

Homicide Rates of Transgender Individuals in the United States: 2010–2014

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Objectives. To estimate homicide rates of transgender US residents and relative risks (RRs) of homicide with respect to cisgender comparators intersected with age, gender, and race/ethnicity.

Methods. I estimated homicide rates for transgender residents and transfeminine, Black, Latin@, and young (aged 15–34 years) subpopulations during the period 2010 to 2014 using Transgender Day of Remembrance and National Coalition of Anti-Violence Programs transgender homicide data. I used estimated transgender prevalences to estimate RRs using cisgender comparators. I performed a sensitivity analysis to situate all results within assumptions about underreporting of transgender homicides and assumptions about the prevalence of transgender residents.

Results. The overall homicide rate of transgender individuals was likely to be less than that of cisgender individuals, with 8 of 12 RR estimates below 1.0. However, the homicide rates of young transfeminine Black and Latina residents were almost certainly higher than were those of cisfeminine comparators, with all RR estimates above 1.0 for Blacks and all above 1.0 for Latinas.

Conclusions. Antiviolence public health programs should identify young and Black or Latina transfeminine women as an especially vulnerable population. (*Am J Public Health*. 2017;107:1441–1447. doi:10.2105/AJPH.2017.303878)

 See also Stotzer, p. 1362.

Homicide is a recognized public health issue in the United States and is reported by age, sex, and race by the National Center for Health Statistics.^{1–5} Public health programs address homicide ranging from the individual level (<https://www.cureviolence.org>) to the state level.^{6–8} Antitransgender violence across the life course is prevalent in the United States, with transgender respondents reporting high prevalences of transphobic harassment and intimidation, assault and battery, sexual violence^{9,10} (with transgender itself sometimes interpreted to justify sexual assault of transgender bodies),¹¹ suicide and self-harm,^{10,12} and homicide.⁹

“Transgender” is an umbrella term for gender-variant individuals,¹⁰ and “cisgender” (meaning “not transgender”) is a logical counterpart.¹³ A radical heterogeneity exists in how transgender is experienced: some transgender individuals undertake some of a diverse array of medically mediated

transitions (hormonal, surgical), some undertake socially legible transitions (e.g., presentation in dress and style, pronoun and name use, legal identity), and some simply self-identify as a gender other than that assigned at birth irrespective of transition.

Such experiences are also dynamic, in that transitions in social legibility and self-identity are multidimensional and may occur at different rates across an individual’s lifetime^{10,14} and across transgender history.¹⁵ Some intersectional nuances of homicides of transgender individuals are accounted for by using the terms “transfeminine” (assigned masculine gender at birth but identifying or conforming with feminine gender later in life),

“cisfeminine” (assigned feminine gender at birth and conforming with feminine gender later in life), with “transmasculine” or “cismasculine” as counterparts. These terms are blunt instruments used to account for transgender identities in research.¹⁶

The term “Latin@” indicates broad Latin American ethnicity in the United States,^{17,18} specifically in a nongendered format.¹⁹ “Latina” and “Latino” are used to gender Latin@ individuals (e.g., transfeminine, cisfeminine).

The Transgender Day of Remembrance (<http://www.masstpc.org/community-events/tdor>) and the National Coalition of Anti-Violence Programs (<https://avp.org/ncavp>) catalog the homicides of transgender individuals, predominantly from media reports about the homicides. I aggregated these data, which include race/ethnicity and designations of transfemininity and transmasculinity, for 2010 to 2016 (Figure 1). I do not use the lens of hate crime because the media reports from which I drew these data contained sparse details regarding perpetrator motivations.

UNDERSTANDING HOMICIDES OF TRANSGENDER INDIVIDUALS

Historically, epidemiology has inadequately represented the transgender category,^{16,20,21} so especial care is warranted in considering the nature of representing transgender individuals. Two profound uncertainties arise when calculating the homicide rates of transgender individuals or

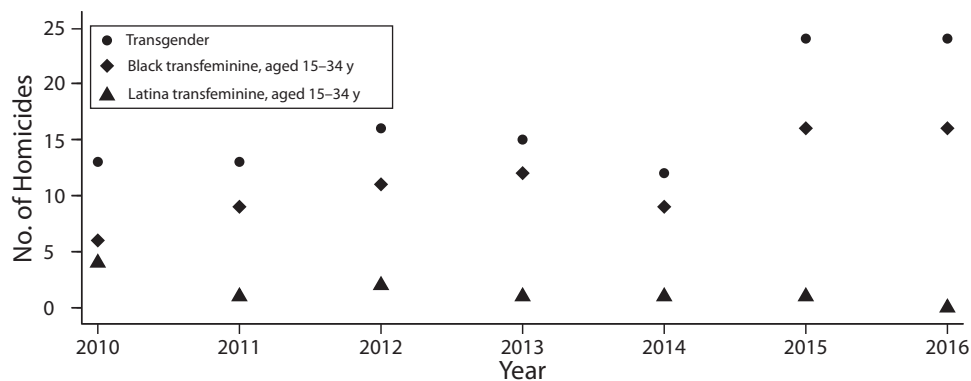
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Source. Transgender Day of Remembrance and National Coalition of Anti-Violence Programs Data.

FIGURE 1—US Transgender Homicides: United States, 2010–2016 (Provisional)

subpopulations: uncertainties about the number of transgender homicides and uncertainty about the number of transgender individuals. The former figure presents at least 3 reasons homicides of transgender individuals may be invisible as specifically transgender homicides, and thus the numbers I have presented are likely to be undercounted.

First, “Our institutions of recording death—coroners, death certificates, police reports, hospital records, obituaries—are unprepared to represent transgender. . . . Boxes labeled ‘Was transgender’ do not exist to be checked off or not.”²² Newspapers and other media outlets running obituaries are just recently coming to terms with noting surviving children with 2 parents of the same sex; editorial social conservatism censors and erases transgender deaths.²³

Second, the fact that a homicide victim was transgender, whether surgically or hormonally transitioned or not, is not necessarily apparent to those who record deaths. Even were the checkbox “Was transgender at time of death” present, how would someone recording a death for institutional reasons—almost certainly a stranger to the deceased—know to mark it?

Finally, the family of origin, because of transphobia—well documented in the United States¹²—can seek to efface transgender identity and experience when contributing information about deceased transgender relatives.

Uncertainty about the number of transgender individuals is in some ways simpler to grapple with. A few population-based studies published in English have attempted to

estimate the prevalence of transgender individuals, mostly in the United States.^{24–29} These studies report prevalences of about 0.10% to 0.60% of the general population. Some of the variation in such estimates may depend on the way “transgender” is operationalized. The 0.10% figure may estimate the prevalence of transgender individuals who have undertaken some kind of medical transition,²⁵ whereas the 0.60% figure may estimate prevalence of transgender individuals based simply on self-identification (i.e., it includes individuals who have undertaken neither medicalized nor social transitions).^{27,29} A midrange 0.35% figure suggests a rough estimate of the prevalence of socially legible transgender individuals.

An intersectional lens assuming that homicide risk can be best explained by multiple intersecting dimensions of social position³⁰ is requisite here because the economic vulnerability of the young and the brown, the racialization of violence, and transphobic and homophobic violence, especially toward transfeminine individuals,^{9,21} all accrue and compound. As Octavia St. Laurent says in Jennie Livingston’s 1990 documentary *Paris Is Burning*—which represents mostly poor young Black, brown, and transgender individuals in New York—during the film’s opening moments:

I remember my dad would say, “You have three strikes against you in this world (every Black man has two: that he’s Black and they’re a male), but you’re a Black, and you’re male, and you’re gay. You’re gonna have a hard fucking time.” And he said, “If you’re gonna do this, you’re gonna have to be stronger than you ever imagined.”

Homicide in general within the United States is raced (with Blacks at higher homicide risk than are other race/ethnicity categories), gendered (with men at higher homicide risk than are women), aged (with Americans aged 15–35 years at the highest risk of all age brackets), and intersectional (with Black men aged 15–35 years at disproportionately high risk for becoming homicide victims relative to other race/ethnicity, gender, and age groups).^{1–5} Homicide is also raced, gendered, aged, and intersectional for transgender individuals (Table 1).

TABLE 1—Transgender Homicides With Selected Subcategories of Race/Ethnicity, Age, and Gender: United States, 2010–2016

| Subcategory | Count (%) |
|---|-----------|
| All transgender | 69 (100) |
| Transgender and White | 2 (2.90) |
| Transgender and Black | 49 (69.6) |
| Transgender and Latin@ | 16 (23.2) |
| Transgender and Asian | 1 (1.45) |
| Transgender and Native American | 1 (1.45) |
| Transfeminine | 68 (98.6) |
| Transmasculine | 1 (1.45) |
| Transgender and aged 15–35 y | 47 (68.1) |
| Transfeminine and aged 15–35 y | 46 (68.1) |
| Transfeminine, Black, and aged 15–35 y | 37 (13.0) |
| Transfeminine, Latina, and aged 15–35 y | 9 (55.1) |

Source. Transgender Day of Remembrance and National Coalition of Anti-Violence Programs data.

To situate these enumerated transgender homicides, I estimated the US 2010 to 2014 homicide rates of transgender individuals and the relative risks (RRs) of homicide of transgender individuals compared with those of cisgender individuals as well as corresponding figures for young, transfeminine, Black, and Latin@ residents. I performed a sensitivity analysis to situate the estimates with respect to uncertainties about numerators and denominators.

METHODS

In a retrospective cohort design, I used enumerated US transgender homicides, enumerated US homicides, US all-population estimates, and transgender prevalence estimates to estimate transgender and cisgender homicide rates and RRs during 2010 to 2014.

Data

I retrospectively measured US transgender homicides by the deceased individual's media-reported age at death, gender, and racial/ethnic category in all US states, the District of Columbia, and Puerto Rico using the National Coalition of Anti-Violence Programs compilation of media reports of homicides of transgender individuals, the International Transgender Day of Remembrance's similar compilation, and *Mic's* "team of five reporters . . . [who] combed through hundreds of news reports over the past seven years . . . [and] talked to dozens of victims' loved ones and family members, professionals in charge of tracking transgender murders, activists who work to end the violence . . . to find out more about each victim" (*Mic's* full statement is available as a supplement to the online version of this article at <http://www.ajph.org> as Transgender Homicide Reports.xlsx).²²

This enumeration of transgender homicides included numbers for 2015 and 2016, and numbers for both years were much higher (24 and 24) than were those for any previous year (the National Centers for Health Statistics Final Data for 2015 and 2016 were not published at the time of the study, so I excluded those years from analysis).

I determined cisgender homicides by subtracting the corresponding number of transgender deaths from the National Center for Health Statistics Mortality Multiple Cause-of-Death Public Use Records for each year from 2010 to 2014.³¹ I counted US deaths—which the National Center for Health Statistics enumerates annually from data compiled by state departments of vital statistics—as homicides if death certificates recorded that they were caused by assault (homicide) on the basis of *International Classification of Diseases, Tenth Revision, Clinical Modification* (Geneva, Switzerland: World Health Organization; 1992) codes *U01–*U02, X85–Y09, and Y87.1, and if resident status was "residents," "intrastate non-residents," or "interstate nonresidents."³²

I determined whether the age at death was within the 15- to 34-year range using the National Center for Health Statistics' Age Recode 12 variable. I defined the racial/ethnic categories "Black" and "Latin@" using National Center for Health Statistics' Race and Hispanic Origin Race Recode variables, respectively. These data record coroner or medical examiner use of informant reports, "usually a member of the family or a friend of the family."³²

I assumed transgender denominators to be 0.10%, 0.35%, and 0.60% of the US population or subpopulation, and I assumed that they were unassociated with race/ethnicity, age, or gender assigned at birth. I assumed the cisgender denominators to be the remaining fraction of the total corresponding population or subpopulation.

I took US population estimates by age, sex, and race/ethnicity from US Census Annual Estimates of the Resident Population.³³ Census data for female and male residents is uncertain because any transgender US resident may report sex on the basis of a legal sex (e.g., state driver's license, passport), gender identity versus gender assigned at birth, some aspect of biological sex (e.g., use of cross-sex hormones, genital reassignment surgery), or perceived social expediency. However, the assumption that transgender residents are evenly split between transfeminine and transmasculine, and the added assumption that transfeminine and transmasculine residents are equally likely to report gender as opposed to sex, means that the reported prevalence figures are unaffected.

Data Analysis

Estimated homicide rates and RRs of homicides derived from those estimates with their confidence intervals (CIs) were calculated as detailed in Appendix A (available as a supplement to the online version of this article at <http://www.ajph.org>). I address the sensitivity of these estimates to assumptions about undercounted transgender homicides and the prevalence of transgender individuals by presenting (1) estimates as if the reported number of transgender homicides is either accurate or undercounted by 1 in 5, 1 in 2, or 4 in 5 by dividing the number of transgender homicides by these ratios and reflecting this adjustment in cisgender homicides; and (2) varying estimates across transgender prevalences of 0.10%, 0.35%, and 0.60% and cisgender prevalences assumed to be the complement.

I rounded figures to 3 significant digits. Twelve separate figures also reflect how different assumptions about transgender prevalence and undercount of transgender homicides affect each estimated RR (all calculations are presented in a supplement to the online version of this article at <http://www.ajph.org> as Data and analysis.xlsx). I have presented CIs only for estimates, assuming that there are no undercounted transgender homicides, because it is unclear how this assumption relates to the sampling uncertainty described by CIs.

RESULTS

Table 2 presents estimated homicide rates for all transgender residents, for Black transfeminine residents aged 15 to 35 years at death, and for Latina transfeminine residents aged 15 to 35 years at death. These and homicide rate estimates for transgender residents aged 15 to 35 years at death, transfeminine residents, Black transgender residents, and Latin@ transgender residents are shown in Table A, and comparator cisgender homicide rate estimates are shown in Table B (see Appendix A).

Table 3 presents estimated RRs of 2010 to 2014 US homicides of transgender versus cisgender populations for the following:

TABLE 2—Estimated Transgender Homicide Rates per 100 000 Residents: United States, 2010–2016

| Subcategory and Undercount Assumption | Assuming Transgender = 0.10% of US Population, Rate (95% CI) | Assuming Transgender = 0.35% of US Population, Rate (95% CI) | Assuming Transgender = 0.60% of US Population, Rate (95% CI) |
|--|--|--|--|
| All transgender | | | |
| Assuming transgender homicides were not undercounted | 22.0 (17.3, 27.8) | 6.28 (4.95, 7.96) | 3.66 (2.89, 4.64) |
| Assuming transgender homicides were undercounted by 1 in 5 | 27.5 | 7.85 | 4.58 |
| Assuming transgender homicides were undercounted by 1 in 2 | 43.9 | 12.6 | 7.32 |
| Assuming transgender homicides were undercounted by 4 in 5 | 110 | 31.4 | 18.3 |
| Black transfeminine aged 15–34 y, assuming transfeminine deaths recorded female and | | | |
| Assuming transgender homicides were not undercounted | 571 (413, 788) | 163 (118, 225) | 95.10 (68.7, 132) |
| Assuming transgender homicides were undercounted by 1 in 5 | 713 | 204 | 119 |
| Assuming transgender homicides were undercounted by 1 in 2 | 1140 | 1140 | 1140 |
| Assuming transgender homicides were undercounted by 4 in 5 | 2850 | 815 | 476 |
| Black transfeminine aged 15–34 y, assuming transfeminine deaths recorded male, and | | | |
| Assuming transgender homicides were not undercounted | 583 (422, 806) | 167 (120, 231) | 97.2 (70.2, 134) |
| Assuming transgender homicides were undercounted by 1 in 5 | 729 | 208 | 729 |
| Assuming transgender homicides were undercounted by 1 in 2 | 1170 | 1170 | 194 |
| Assuming transgender homicides were undercounted by 4 in 5 | 2920 | 833 | 486 |
| Latina transfeminine aged 15–34 y, assuming transfeminine deaths recorded female, and | | | |
| Assuming transgender homicides were not undercounted | 106 (52.6, 205) | 30.3 (15.0, 58.7) | 17.7 (8.77, 34.2) |
| Assuming transgender homicides were undercounted by 1 in 5 | 132 | 37.8 | 22.1 |
| Assuming transgender homicides were undercounted by 1 in 2 | 212 | 60.5 | 35.3 |
| Assuming transgender homicides were undercounted by 4 in 5 | 530 | 151 | 88.3 |
| Latina transfeminine aged 15–34 y, assuming transfeminine deaths recorded male, and | | | |
| Assuming transgender homicides were not undercounted | 96.8 (48.1, 188) | 27.7 (13.7, 53.6) | 16.1 (8.01, 31.3) |
| Assuming transgender homicides were undercounted by 1 in 5 | 121 | 34.6 | 20.2 |
| Assuming transgender homicides were undercounted by 1 in 2 | 194 | 55.3 | 32.3 |
| Assuming transgender homicides were undercounted by 4 in 5 | 484 | 138 | 80.7 |

Note. CI = confidence interval (Agresti-Coul).

Source. Transgender Day of Remembrance and National Coalition of Anti-Violence Programs data.

- all transgender residents versus all cisgender residents;
 - Black transfeminine residents aged 15 to 34 years versus Black cisfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded female;
 - Black transfeminine aged 15 to 34 years versus Black cismasculine aged 15 to 34 years, assuming transfeminine deaths recorded male;
 - Latina transfeminine residents aged 15 to 34 years versus Latina cisfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded female; and
 - Latina transfeminine residents aged 15 to 34 years versus Latino cismasculine aged 15 to 34 years, assuming transfeminine deaths recorded male.
- Table C (see Appendix A) presents these and estimated RRs for the following:
- transgender residents aged 15 to 34 years versus cisgender residents aged 15 to 34 years;
 - transfeminine residents versus cisfeminine residents, assuming transfeminine deaths recorded female;
 - transfeminine residents versus cismasculine residents, assuming transfeminine deaths recorded male;
 - Black transgender residents versus Black cisgender residents; and
 - Latin@ transgender residents versus Latin@ cisgender residents.
- The 2010 to 2014 homicide rate per 100 000 of all US residents was 25.8 (95% CI = 25.6, 26.0). Estimates of the transgender homicide rate per 100 000 during this period ranged from 3.66, when assuming no undercount and a large transgender population, to 110, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population. Eight of 12 estimates give a lower transgender homicide rate than that for all residents. The 2010 to 2014 RR of homicide for transgender US residents versus cisgender US residents ranged from 0.141, when assuming no

TABLE 3—Estimated RR (95% CI) of Homicide in Transgender Versus Cisgender Residents: United States, 2010–2016

| Subcategories Compared and Undercount Assumption | Assuming Transgender = 0.10% of US Population, RR (95% CI) | Assuming Transgender = 0.35% of US Population, RR (95% CI) | Assuming Transgender = 0.60% of US Population, RR (95% CI) |
|---|--|--|--|
| All transgender vs all cisgender | | | |
| Assuming transgender homicides were not undercounted | 0.851 (0.672, 1.08) | 0.242 (0.191, 0.306) | 0.141 (0.111, 0.179) |
| Assuming transgender homicides were undercounted by 1 in 5 | 1.07 | 0.303 | 0.176 |
| Assuming transgender homicides were undercounted by 1 in 2 | 1.70 | 0.486 | 0.283 |
| Assuming transgender homicides were undercounted by 4 in 5 | 4.28 | 1.22 | 0.707 |
| Black transfeminine aged 15–34 y vs Black cisfeminine aged 15–34 y, assuming transfeminine deaths recorded female, and | | | |
| Assuming transgender homicides were not undercounted | 14.2 (10.3, 19.6) | 4.03 (2.91, 5.57) | 2.35 (1.70, 3.25) |
| Assuming transgender homicides were undercounted by 1 in 5 | 17.7 | 5.06 | 2.95 |
| Assuming transgender homicides were undercounted by 1 in 2 | 28.6 | 8.17 | 4.75 |
| Assuming transgender homicides were undercounted by 4 in 5 | 74.9 | 21.4 | 12.5 |
| Black transfeminine aged 15–34 y vs Black cismasculine aged 15–34 y, assuming transfeminine deaths recorded male, and | | | |
| Assuming transgender homicides were not undercounted | 1.58 (1.15, 2.18) | 0.453 (0.328, 0.625) | 0.263 (0.191, 0.363) |
| Assuming transgender homicides were undercounted by 1 in 5 | 1.99 | 0.565 | 0.331 |
| Assuming transgender homicides were undercounted by 1 in 2 | 3.19 | 0.905 | 0.526 |
| Assuming transgender homicides were undercounted by 4 in 5 | 8.00 | 2.28 | 1.32 |
| Latina transfeminine aged 15–34 y vs Latina cisfeminine aged 15–34 y, assuming transfeminine deaths recorded female, and | | | |
| Assuming transgender homicides were not undercounted | 8.48 (4.40, 16.3) | 2.40 (1.25, 4.62) | 1.40 (0.726, 2.70) |
| Assuming transgender homicides were undercounted by 1 in 5 | 10.6 | 3.02 | 1.75 |
| Assuming transgender homicides were undercounted by 1 in 2 | 17.1 | 4.88 | 2.82 |
| Assuming transgender homicides were undercounted by 4 in 5 | 43.8 | 12.5 | 7.24 |
| Latina transfeminine aged 15–34 y vs Latino cismasculine aged 15–34 y, assuming transfeminine deaths recorded male, and | | | |
| Assuming transgender homicides were not undercounted | 1.23 (0.640, 2.36) | 0.352 (0.183, 0.677) | 0.204 (0.106, 0.392) |
| Assuming transgender homicides were undercounted by 1 in 5 | 1.54 | 0.440 | 0.256 |
| Assuming transgender homicides were undercounted by 1 in 2 | 2.48 | 0.704 | 0.410 |
| Assuming transgender homicides were undercounted by 4 in 5 | 6.21 | 1.76 | 1.03 |

Note. CI = confidence interval; RR = relative risk.

Source. Transgender Day of Remembrance and National Coalition of Anti-Violence Programs Data.

undercount and a large transgender population, to 4.28, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population, with 8 of 12 estimates below 1.0.

The 2010 to 2014 homicide rate per 100 000 for Black female US residents aged 15 to 34 years was 40.9 (95% CI = 39.3, 42.5) and for Black male US residents aged 15 to 34 years was 367 (95% CI = 363, 372). Black transfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded as female, almost certainly have a higher homicide rate per 100 000 than do all Black female residents aged 15 to 34 years, with estimates ranging from 95.1, when assuming no undercount and a large transgender

population, to 2850, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population.

Estimates of the Black transfeminine aged 15 to 34 years homicide rate per 100 000 during this period, assuming their deaths were recorded as male, ranged from 97.2, when assuming no undercount and a large transgender population, to 2920, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population. For Black transfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded female, no estimate gives a lower homicide rate than does that for all Black female residents aged 15 to 34 years, and 6 of 12 estimates give a lower homicide

rate than does that for all Black male residents aged 15 to 34 years.

The 2010 to 2014 RR of homicide for Black transfeminine residents aged 15 to 34 years versus Black cisfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded female, ranged from 2.35, when assuming no undercount and a large transgender population, to 74.8, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population, with 0 of 12 estimates below 1.0.

The 2010 to 2014 RR of homicide for Black transfeminine residents aged 15 to 34 years versus Black cismasculine residents aged 15 to 34 years, assuming transfeminine deaths recorded male, ranged from 0.263,

when assuming no undercount and a large transgender population, to 8.00, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population, with 6 of 12 estimates below 1.0.

The 2010 to 2014 homicide rate per 100 000 for Latin@ female US residents aged 15 to 34 years was 12.6 (95% CI = 11.9, 13.4) and for Latin@ male US residents aged 15 to 34 years was 78.4 (95% CI = 76.7, 80.3). Latina transfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded as female, almost certainly have a higher homicide rate per 100 000 than do all Latin@ female residents aged 15 to 34 years, with estimates ranging from 17.7, when assuming no undercount and a large transgender population, to 530, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population.

Estimates of the Latina transfeminine aged 15 to 34 years homicide rate per 100 000 during this period, assuming their deaths were recorded as male, ranged from 16.1, when assuming no undercount and a large transgender population, to 484, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population. For Latina transfeminine residents aged 15 to 34 years, assuming their deaths were recorded as female, no estimate gives a homicide rate for all Latin@ female residents aged 15 to 34 years, and 6 of 12 estimates give a lower homicide rate than that for all Latin@ male residents aged 15 to 34 years.

The 2010 to 2014 RR of homicide for Latina transfeminine residents aged 15 to 34 years versus Latina cisfeminine residents aged 15 to 34 years, assuming transfeminine deaths recorded female ranged from 1.40, when assuming no undercount and a large transgender population, to 43.8 when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population, with 0 of 12 estimates below 1.0.

The 2010 to 2014 RR of homicide for Latina transfeminine aged 15 to 34 years versus Latino cismasculine aged 15 to 34 years, assuming transfeminine deaths recorded male, ranged from 0.204, when assuming no undercount and a large transgender population, to 6.21, when assuming 4 of 5 transgender deaths went unreported and a smaller transgender population, with 6 of 12 estimates below 1.0.

DISCUSSION

The estimates suggest that overall in the United States during 2010 to 2014, transgender residents may have been at lower risk for homicide than were cisgender residents. This is surprising, considering transgender residents' economic vulnerability¹² and high prevalence of reported violence.¹⁰ If true, it may be that transgender experiences may lower one's risk of homicide because transgender individuals tend to be acutely sensitive to transphobic hostility and structural oppression (e.g., North Carolina's "bathroom law," laws regarding legal identity, presence or absence of government or organizational transgender antidiscrimination policies) and alert to the possibility of safe gender expression. For example, transgender individuals often take extra precautions when making interstate road trips, are careful about which neighborhoods they enter and at what hours, and migrate to or avoid social scenes. Transgender individuals may thus be driven to seek safety and avoid many kinds of situations that threaten lethal violence.

Assuming no undercount of transgender homicides, and a 2013 population of 742 million,³⁴ results from a study reporting 71 European transgender homicides²⁰ suggest a European 2008–2013 transgender homicide rate per 100 000 of 9.57, 2.73, or 1.60 for assumed comparable transgender prevalences of 0.10%, 0.35% and 0.60%, respectively: estimates that are about 44% of the US estimates.

Transfeminine residents aged 15 to 34 years who were Black or Latina were almost certainly more likely to be murdered than were their cisfeminine comparators. Indeed, as Table 1 shows, a large majority of transgender homicide risk is borne by young Black and Latina transfeminine individuals. Because the rate of cismasculine murders among Black and Latino US residents aged 15 to 34 years is so high, the possibility that transfeminine Black or Latina residents aged 15 to 34 years have even higher rates of being murdered is alarming. The gendering of and legal vulnerability of sex work coupled with severely curtailed economic opportunities driving poor, young, Latina or Black, and transfeminine individuals into sex work suggests that the high rates in

these groups may express anti-sex worker violence, as similarly observed in Italy.²⁰

Just 1 homicide victim was reported as transmasculine between 2010 and 2016. This is congruent with research into Milanese Italian transgender homicides between 1993 and 2012 that found all transgender murder victims were transfeminine.²⁰ If the likelihood that a homicide is reported as transgender is insensitive to gender, and transmasculine individuals do not suffer greater posthumous invisibility as transgender, then transmasculine individuals may have among the lowest homicide rates in any group demarcated by sex, gender, age, and race/ethnicity.

Limitations

My findings were sensitive to the assumed prevalence of transgender individuals as a simple scalar quotient: assuming, for example, 0.60% transgender prevalence gives one sixth the homicide rate and one sixth the RR of assuming 0.10% prevalence. My findings were likewise sensitive to assumptions about undercounting transgender deaths, especially if transgender homicides are truly undercounted by 1 in 2 or more. The failure of institutions to account for transgender status when recording deaths creates structural blindness to the rates and causes of transgender death, homicides included.

Currently available data do not describe the distribution of age among transgender individuals and do not account for individuals becoming transgender—not all transgender individuals have gender identities that were always at variance with their gender assigned at birth. Therefore, the current data cannot create narratives about transgender life expectancy.

Public Health Implications

Because of the layered social vulnerabilities transgender populations experience, attention to antitransgender violence is warranted, and, as I have shown, such attention requires intersection with age, gender, and race/ethnicity. Because of transgender populations' high vulnerability, antiviolence programs should take special notice of young and Black or Latina transfeminine individuals.

An epidemiology of transgender mortality desperately needs reliable estimates of prevalence for different categories of transgender, an accurate accounting of transgender deaths,³⁵ and evidence supporting or refuting assumptions about the homogeneity of reporting across age, gender, and race/ethnicity.

Social differences may indeed express different transgender prevalences, and therefore produce different risks and RRs. For example, in Midwest communities of color and queerness, sexual identity and transgender identity are often viewed as both cohesive and labile, and they incorporate concepts like “de-transition” (Loree Cook-Daniels, policy and program director of FORGE, a National Coalition of Anti-Violence Programs member organization, personal communication, December 15, 2016). As another example, medicalized transition is costly, so subcategories of transgender identity related to social identifiability are determined in part by socioeconomic position, possibly affecting both prevalence and homicide counts. The fact that there are gendered economic opportunities and remuneration in the United States suggests that there may be differences in transmasculine versus transfeminine prevalences and homicide counts. More refined tools to account for sex categories outside a binary of male versus female are needed to build an epidemiology that includes intersex individuals, whether cisgender or transgender.

Homicide is a limited measure of the range of violence experienced by transgender individuals, and it is affected by transgender-specific determinants of health; homicide rates do not account for non-lethal sexual, domestic, or partner violence or for suicide or self-harm. Transgender individuals and populations need an epidemiology of transgender morbidity and mortality. **AJPH**

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HUMAN PARTICIPANT PROTECTION

This study involved no human participants, as all personally identifying information in this study was derived from

posthumous reports of the individual by third parties in the media and does not identify any living human being. This research was conducted in compliance with the principles of the ethical practice of public health of the American Public Health Association.

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