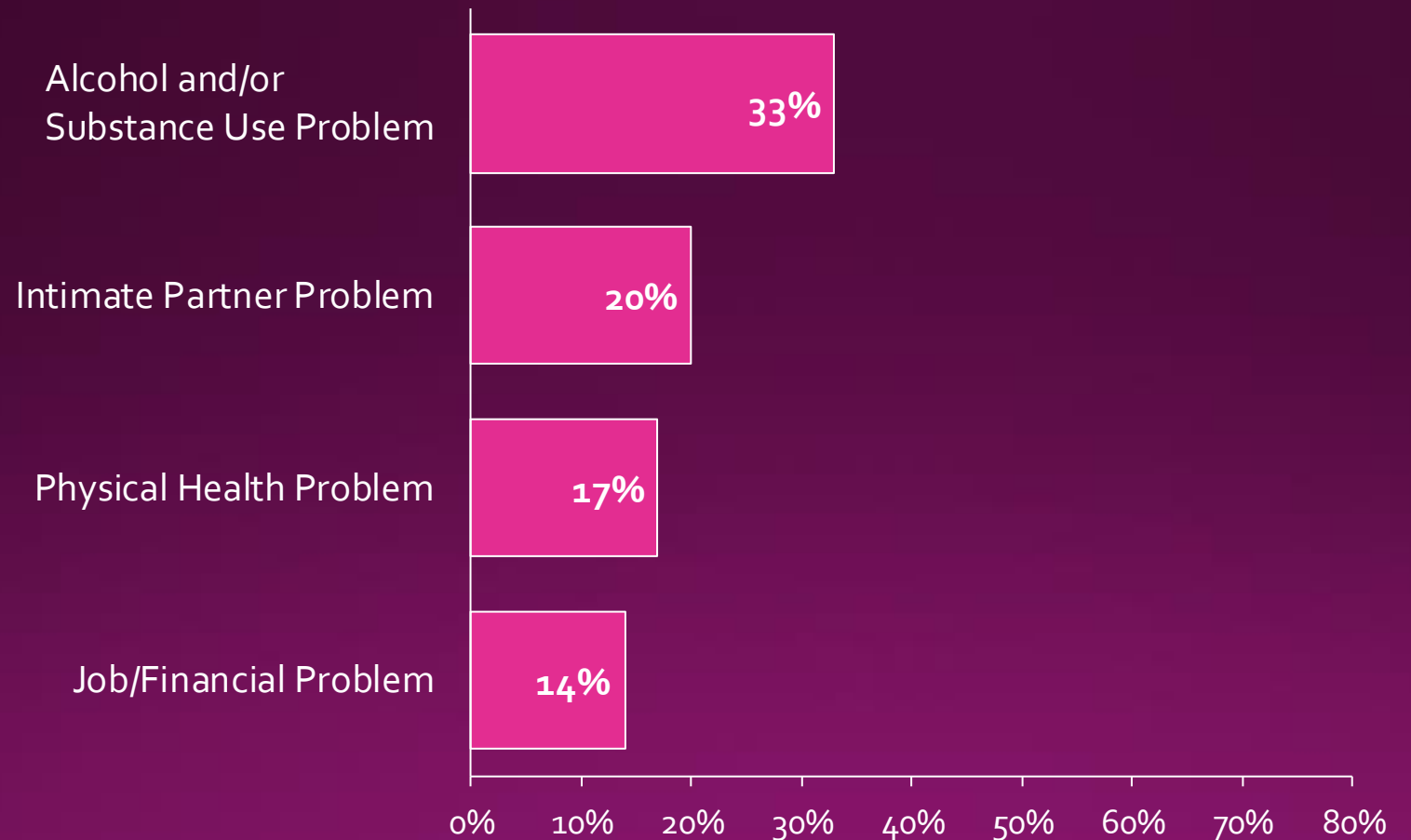
Males were more likely to disclose their suicide intent compared to females (14% vs. 10%)



# Circumstances Associated with Suicides in MA, 2020

98% of suicide decedents had at least one known circumstance

The proportion of decedents with physical health problems was heavily dependent on age: from 5% among those under 45 years of age to 43% among those 65 years or older

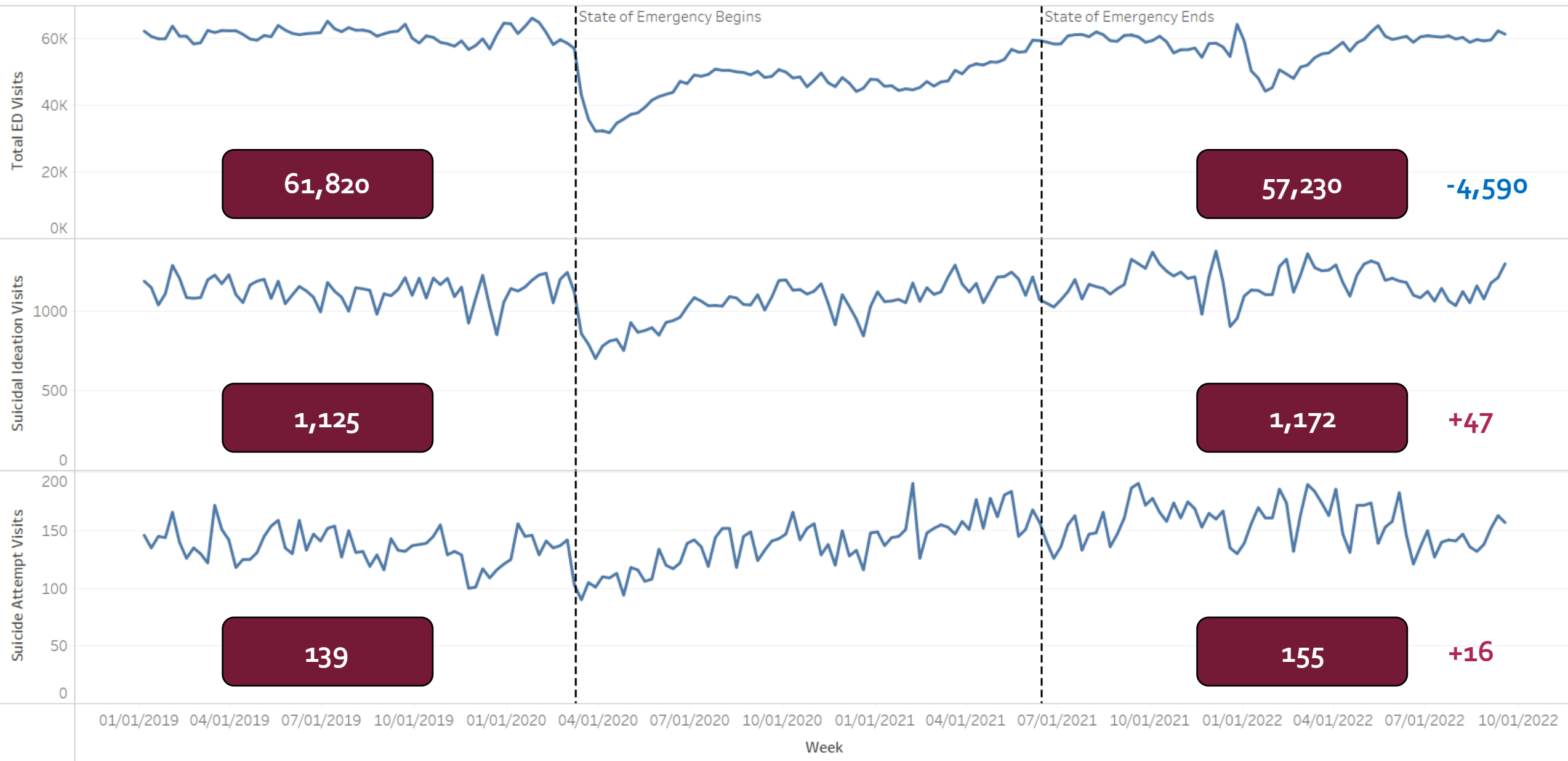




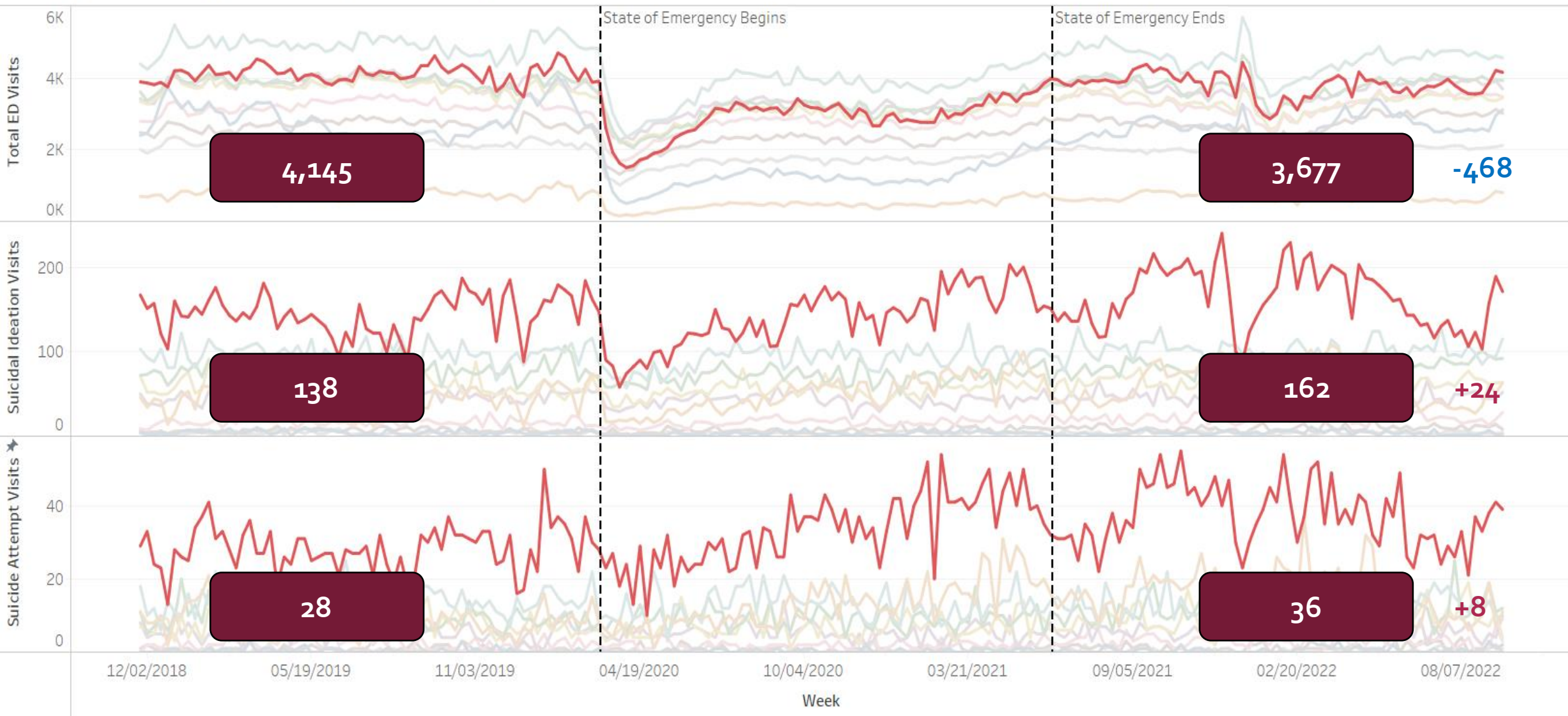
# ED Syndromic Surveillance

- Collects data from 100% of EDs across Massachusetts
  - January 2019-September 2022
- Uses chief complaint text fields and ICD codes to identify visits associated with issues of concern, including:
  - Suicidal ideation
  - Suicide attempts
- Collects basic demographic data (e.g. age, sex, race/ethnicity, county of residence)

# Total Weekly ED Visits

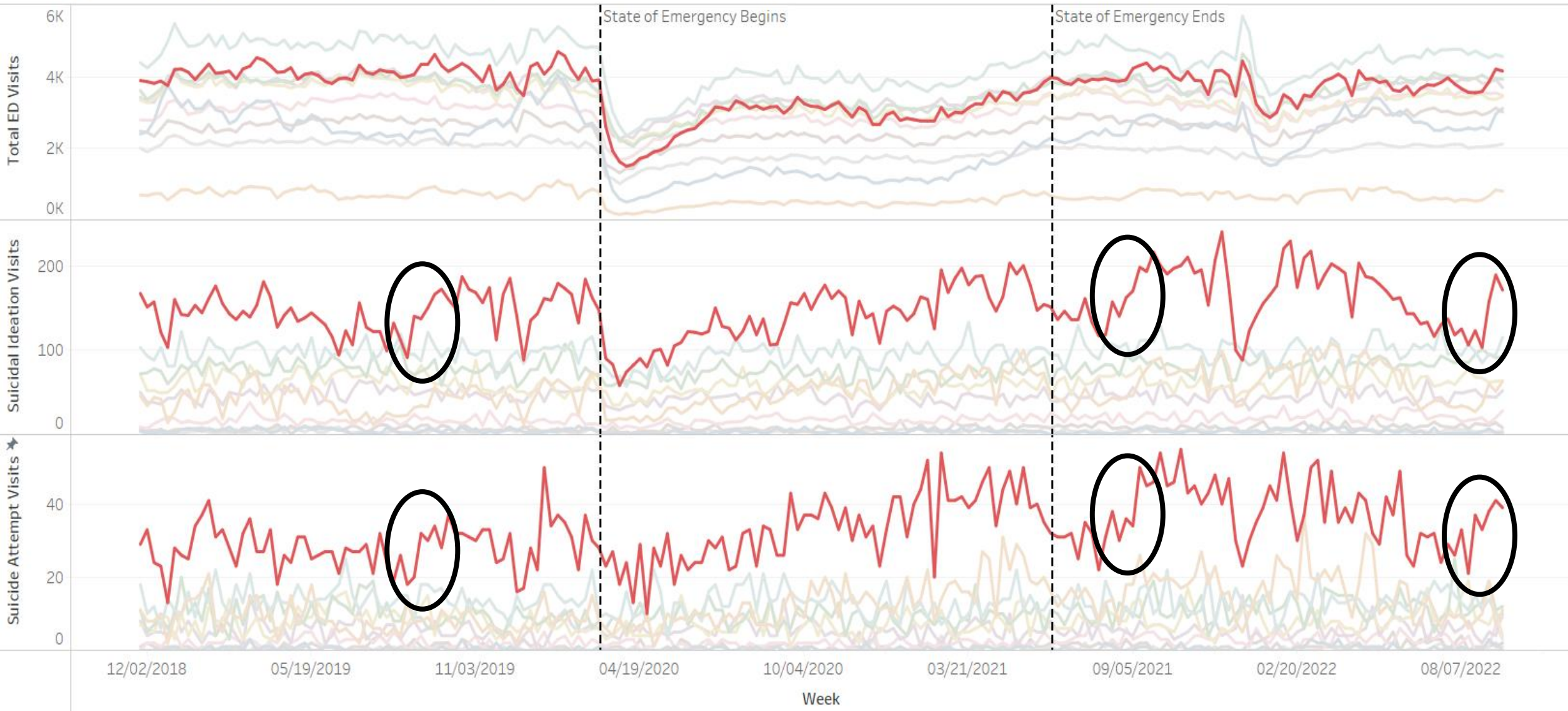


# Weekly ED Visits by Age Among Females Age 15-24



Source: Syndromic Surveillance Program, Massachusetts Department of Public Health

# Weekly ED Visits by Age Among Females Age 15-24



Source: Syndromic Surveillance Program, Massachusetts Department of Public Health

# Overall Observations

- Overall suicide rates declined 2 years in a row
- Not all groups have been experiencing declines in recent years
  - Hispanic/Latinx
  - Asian, non-Hispanics
- Youth suicides show higher proportions of non-White decedents compared to other age groups
- ED visits for suicidal ideation and suicide attempt are higher in 2022 compared to 2021
  - Mostly driven by increases seen in young females age 15-24

Thank You!

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