

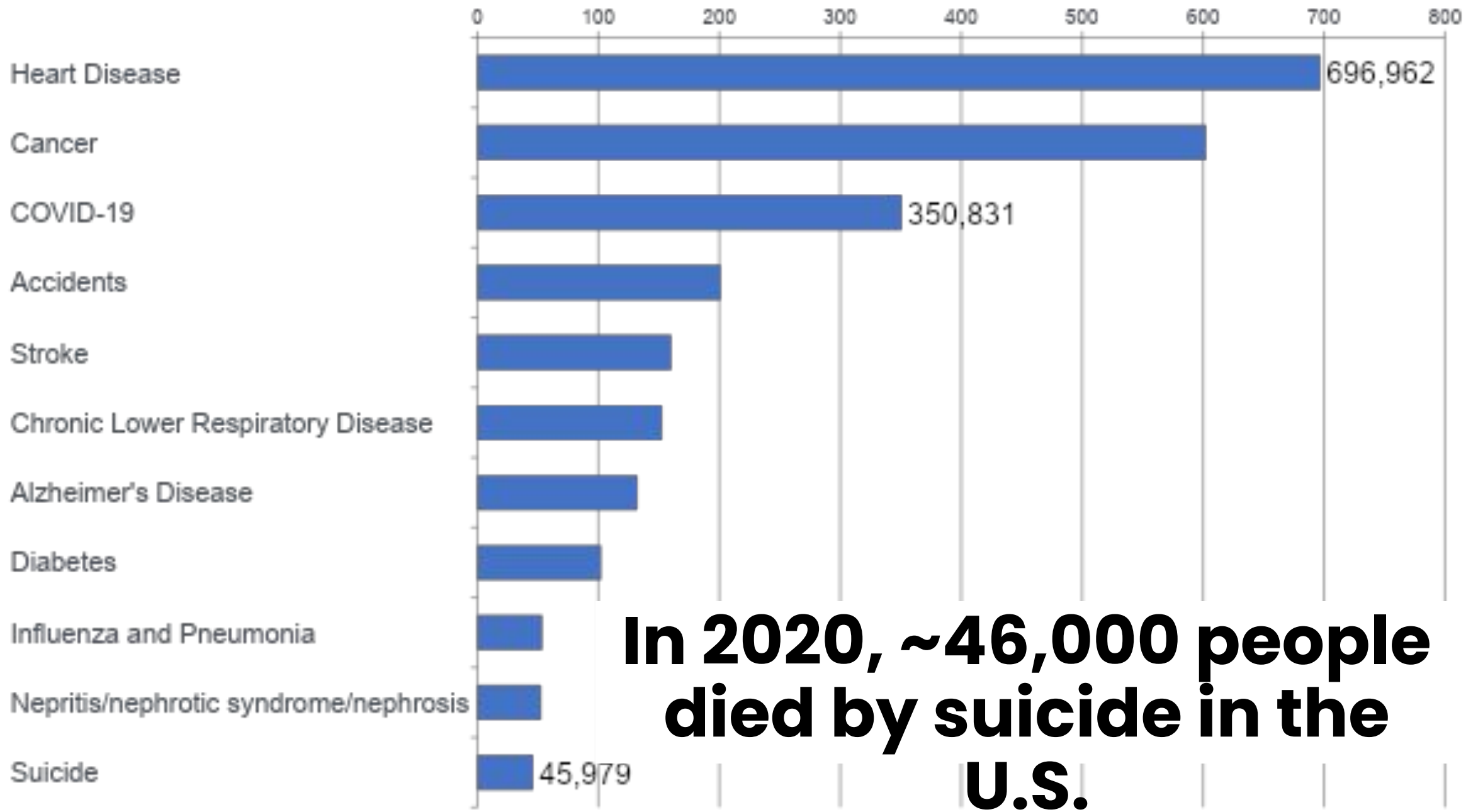


Suicide in Lesbian, Gay & Bisexual Adults:

Epidemiologic Trends & Strategies for Prevention

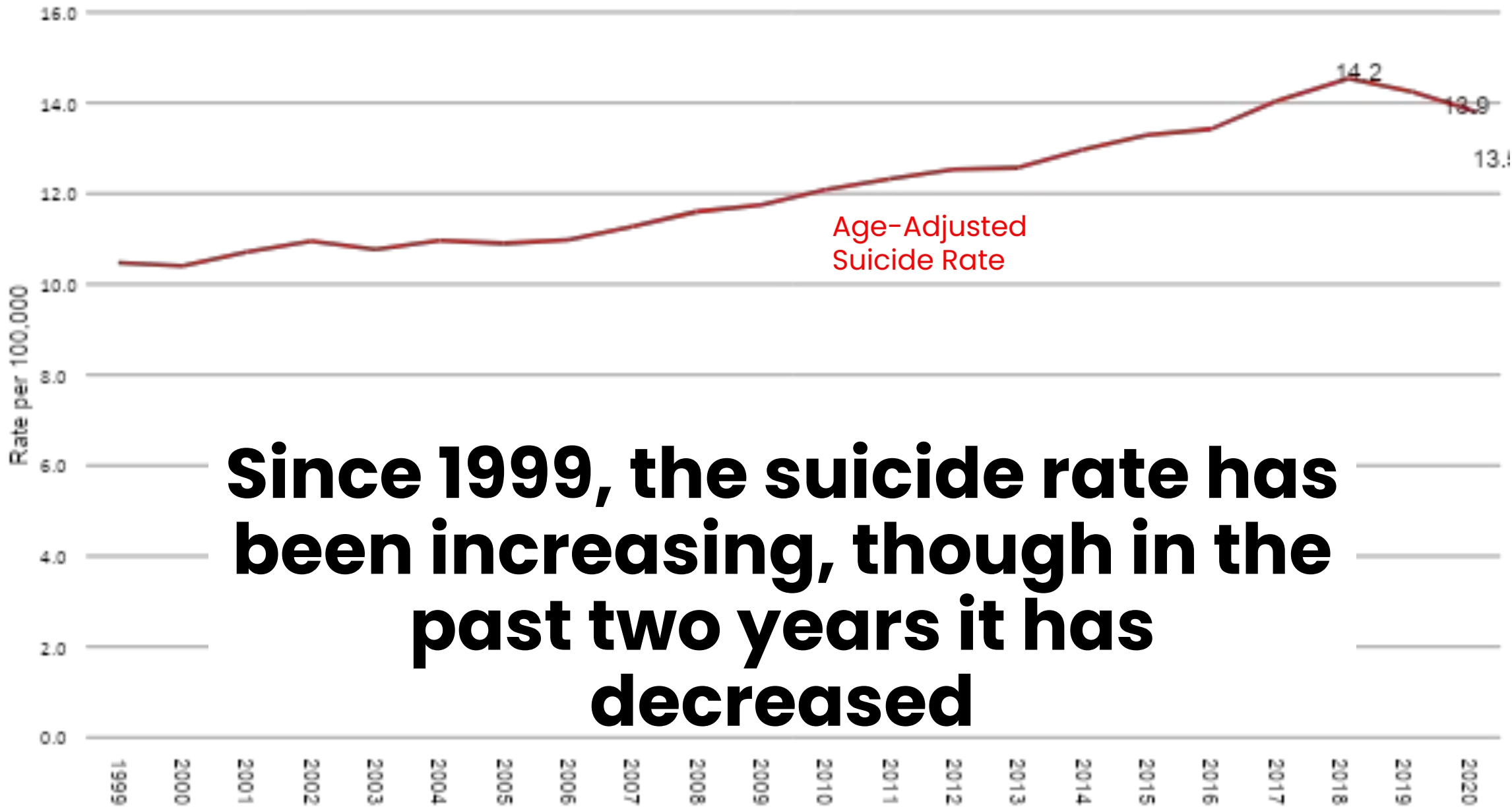
Rajeev Ramchand, Ph.D.

June 13, 2023



In 2020, ~46,000 people died by suicide in the U.S.

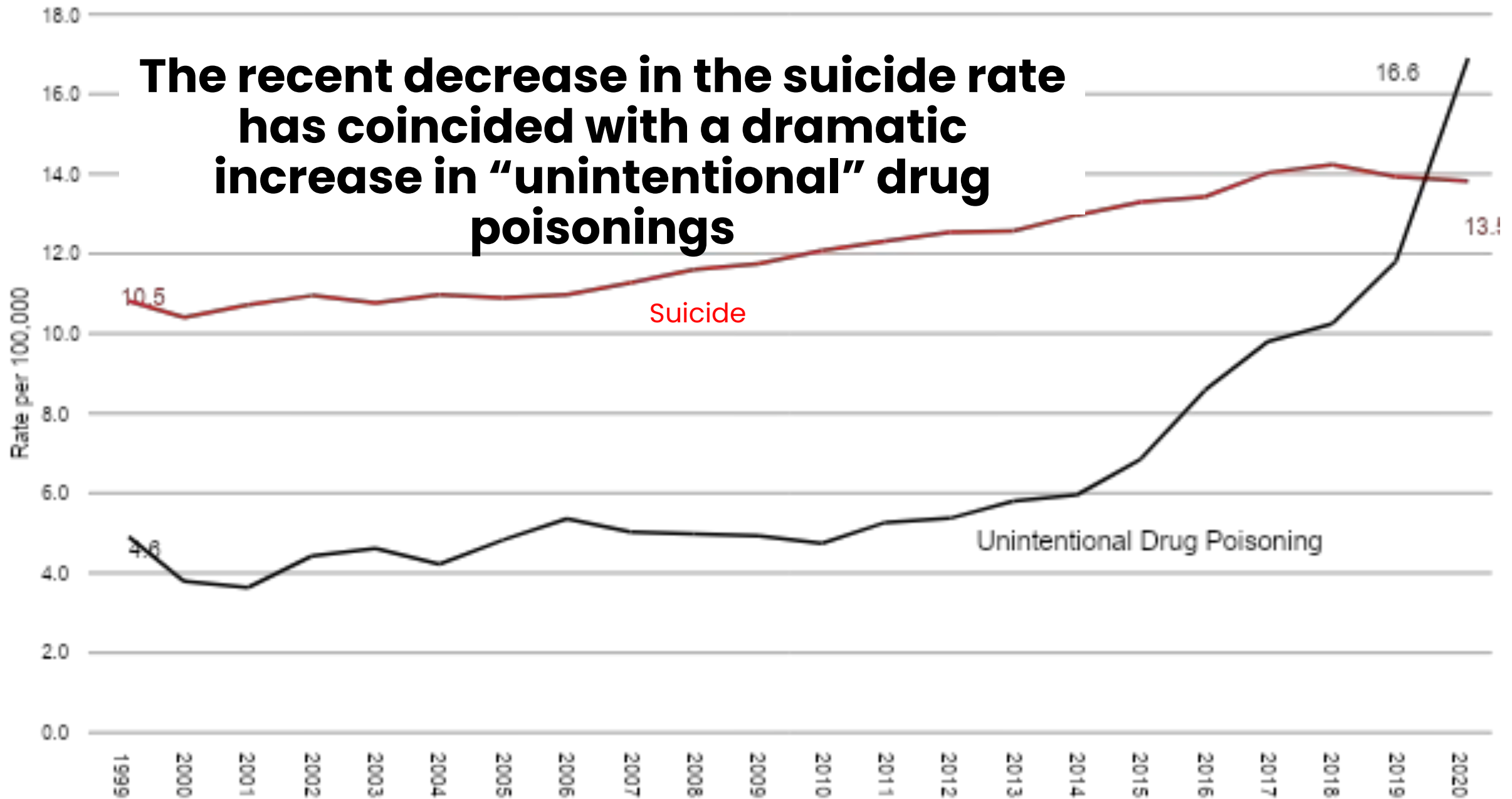
Data from National Vital Statistics System



Since 1999, the suicide rate has been increasing, though in the past two years it has decreased

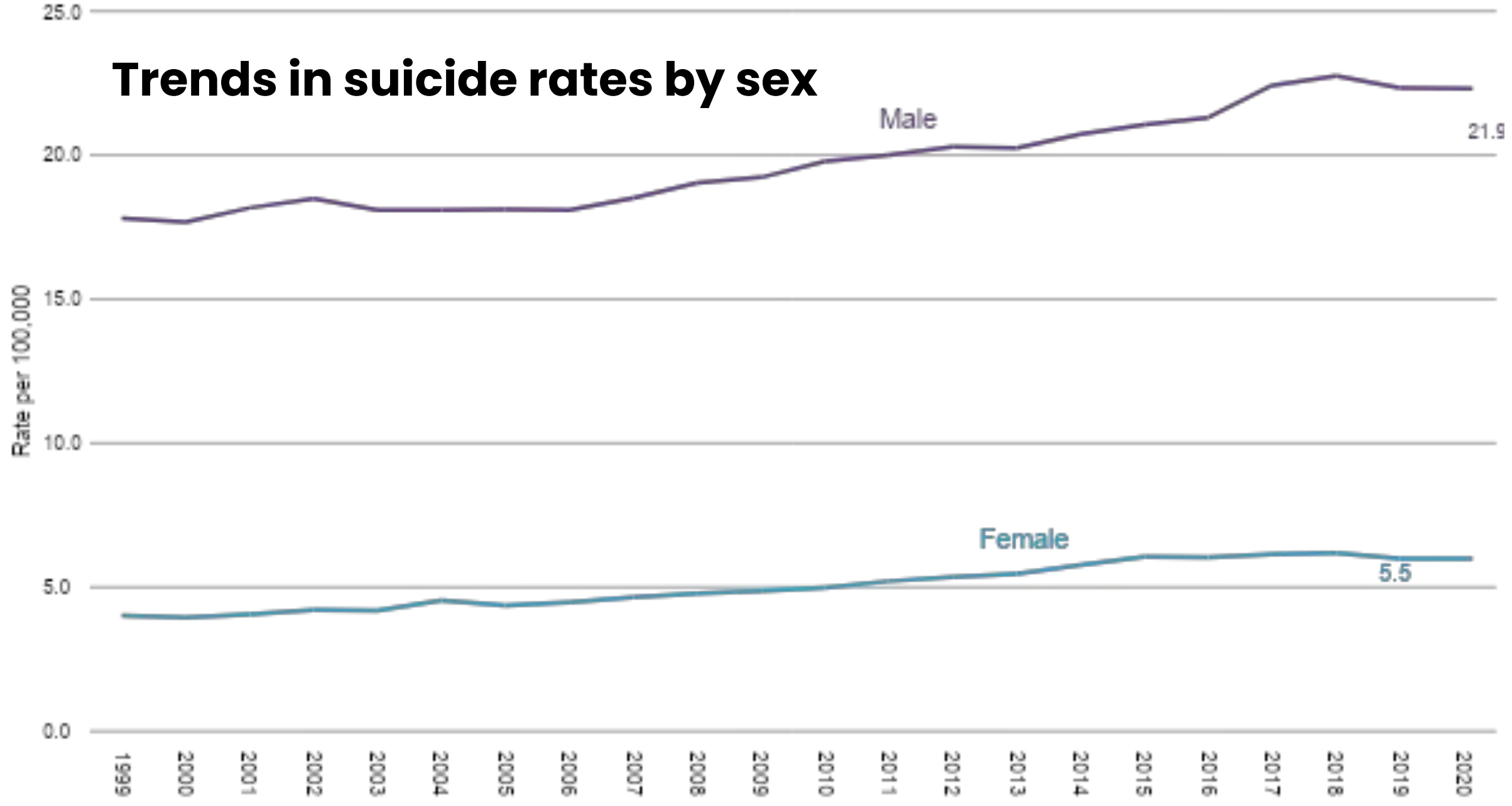
Data from National Vital Statistics System

**The recent decrease in the suicide rate
has coincided with a dramatic
increase in “unintentional” drug
poisonings**



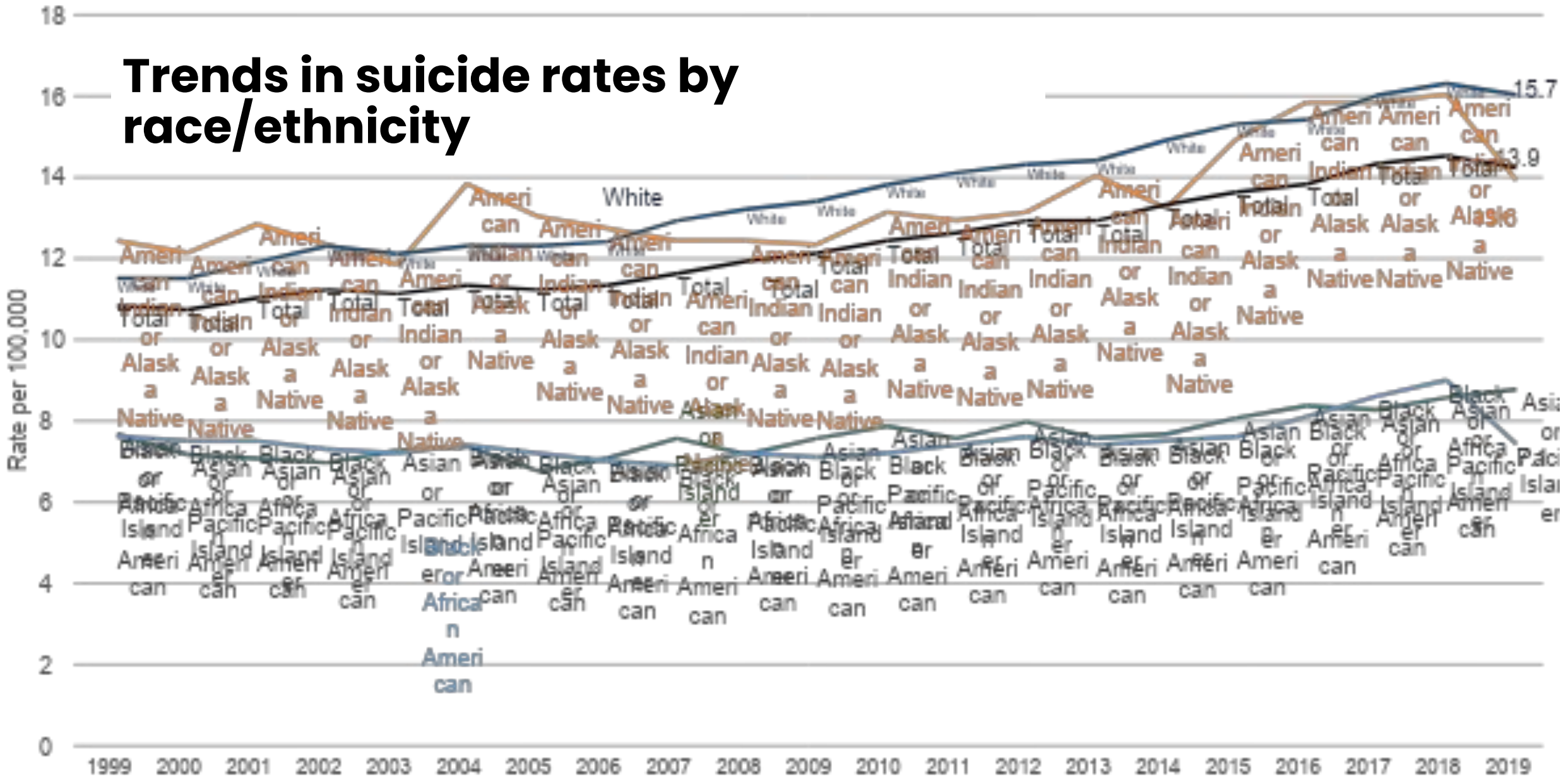
Data from National Vital Statistics System

Trends in suicide rates by sex



Data from National Vital Statistics System

Trends in suicide rates by race/ethnicity



Data from National Vital Statistics System

Trends in suicide rates by sexual orientation

Rate per 100,000

1

0

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Trends in suicide rates by gender identity

Rate per 100,000

1

0

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

U.S. STANDARD CERTIFICATE OF DEATH

LOCAL FILE NO. STATE FILE NO.

1. DECEDENT'S LEGAL NAME (Include MA's if any) (Print, Middle, Last) 2. SEX 3. SOCIAL SECURITY NUMBER

4a. AGE-Last birthday (Years) 4b. UNDER 1 YEAR: Months, Days, Hours, Minutes 5. DATE OF BIRTH (Mo/Day/Yr) 6. BIRTHPLACE (City and date of Foreign Country)

7a. RESIDENCE-STATE 7b. COUNTY 7c. CITY OR TOWN

8. STREET AND NUMBER 9a. APT. NO. 9b. ZIP CODE 9c. INSIDE CITY LIMITS? Yes No

8. EVER IN US ARMED FORCES? Yes No 9. MARITAL STATUS AT TIME OF DEATH: Married Married, but separated Widowed Divorced Never Married Unknown 10. SURVIVING SPOUSE'S NAME (If wife, give name prior to first marriage)

11. FATHER'S NAME (First, Middle, Last) 12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last)

13a. INFORMANT'S NAME 13b. RELATIONSHIP TO DECEDENT 13c. MAILING ADDRESS (Street and Number, City, State, Zip Code)

14. PLACE OF DEATH (Check only one - see instructions)

14. DEATH OCCURRED IN A HOSPITAL: Inpatient Emergency Room/Outpatient Dead on Arrival 14. DEATH OCCURRED SOMEWHERE OTHER THAN A HOSPITAL: Hospice facility Nursing home/Long term care facility Decedent's home Other (Specify)

15. FACILITY NAME (For institutions, give street & number) 16. CITY OR TOWN, STATE, AND ZIP CODE 17. COUNTY OF DEATH

16. METHOD OF DISPOSITION: Burial Cremation Donation Entombment Removal from State Other (Specify) 19. PLACE OF DISPOSITION (Name of cemetery, crematory, other place)

20. LOCATION-CITY, TOWN, AND STATE 21. NAME AND COMPLETE ADDRESS OF FUNERAL FACILITY

22. SURVIVORS OF FUNERAL SERVICE LICENSES OR OTHER RIGHTS 23. LICENSE NUMBER (Of Licensee)

ITEMS 24-28 MUST BE COMPLETED BY PERSON WHO PRONOUNCES OR CERTIFIES DEATH

24. DATE PRONOUNCED DEAD (Mo/Day/Yr) 25. TIME PRONOUNCED DEAD 26. SIGNATURE OF PERSON PRONOUNCING DEATH (only when applicable) 27. LICENSE NUMBER 28. DATE SIGNED (Mo/Day/Yr)

29. ACTUAL OR PRESUMED DATE OF DEATH (Mo/Day/Yr) (Spell Month) 30. ACTUAL OR PRESUMED TIME OF DEATH 31. WAS MEDICAL EXAMINER OR CORONER CONTACTED? Yes No

32. CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - diseases, injuries, or complications - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.

32. PART II. Enter other significant conditions or events that, but not resulting in the underlying cause given in PART I.

33. WAS AN AUTOPSY PERFORMED? Yes No 34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? Yes No

35. DID TOBACCO USE CONTRIBUTE TO DEATH? Yes Probably No Unknown 36. IF FEMALE: Not pregnant within past year Pregnant at time of death Not pregnant, but pregnant within 42 days of death Not pregnant, but pregnant 43 days to 1 year before death Unknown if pregnant within the past year 37. MANNER OF DEATH: Natural Homicide Accident Pending Investigation Suicide Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month) 39. TIME OF INJURY 40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area) Unknown if pregnant within the past year 41. INJURY AT WORK? Yes No

42. LOCATION OF INJURY - State City or Town Apartment No. Zip Code

43. DESCRIBE HOW INJURY OCCURRED: 44. IF TRANSPORTATION INJURY, SPECIFY: Driver/Operator Passenger Pedestrian Other (Specify)

45. CERTIFIER (Check only one): Certifying physician-To the best of my knowledge, death occurred due to the cause(s) and manner stated. Pronouncing & Certifying physician-To the best of my knowledge, death occurred at the time, date, and place, and due to the cause(s) and manner stated. Medical Examiner/Coroner-On the basis of examination, and/or investigation, in my opinion, death occurred at the time, date, and place, and due to the cause(s) and manner stated.

Signature of certifier: _____

46. NAME, ADDRESS, AND ZIP CODE OF PERSON COMPLETING CAUSE OF DEATH (Item 32)

47. TITLE OF CERTIFIER 48. LICENSE NUMBER 49. DATE CERTIFIED (Mo/Day/Yr) 50. FOR REGISTRAR ONLY- DATE FILED (Mo/Day/Yr)

51. DECEDENT'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of death): 8th grade or less 9th-12th grade; no diploma High school graduate or GED completed Some college credit, but no degree Associate degree (e.g., AA, AS) Bachelor's degree (e.g., BA, BS, BS) Master's degree (e.g., MA, MS, MEd, MEd, MEdW, MEdA) Doctorate (e.g., PhD, EdD) Professional degree (e.g., MD, DDS, DVM, LL.M., JD)

52. DECEDENT OF HISPANIC ORIGIN? (Check the box that best describes whether the decedent is Spanish/Hispanic/Latino. Check the "No" box if decedent is not Spanish/Hispanic/Latino): No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic/Latino (Specify) _____

53. DECEDENT'S RACE (Check one or more races to indicate what the decedent considered himself or herself to be): White Black or African American American Indian or Alaska Native (Name of the enrolled or principal tribe) Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian (Specify) _____ Native Hawaiian or Other Pacific Islander (Specify) _____ Other (Specify) _____

54. DECEDENT'S USUAL OCCUPATION (Indicate type of work done during most of working life. DO NOT USE RETIRED).

55. KIND OF BUSINESS/INDUSTRY

In most death investigations across the United States, sexual orientation and gender identity are not included in death certificates

Exceptions include: Los Angeles County (2019) California pilot (2021; AB1094)

Researchers have used novel techniques to examine suicide mortality risk among LGBTQ+ populations

Linked Survey Data

- **Sample:** Nationally representative sample of adults who reported at least one same-sex sexual partner between 1988 and 2002
- No evidence of differing rate among MSM and MSWO
- WSW had higher suicide rate than WSMO

Diagnostic Codes

- **Sample:** VA patients with one of four ICD-9 codes (Gender Identity Disorder (x2), transsexualism; and transvestic fetishism) between 2000 and 2009
- **Suicide rate:** 82 per 100,000

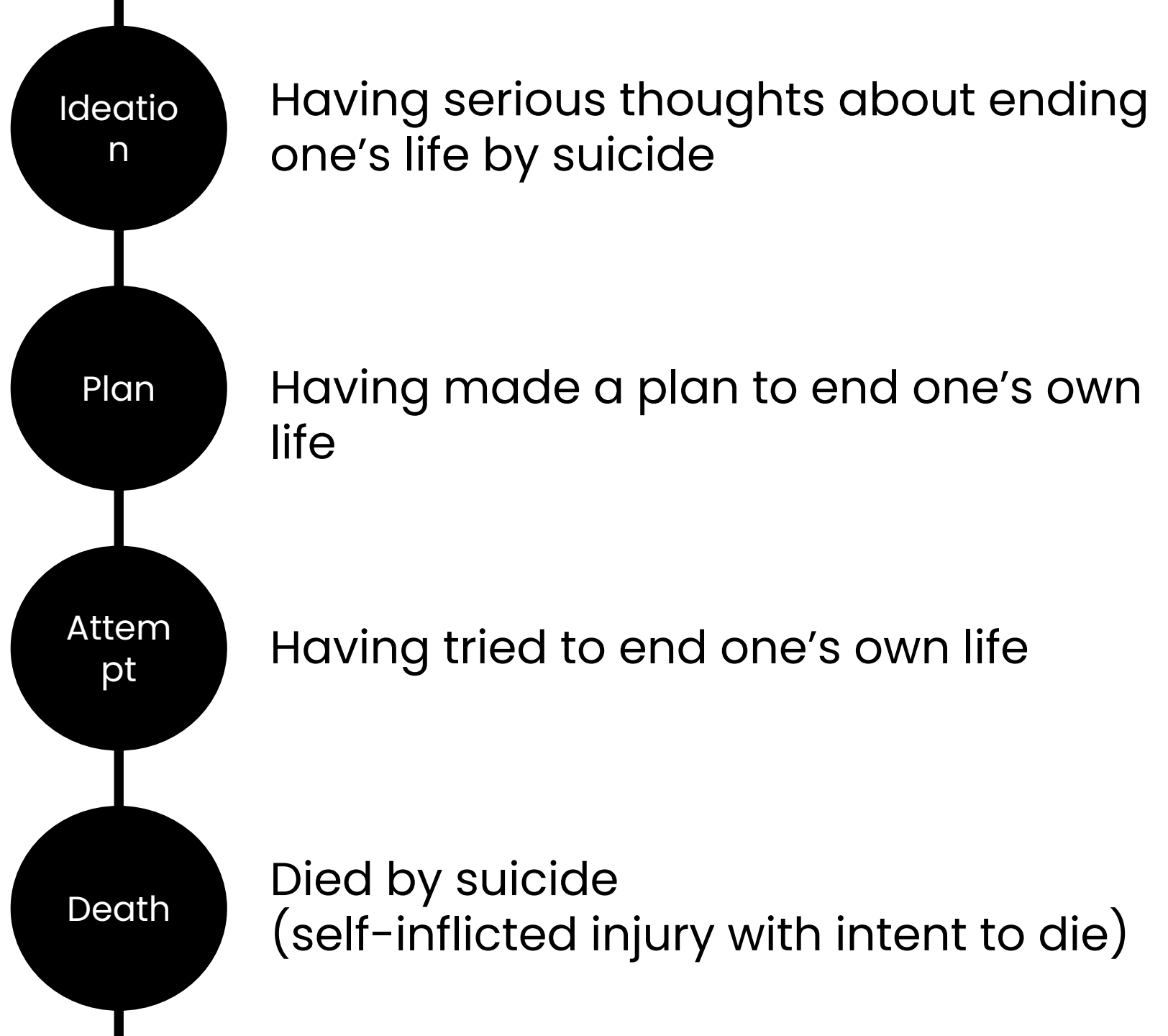
Blosnich et al., 2014

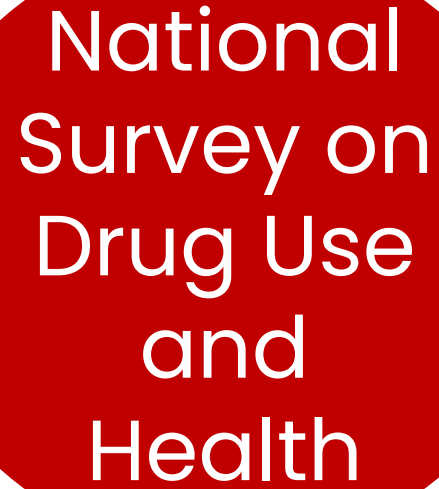
Natural Language Processing

- **Sample:** VA patients with documentation of sexual orientation in clinical notes from 1999-2017
- **Suicide rate:** 82.5 per 100,000 (v. 37.7 per 100,000)

Lynch et al., 2014

Other constructs are important markers of distress and suicidal behaviors





National Survey on Drug Use and Health

Annual survey representative of the civilian, non-institutionalized U.S. population

~57,000 respondents annually

Since 2015, asks questions of those 18 and older about sexual orientation:

Which one of the following do you consider yourself to be?

- *Heterosexual, that is, straight,*
- *Lesbian or gay*
- *Bisexual*
- *Don't know.*

Asks those 18 and older about suicide ideation, plans and attempts

- **Ideation:** *At any time in the past 12 months, that is from [DATEFILL] up to and including today, did you seriously think about trying to kill yourself?*
- **Plans:** *During the past 12 months, did you make any plans to kill yourself?*
- **Attempts:** *During the past 12 months, did you try to kill yourself?*

NSDUH Sample Characteristics: Current Study

Total Sample Size: 191,954 (2015–2019, pooled)

Identify as LGB: 14,693

Male

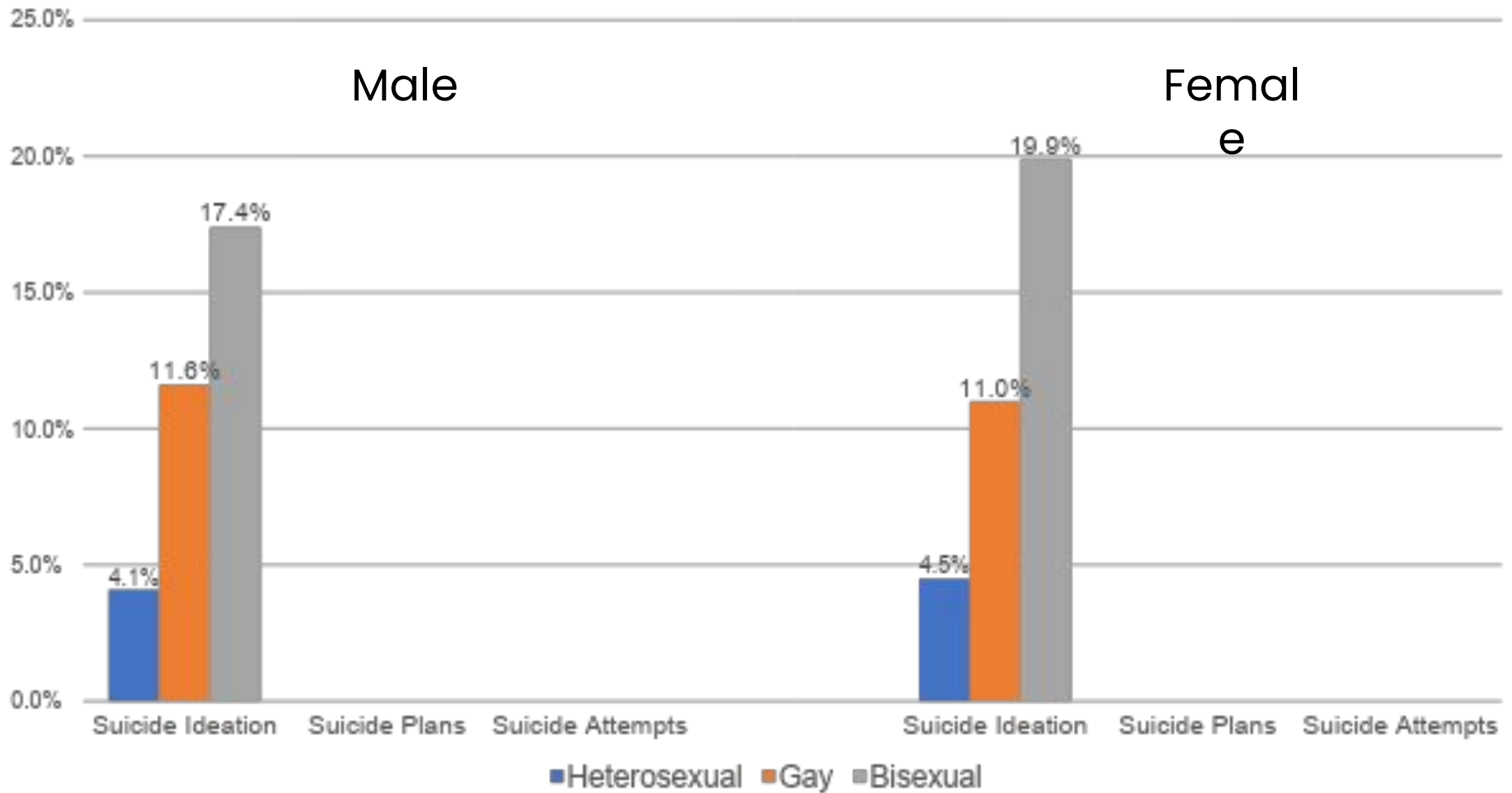
	Heterosexual	Gay	Bisexual
18–25	93.4%	2.9%	3.7%
26–34	94.4%	3.1%	2.5%
35–64	96.5%	2.2%	1.4%

	Heterosexual	Gay	Bisexual
White, NH	95.6%	2.4%	2.0%
Black, NH	95.8%	2.5%	1.7%
Other, NH	95.4%	2.3%	2.3%
Hispanic	94.8%	2.8%	2.3%

Female

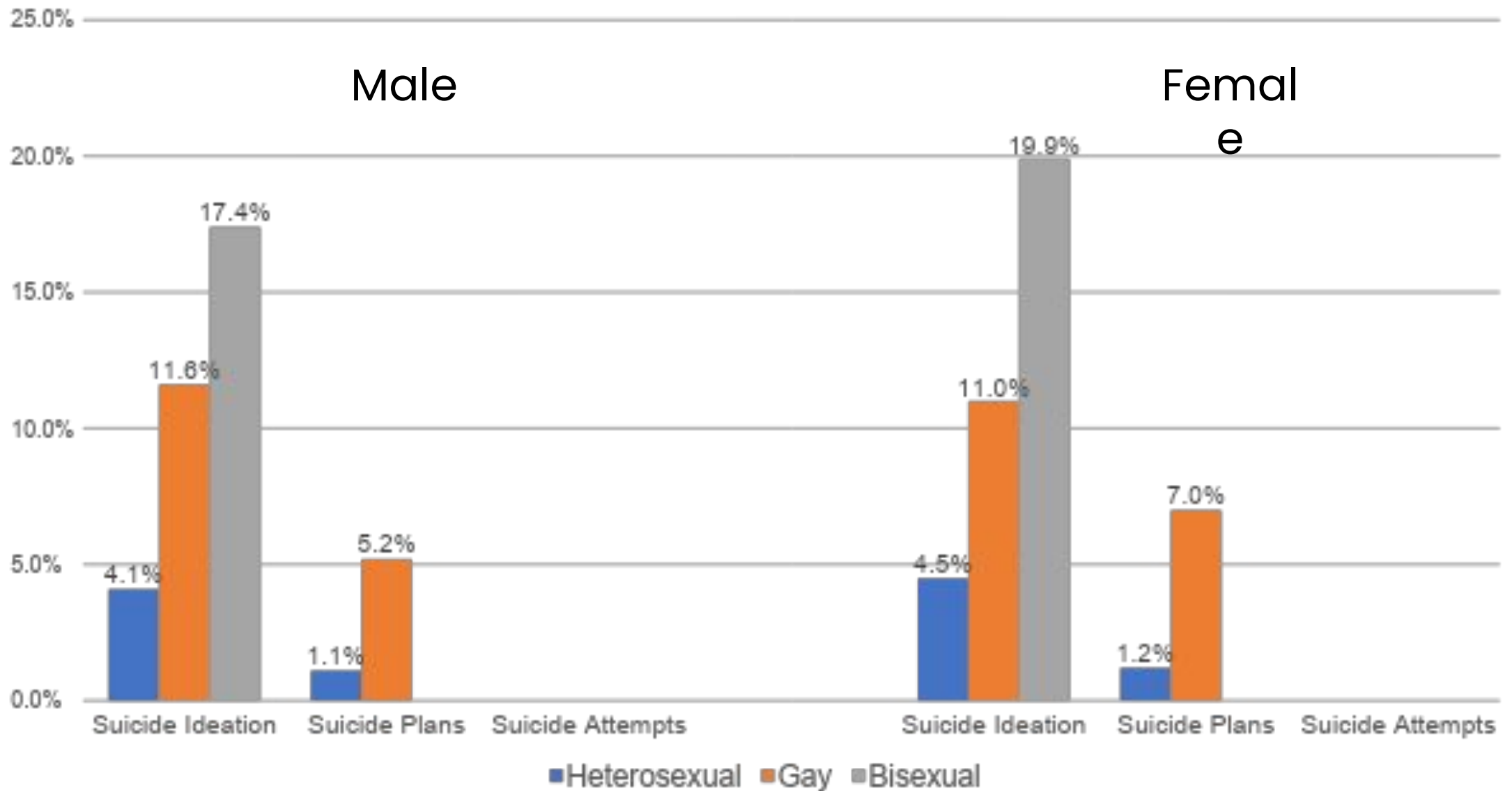
	Heterosexual	Lesbian	Bisexual
18–25	84.3%	2.6%	13.1%
26–34	89.6%	2.3%	8.1%
35–64	96.1%	1.5%	2.4%

	Heterosexual	Lesbian	Bisexual
White, NH	92.8%	1.9%	5.3%
Black, NH	92.0%	2.4%	5.6%
Other, NH	93.0%	1.4%	5.7%
Hispanic	93.2%	1.7%	5.1%



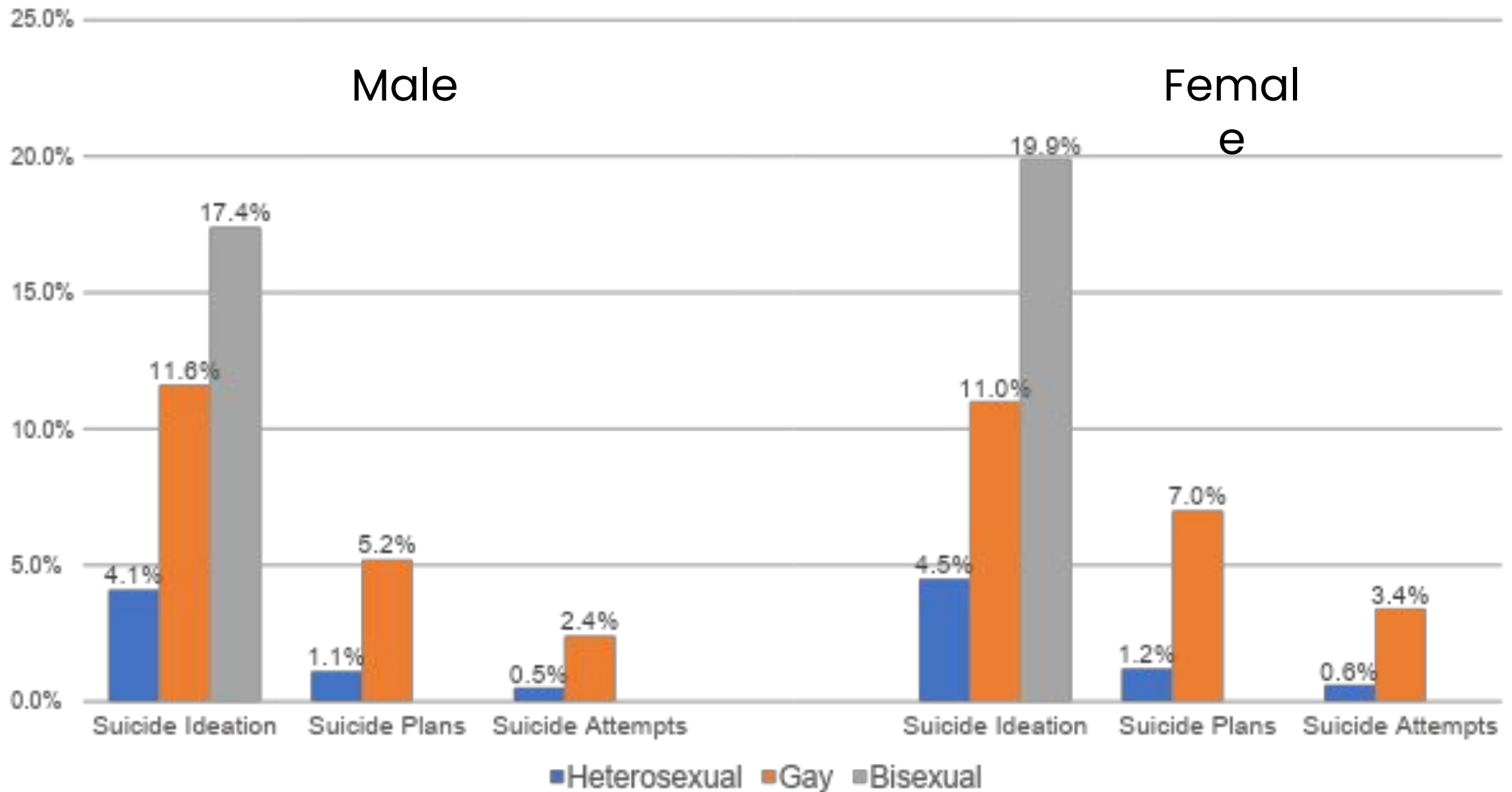
Estimates provided are adjusted marginal means (average prevalence estimates after adjustment for sociodemographic covariates)

For suicide plans, Gay/Lesbian also includes those who identify as bisexual



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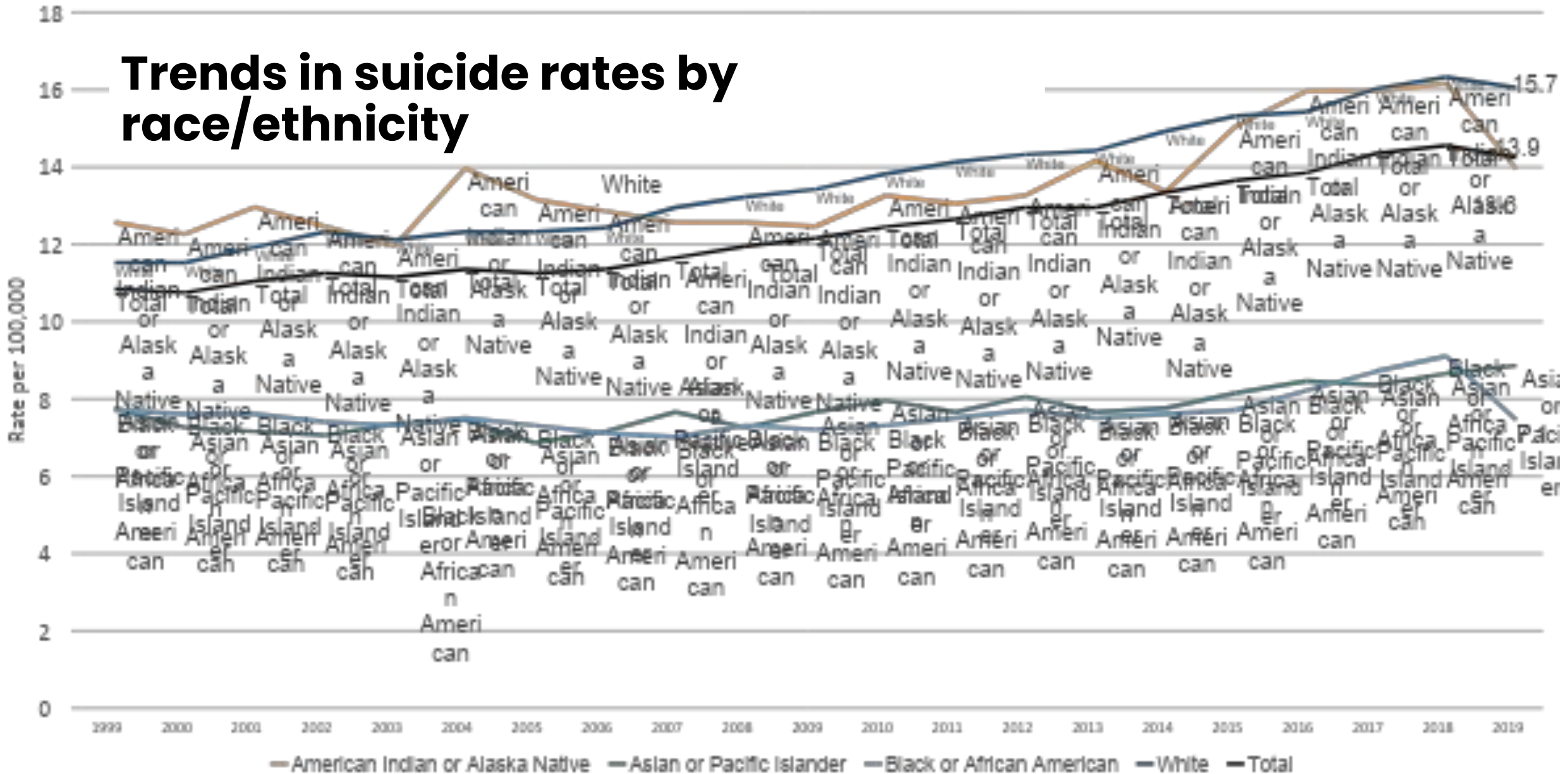
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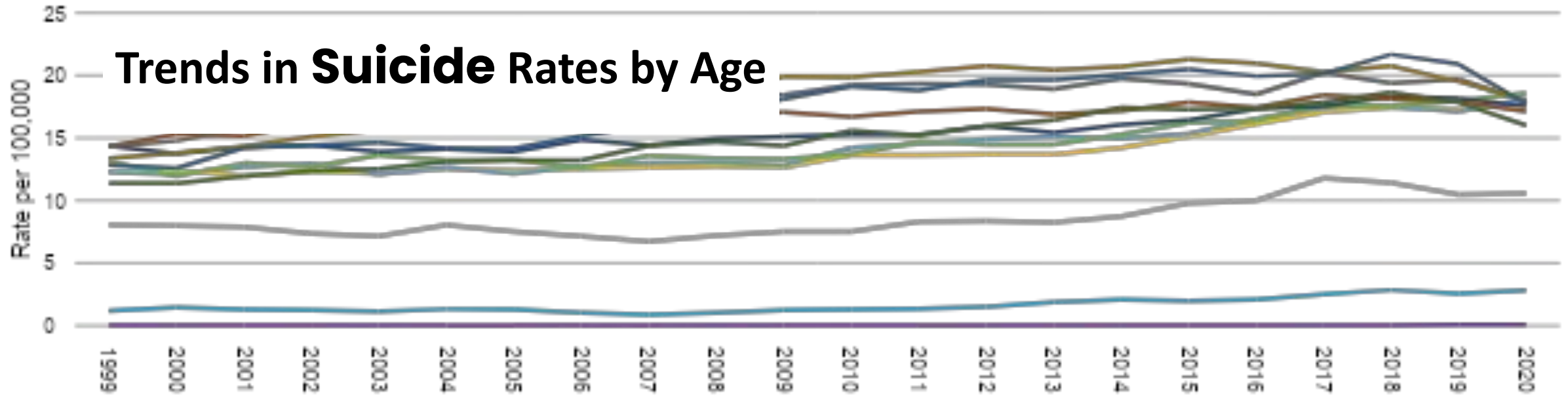
For suicide plans, Gay/Lesbian also includes those who identify as bisexual

Trends in suicide rates by race/ethnicity



Data from National Vital Statistics System

Trends in Suicide Rates by Age



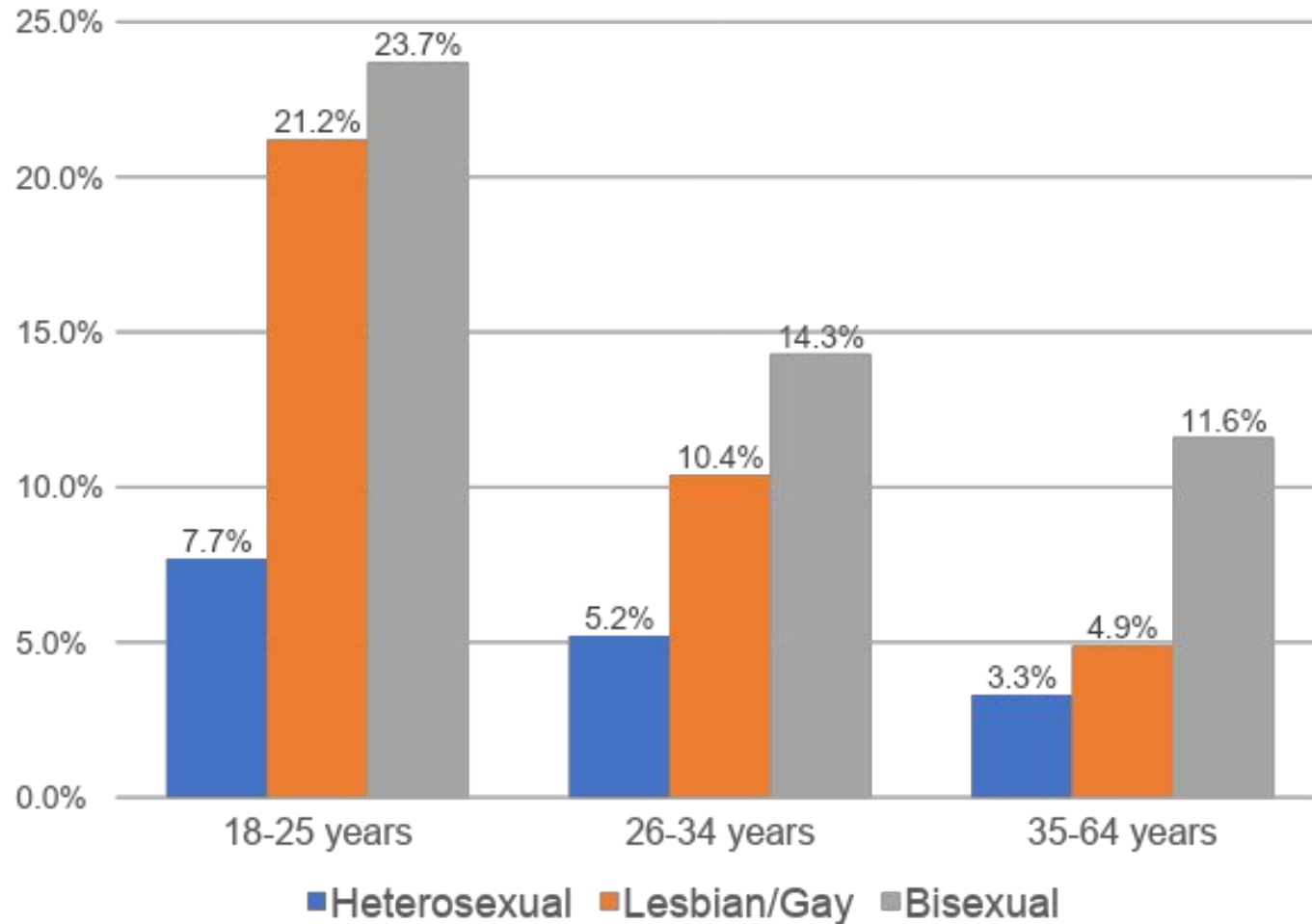
- 5 to 9
- 10 to 14
- 15 to 19
- 20 to 24
- 25 to 29
- 30 to 34
- 35 to 39
- 40 to 44
- 45 to 49
- 50 to 54



Is prevalence of suicide thoughts, plans and attempts different between...

1. Lesbian/gay/bisexual adults across age groups?
2. Lesbian/gay/bisexual adults across race/ethnicity groups?
3. Age groups among lesbian/gay/bisexual adults?
4. Race/ethnicity groups among lesbian/gay/bisexual adults?

Past Year Suicide Thoughts, Females



Across all age groups, bisexual women have higher rates of suicidal thoughts than heterosexual women

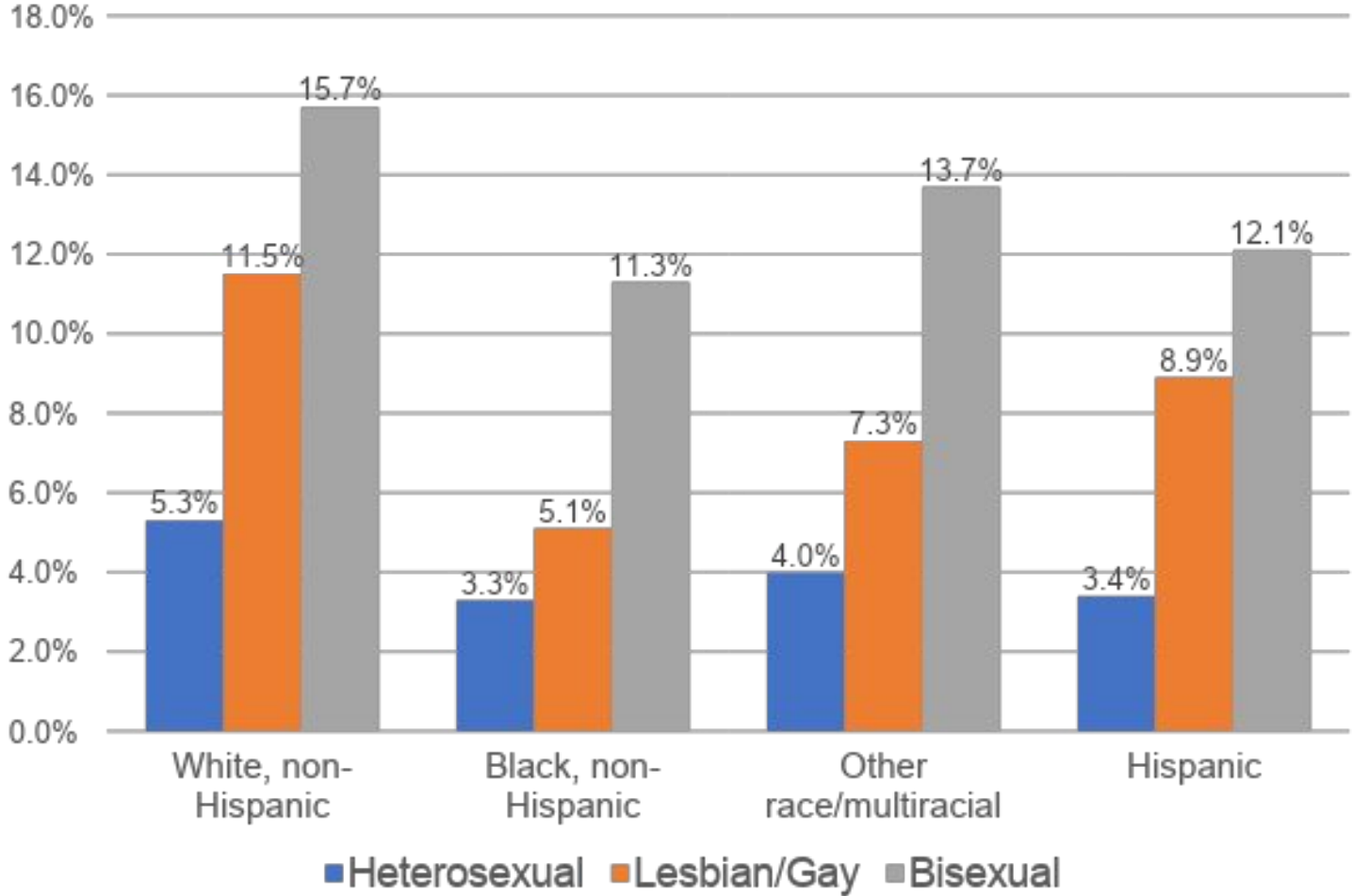
In the younger two age groups, gay/lesbian women have higher rates of suicidal thoughts than heterosexual women

In the older age groups, bisexual women have higher rates of suicidal thoughts than gay/lesbian women

In all sexual identity groups, younger women have highest rates of suicidal thoughts

Estimates provided are adjusted marginal means (average prevalence estimates after adjustment for sociodemographic covariates)

Past Year Suicide Thoughts, Females



Across all age groups, bisexual women have higher rates of suicidal thoughts than heterosexual women

Among White and Hispanic adults, gay/lesbian women have higher rates of suicidal thoughts than heterosexual women

Among White and Black adults, bisexual women have higher rates of suicidal thoughts than gay/lesbian women

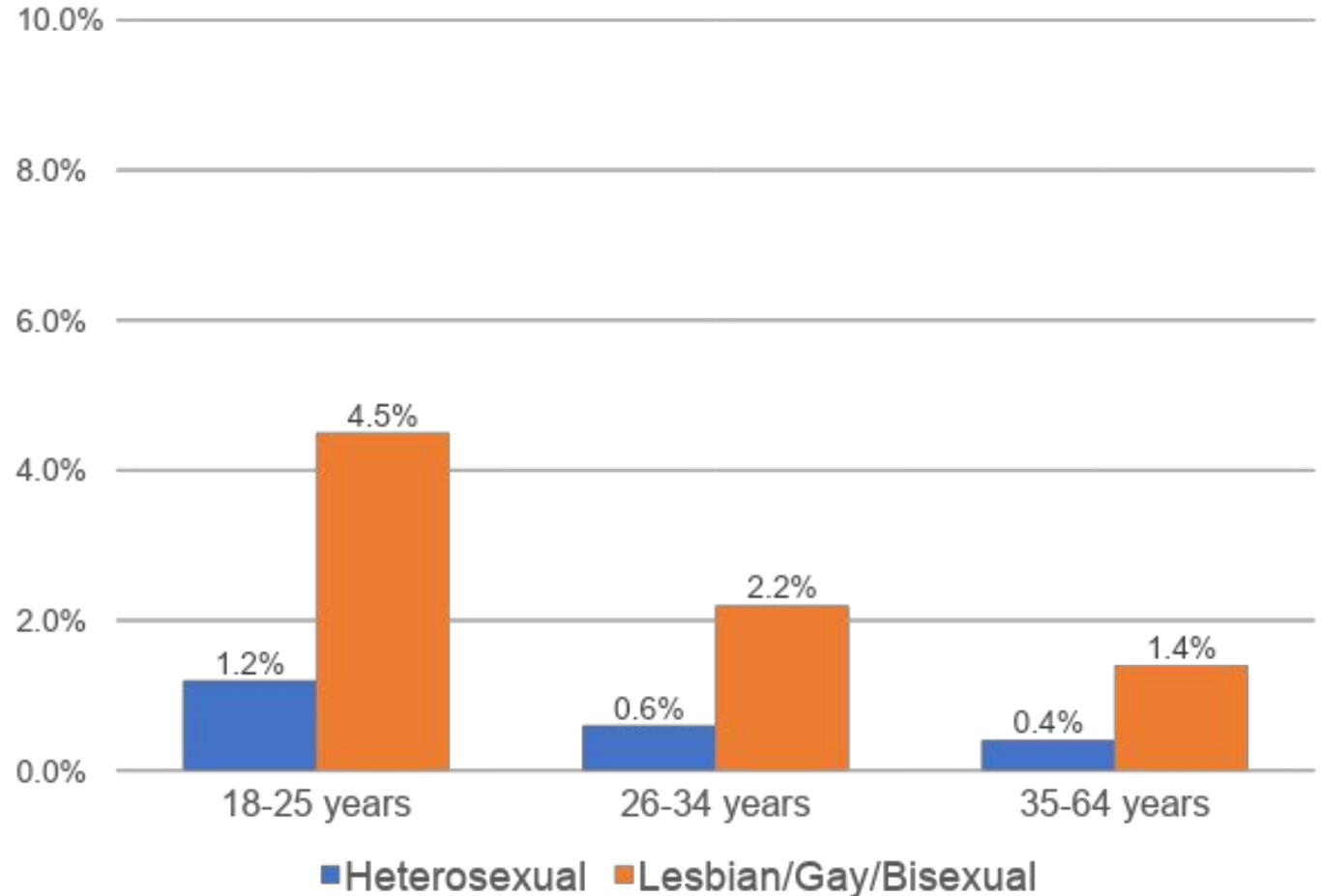
Among lesbian/gay, and bisexual women, Black women have lower rates of suicidal thoughts

Estimates provided are adjusted marginal means (average prevalence estimates after adjustment for sociodemographic covariates)

Past Year Suicide Attempts, Females

Across all age groups, lesbian/gay/bisexual women have higher rates of past suicide attempts

In both sexual identity groups, younger women have highest rates of suicidal thoughts

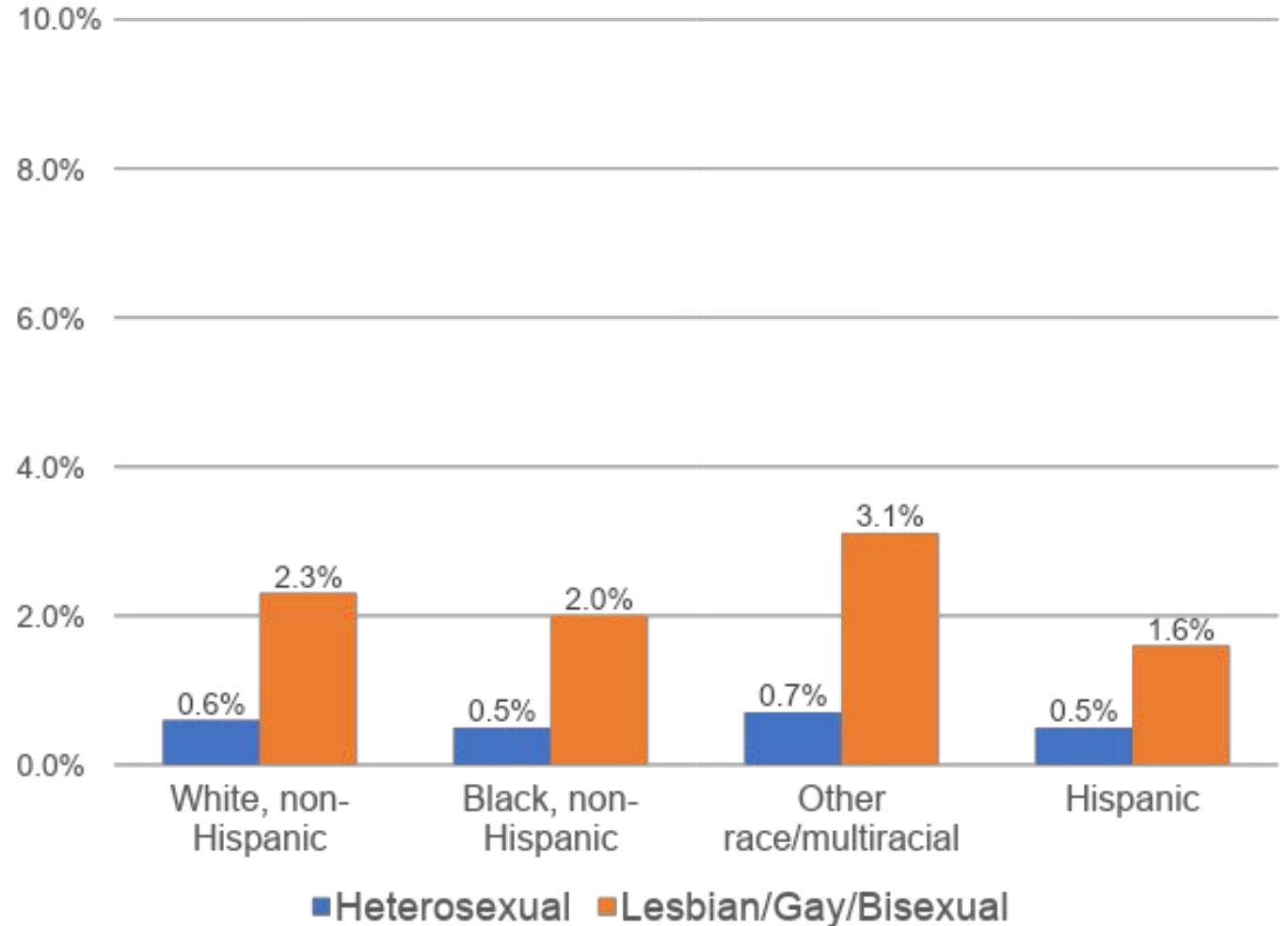


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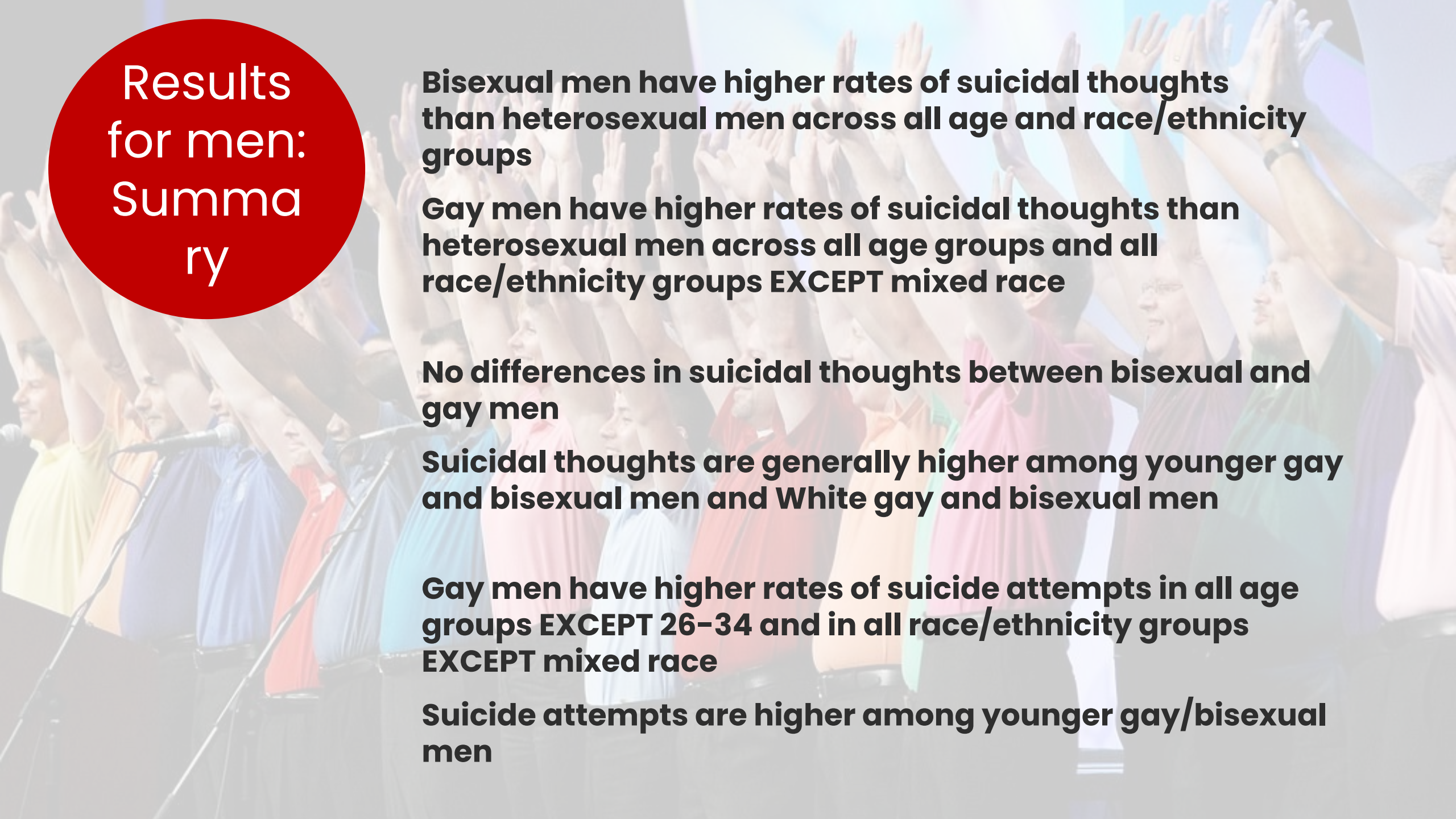
Past Year Suicide Attempts, Females

Across all race/ethnicity groups, lesbian/gay/bisexual women have higher rates of past suicide attempts

There are no differences by race/ethnicity in rates of past year suicide attempts among heterosexual or gay/lesbian/bisexual women



Estimates provided are adjusted marginal means (average prevalence estimates after adjustment for sociodemographic covariates)



**Results
for men:
Summa
ry**

Bisexual men have higher rates of suicidal thoughts than heterosexual men across all age and race/ethnicity groups

Gay men have higher rates of suicidal thoughts than heterosexual men across all age groups and all race/ethnicity groups EXCEPT mixed race

No differences in suicidal thoughts between bisexual and gay men

Suicidal thoughts are generally higher among younger gay and bisexual men and White gay and bisexual men

Gay men have higher rates of suicide attempts in all age groups EXCEPT 26–34 and in all race/ethnicity groups EXCEPT mixed race

Suicide attempts are higher among younger gay/bisexual men

Key Implications

Mostly consistent results of elevated suicidal behaviors among LGB adults



Minority Stress theory

Stigma, prejudice, and discrimination experienced by LGB individuals may exacerbate the risk for mental health problems, thereby increasing suicide risk

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Different associations between race/ethnicity and suicide outcomes among sexual minority adults relative to heterosexual adults



Intersectional theory

Discrimination may manifest in complex ways for those with multiple marginalized identities

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Intersectional theory

Discrimination may manifest in complex ways for those with multiple marginalized identities

In some instances, elevated rates of suicide thoughts among adults who identify as bisexual



Cultural invisibility of bisexual people may result in unique stressors and a lack of bisexual-specific resources

Biphobia:

negative stereotypes about bisexual people

Strategies for Prevention



Nine Broad Categories of Suicide Prevention



Training on coping skills and self-referral



Screening programs



Mental health interventions



Marketing campaigns



Crisis hotlines



Social/policy interventions



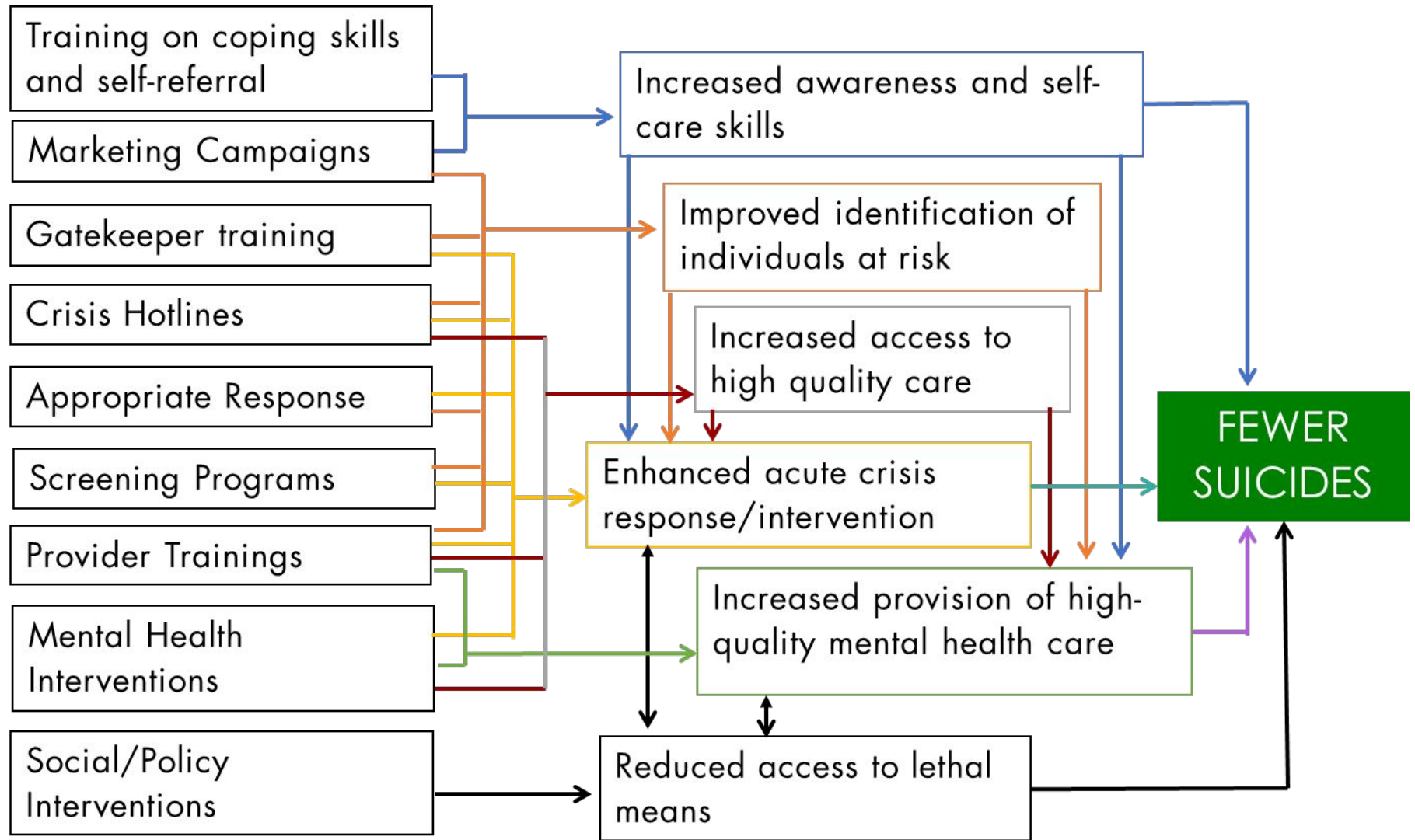
Gatekeeper training



Provider training



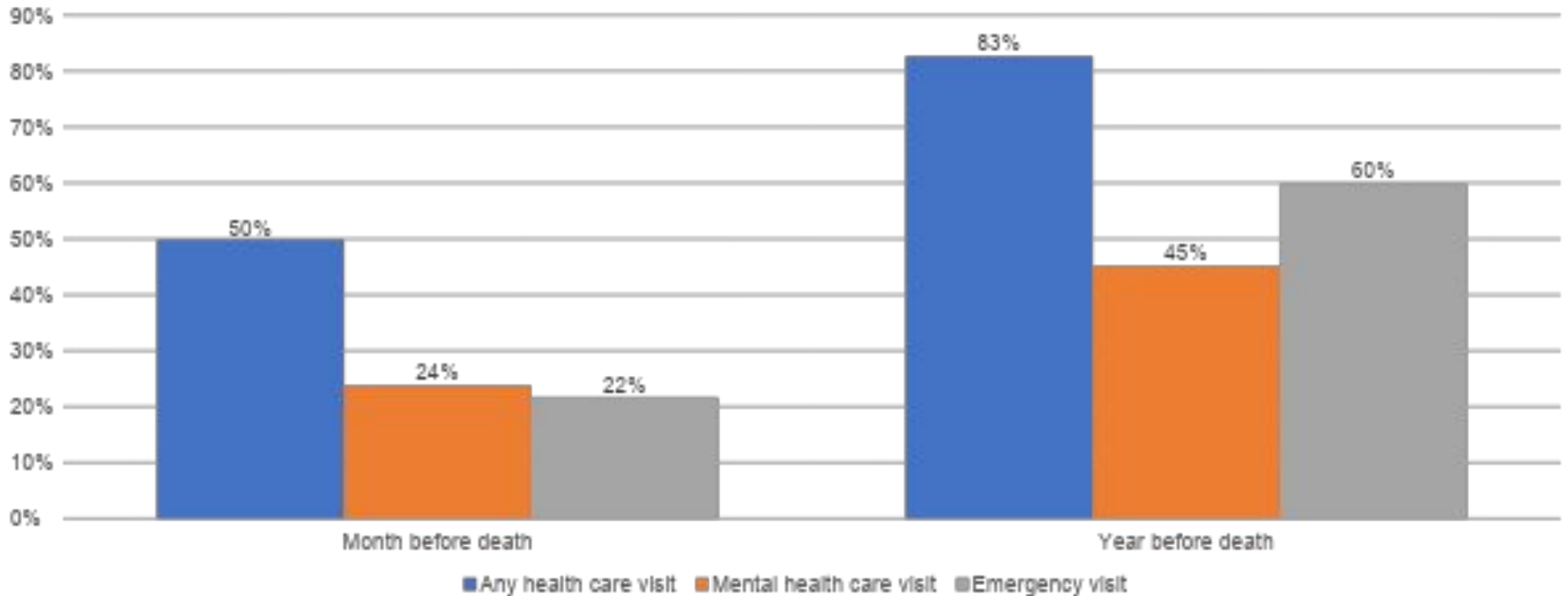
Appropriate response



From: Acosta J, Ramchand R, Jaycox L, Becker A, Eberhart N. 2012. *Interventions to Prevent Suicide: A Literature Review to Guide Evaluation of California's Mental Health Prevention and Early Intervention Initiative (TR-1317)*. Santa Monica, CA: RAND.

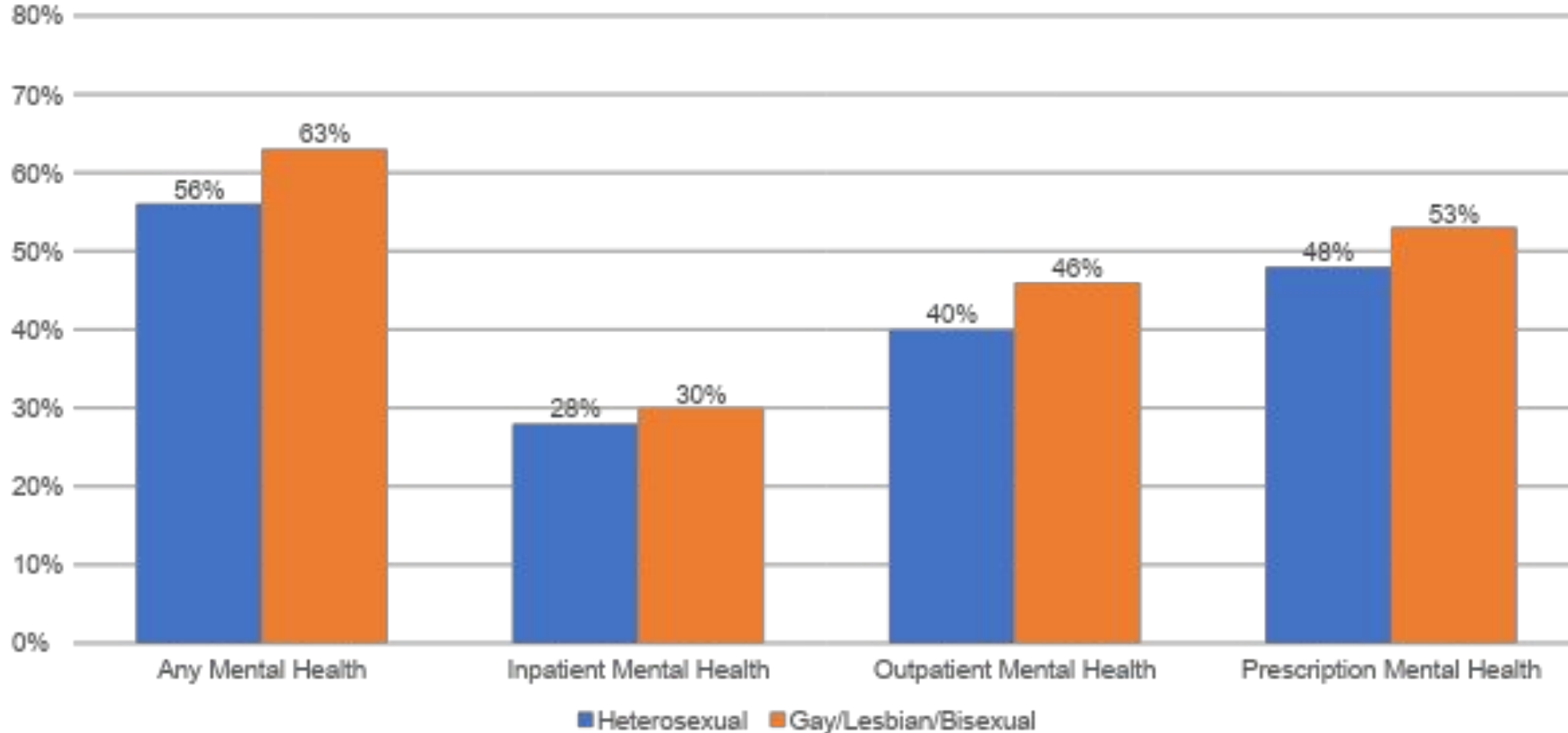
Health care settings provide opportunities to identify and mitigate suicide risk

Among 5,894 suicides enrolled in a health plan in a year before death...



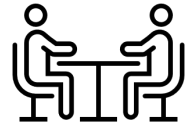
From: Ahmedani, B. K., Simon, G. E., Stewart, C., Beck, A., Waitzfelder, B. E., Rossom, R., . . . Solberg, L. I. (2014). Health care contacts in the year before suicide death. *J Gen Intern Med*, 29(6), 870-877.

Past Year Receipt of Mental Health Services Among Those Who Reported Attempting Suicide



From: Ramchand et al. (2022). Mental Health Service Use Among Lesbian, Gay, and Bisexual Adults Who Report Having Made a Suicide Attempt. *Psychiatric Services*, forthcoming.

Evidence-
Supported
Mental
Health
Strategies



Screening for suicide risk



Cognitive behavioral therapy



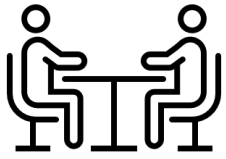
Dialectical behavioral therapy



Safety Planning



Caring contacts



Screening for suicide risk

- There is no evidence for iatrogenic risk of asking people questions about suicide (i.e., worry about “putting ideas into their heads.”)
 - Screening positive for suicide risk helps identify persons at risk for future suicide or other serious mental health concerns
 - Screening can be done by non-mental health clinicians
- ASQ is a validated suicide screening tool with versions for youth and adults in various clinical settings (outpatient, clinics, emergency departments, etc.)
 - More information at: <https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials>





Cognitive
behavioral
therapy



Dialectical
behavioral
therapy

What is Cognitive Behavioral Therapy (CBT)?

- One of the best tested, proven therapies for anxiety and depression (and other problems including suicidal thoughts and behaviors)
- Generally short-term (e.g., 8-16 weekly sessions)
- Collaborative
- Symptom-focused
- Therapist usually acts like a coach, assigns homework
- Therapist needs training to deliver CBT
- Face-to-face (but not e-health) CBT effective in reducing suicidal thoughts and behaviors

Leavey, K., & Hawkins, R. (2017). Is cognitive behavioural therapy effective in reducing suicidal ideation and behaviour when delivered face-to-face or via e-health? A systematic review and meta-analysis. *Cognitive behaviour therapy*, 46(5), 353-374.

What is Dialectical Behavioral Therapy (DBT)?

- Originally designed to treat chronic suicidal thoughts and borderline personality disorder, but tailored for many other conditions
- Effective for reducing suicidal behavior
- Targets emotion regulation, interpersonal effectiveness, distress tolerance
- Integrates CBT and mindfulness/acceptance-based skills
- Typically, one year of weekly treatment
- Key components:
 - Group therapy
 - Individual therapy
 - Phone coaching



Safety Planning is an evidence-based approach in which clinicians work with clients to identify strategies to cope with suicidal thoughts and reduce the risk of suicide.

Six components of safety planning

1. Recognizing individual warning signs
2. Identifying and employing internal coping strategies
3. Using social supports as distractions
4. Contacting trusted family or friends to help
5. Contacting specific mental health services
6. Reducing access to/use of lethal means

From: Stanley, B., & Brown, G. K. (2012). Safety planning intervention: A brief intervention to mitigate suicide risk. *Cognitive Behavioural Practice*, 19(2), 256–264.

Safety Planning “differs significantly from the widely considered ineffective ‘no-suicide contract.’” Ferguson et al., 2021.



Safety Planning: The evidence

Across 26 studies, evidence supported improvements in:

- Suicidality (ideation, behavior, death)
- Depression, hopelessness
- Hospitalization, treatment engagement

From: Ferguson, M et al. (2021). The Effectiveness of the Safety Planning Intervention for Adults Experiencing Suicide-Related Distress: A Systematic Review," Archives of Suicide Research, 1-24



Caring contacts

- Asynchronous, nonintrusive, low cost
- Targets patients recently discharged from psychiatric crisis care settings
- Send personalized text-based messages expressing interest and concern for the patient's wellbeing without any demand for a response
- Can be sent via text message or snail mail (e.g., postcards)
- Approximately 8 contacts over one year
- A review of 13 RCTs suggested an overall protective effect for suicide attempts one-year post-randomization



In
conclusion..



Suicide is preventable



LGB adults face increased suicide risk, but risk varies



Health care professionals can help prevent suicide



Evidence-supported strategies exist, and new evidence is emerging

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