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Demographic and Health Characteristics of Transgender Adults in California: Findings from the 2015-2016 California Health Interview Survey

Jody L. Herman, Bianca D.M. Wilson, Tara Becker

“Transgender adults are similar to cisgender adults in many ways but experience disparities in mental health, disability status, and health care access.”

SUMMARY: This report provides the first look at demographics, health, and health care access among transgender adults in California who participated in the 2015-2016 California Health Interview Survey (CHIS). In California, about 92,000 (0.35 percent) adults ages 18 to 70 are transgender. Transgender adults are similar to cisgender¹ adults in many ways but experience disparities in mental health, disability status, and health care access. Compared to cisgender adults, transgender adults are more than three times more likely to have ever thought about suicide, nearly six times more likely to have ever attempted suicide, nearly four times more likely to have experienced serious psychological distress, and more than three times more likely to have emotions that interfere with their relationships, social life, ability to do chores,

and work performance. In regard to health care access, transgender adults are nearly three times more likely than cisgender adults to delay getting medicine prescribed to them by a doctor or to not get the medicine at all. There are no statistically significant differences between transgender and cisgender adults in some demographic characteristics, such as education and U.S. citizenship, and in reports of various physical health conditions, such as diabetes and asthma. However, transgender adults appear more likely to be living with HIV. These and other findings call for future research to explain existing disparities and similarities, as well as for the creation of structural and clinical interventions that will improve health care access and mental and physical health outcomes for the transgender population.

Health disparities and inequitable health care access among marginalized groups are associated with stigma and discrimination.² Current national debates on the rights of transgender people in public accommodations, the military, and employment settings highlight the widespread marginalization of this population. However, this discriminatory climate is not uniform across states. While 30 other states do not have nondiscrimination statutes in place to protect transgender people, California has communicated a state interest in the well-being of the transgender community by enacting several statutes and other public policies intended to protect the rights of

transgender people.^{3,4} The aim of this study was to document health and health care access among transgender Californians compared to cisgender people, in the context of a complex climate characterized by a mix of national and state-level public policies.

Knowledge about the characteristics, experiences, health, and well-being of the transgender population is limited by a lack of systematic data collection about this population from representative samples. Nearly all published articles and reports about transgender people's health have been based on data collected through clinical or administrative record samples (such as

“The California Health Interview Survey (CHIS) is the only state-level representative survey in the country to include a two-step approach to identify transgender and cisgender respondents.”

patient health records) and surveys that utilize nonprobability sampling (such as convenience samples). Findings from these studies have raised concerns about transgender people’s health and health disparities, including the alarmingly high prevalence of suicidal thoughts and behaviors among this group. However, due to the sampling methods used in most studies of transgender people’s health, it is not known whether such findings represent the transgender population as a whole or whether they represent unique segments of the transgender population.

The California Health Interview Survey (CHIS) is the only state-level representative survey in the country to include a two-step approach to identify transgender and cisgender respondents. (See “Methods” for more details.) In a multiyear collaboration between the UCLA Center for Health Policy Research and the Williams Institute at the UCLA School of Law, various gender identity measures were tested, piloted, and finalized for inclusion in the 2015-2016 CHIS cycle.^{5,6} The following two-step approach was used, with 32,227 Californians ages 18 to 70 asked these questions during the 2015-2016 cycle:

Item #1:

“On your original birth certificate, was your sex assigned as male or female?”

Item #2:

“Do you currently describe yourself as male, female, or transgender?”

The responses to these two items were cross-tabulated to identify individuals whose assigned sex at birth differs from their current gender identity as transgender, and also to identify those whose sex assigned at birth is the same as their current gender identity as cisgender.

In this report, we describe the main findings from the 2015-2016 CHIS cycle regarding demographics, health, and health care access for transgender adults, and we examine how these findings compare to findings for cisgender adults in California. Even with two years of CHIS data, the number of transgender respondents is small, which leads to imprecise

estimates with wide confidence intervals for this population. Nevertheless, many differences between transgender and cisgender Californians are sufficiently large to reach statistical significance. These findings make a substantial contribution in that they provide information about the significance of gender identity in health using a thoroughly tested two-step approach and sampling methods that allow us to speak to the experiences of the entire population of California.

Population Size

Our analyses of the 2015-2016 CHIS data found that 0.35 percent (95 percent confidence interval = 0.15-0.55; $n=85$) of the sample were identified as transgender through the two-step measure. This estimate indicates that there are 92,000 transgender individuals ages 18 to 70 in California (95 percent confidence interval = 40,000-144,000).⁷ Although this population proportion appears slightly smaller than the proportions seen in previously published population findings based on the CDC’s Behavior Risk Factor Surveillance System, the confidence intervals for both estimates overlap, indicating that they are not significantly different.⁸

Demographics

As shown in Exhibit 1, the average age for transgender adults in California is 41.9 years, which is similar to cisgender adults (42.5 years). In regard to race and ethnicity, 64 percent of transgender adults identified as non-Hispanic White, 17 percent identified as non-Hispanic Asian, 13 percent identified as Hispanic of any race, and the remaining 7 percent identified as non-Hispanic Black, another race or ethnicity, or multiple race/ethnic groups. Transgender adults were significantly more likely than cisgender adults in California to identify as non-Hispanic White (64 percent versus 39 percent) and less likely to be Latino (13 percent versus 38 percent). When asked how they currently describe themselves, 7 percent of transgender adults described themselves as male, 32 percent as female, 46 percent as transgender, and 15 percent as a different gender identity.

Demographics for Transgender and Cisgender Adults Ages 18 to 70, 2015-2016 CHIS

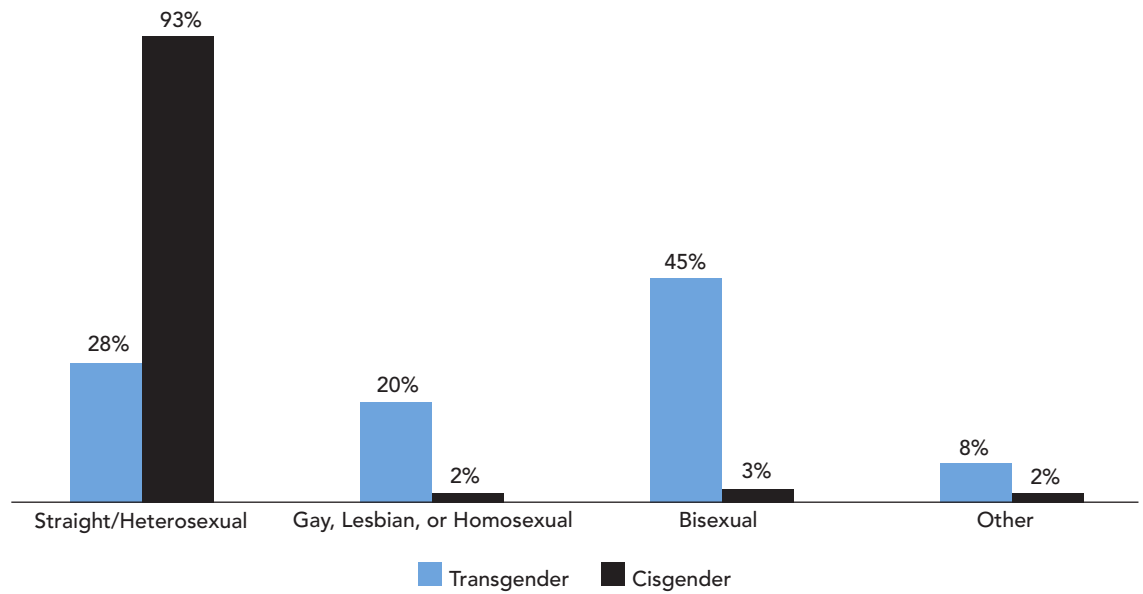
Exhibit 1

Measure	Transgender		Cisgender	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Mean Age	41.9	(31.4, 52.5)	42.5	(42.4, 42.6)
Race/ethnicity				
Hispanic, any race*	13%	(4%, 34%)	38%	(37%, 38%)
Non-Hispanic White*	64%	(37%, 84%)	39%	(39%, 40%)
Non-Hispanic Asian	17%	(4%, 47%)	15%	(14%, 15%)
Non-Hispanic Black, another race/ethnicity, or multiple race/ethnicities	7%	(1%, 26%)	9%	(8%, 9%)
Sex assigned at birth on original birth certificate				
Male	54%	(27%, 80%)	49%	(49%, 50%)
Female	46%	(20%, 73%)	51%	(50%, 51%)
Current gender identity				
Male	7%	(2%, 23%)	49%	(49%, 50%)
Female	32%	(8%, 71%)	51%	(50%, 51%)
Transgender	46%	(20%, 74%)	0%	–
A gender identity not listed above	15%	(5%, 37%)	0%	–
Sexual orientation*				
Straight or heterosexual	28%	(10%, 59%)	93%	(93%, 94%)
Gay or lesbian	20%	(7%, 42%)	2%	(2%, 3%)
Bisexual	45%	(17%, 75%)	3%	(2%, 3%)
A sexual orientation identity not listed above	8%	(2%, 23%)	2%	(1%, 2%)
Relationship status*				
Married or living with partner	25%	(10%, 49%)	55%	(54%, 57%)
Single (Never married, divorced, widowed, separated)	75%	(51%, 90%)	45%	(43%, 46%)
Education				
Less than high school	28%	(8%, 61%)	17%	(17%, 17%)
High school	20%	(8%, 43%)	22%	(21%, 22%)
Some college/associate's degree	15%	(5%, 35%)	24%	(23%, 25%)
Bachelor's degree or more	38%	(12%, 72%)	38%	(37%, 39%)
Housing				
Own home	32%	(13%, 59%)	53%	(53%, 54%)
Rent/Other living arrangement	68%	(41%, 87%)	47%	(46%, 47%)
Urban/Rural				
Urban	93%	(79%, 98%)	91%	(90%, 91%)
Rural	7%	(2%, 21%)	9%	(9%, 10%)
U.S. citizenship				
Citizen, by birth	66%	(31%, 90%)	65%	(64%, 66%)
Citizen, by naturalization	26%	(5%, 69%)	17%	(16%, 18%)
Not a U.S. citizen	7%	(2%, 26%)	18%	(17%, 19%)
Poverty, 138% or less of official poverty level	32%	(13%, 61%)	28%	(27%, 29%)
Cash assistance from TANF/CalWORKS	12%	(2%, 51%)	4%	(4%, 5%)
Receives SNAP (food stamps)	12%	(3%, 36%)	10%	(9%, 11%)
Food insecurity, past year (of those at or below 200% poverty level)	64%	(26%, 90%)	45%	(43%, 47%)

* Statistically significant at $p < 0.05$; demographic categories may not add to 100% due to rounding.

Exhibit 2

Sexual Orientation of Transgender and Cisgender Adults, 2015-2016 CHIS



“Transgender adults were nearly six times more likely to report having ever attempted suicide than cisgender adults.”

Transgender adults were significantly different from cisgender adults regarding sexual orientation (see Exhibit 2). For instance, 28 percent of transgender adults identified as straight or heterosexual, whereas 93 percent of cisgender adults identified as straight or heterosexual. Forty-five percent of transgender adults identified as bisexual, while 3 percent of cisgender adults identified in that way. Transgender people were also significantly more likely to be currently single than cisgender adults (75 percent versus 45 percent) (see Exhibit 1).

On other demographic measures, transgender adults were not significantly different from cisgender adults in California. As seen in Exhibit 1, the population estimates for education, housing status, urban residency, and citizenship among transgender adults were not significantly different from cisgender adults.

In regard to poverty, public assistance, and food insecurity, no significant differences emerged when comparing transgender adults to cisgender adults. Though differences were not statistically significant between transgender and cisgender adults on the indicators of low income and food insecurity, the trends indicate that a larger sample size

may show significant differences and reflect prior research showing economic disparities between these two populations.^{9,10}

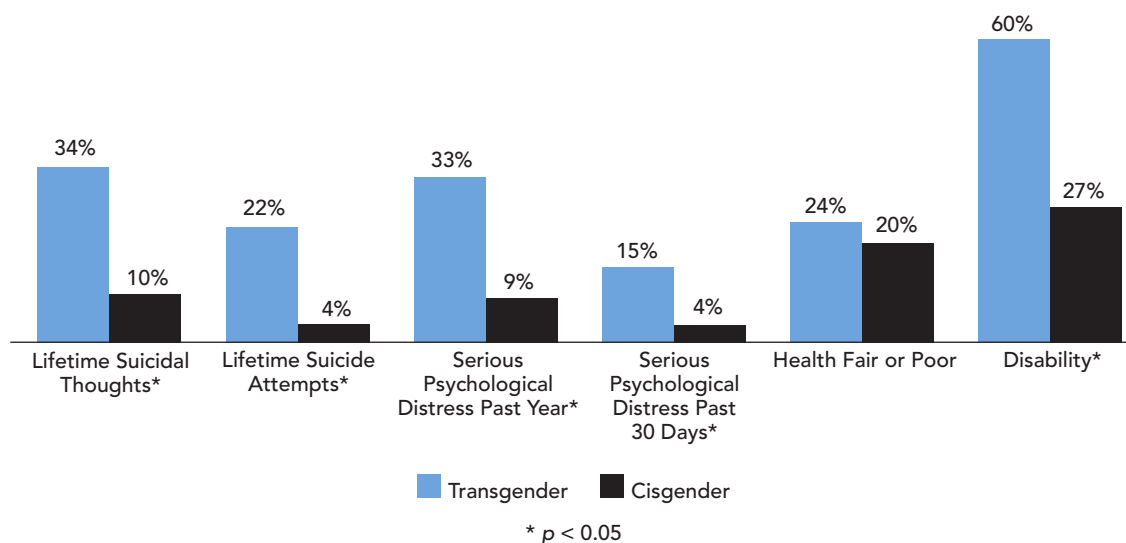
Mental and Physical Health Indicators

Existing research suggests that transgender adults have a higher prevalence of some mental and physical health conditions compared to cisgender adults, including suicidal thoughts and behaviors. Prior research suggests that this higher prevalence is, at least in part, related to the stress that results from stigma and discrimination, to delaying health care due to fear of discrimination, and to not receiving medically necessary transition-related health care.¹¹

Findings from the 2015-2016 CHIS are consistent with this prior research (see exhibits 3 and 4). The prevalence of lifetime suicidal thoughts for transgender adults (34 percent) was more than three times that of cisgender adults (10 percent). Transgender adults were nearly six times more likely to report having ever attempted suicide than cisgender adults (22 percent versus 4 percent), and they were nearly four times more likely to have experienced serious psychological distress in the past year (33 percent versus 9 percent) and in the past 30 days (15 percent versus

Mental and Physical Health Indicators for Transgender and Cisgender Adults, 2015-2016 CHIS

Exhibit 3



4 percent). Transgender adults were more than three times more likely to have emotions that interfered with some aspects of life, including relationships (53 percent versus 15 percent), social life (46 percent versus 15 percent), ability to do chores (45 percent versus 14 percent), and work performance (30 percent versus 10 percent).

In regard to general health, 24 percent of transgender adults reported their health as fair or poor, which was similar to cisgender adults (20 percent). Transgender adults were significantly more likely than cisgender adults to report having a disability due to a physical, mental, or emotional condition (60 percent versus 27 percent).

Among adults who have had more than one sexual partner in the past year, 88 percent of transgender adults and 68 percent of cisgender adults have ever been tested for HIV, but this difference was not statistically significant. Though they were not more likely to have been tested, transgender adults with multiple sexual partners in the past year were significantly more likely than their cisgender counterparts to have tested positive for HIV (35 percent versus 2 percent). While the difference between transgender and

cisgender adults seems large, the small sample size results in large confidence intervals for transgender adults (95 percent confidence intervals: transgender adults = 6–83 percent; cisgender adults = 1–3 percent). Nevertheless, prior research indicates that our findings reflect existing large differences in HIV prevalence, as transgender people in the U.S. have been found to be at high risk for HIV.¹² In particular, one study showed that transgender women were 34 times more likely to be living with HIV compared to the rest of the adult population.¹³

Access to Health Care

Prior research based on national convenience samples and multistate representative samples has found that transgender adults experience barriers to accessing health care, including being less likely to have health insurance coverage, having a lack of health care providers, and experiencing mistreatment by health care providers.¹⁴ In this study, transgender adults were similar to cisgender adults in nearly all measures of health care access included in the CHIS. However, transgender adults were nearly three times as likely as cisgender adults to delay or not get medicine that a doctor had prescribed to them (32 percent versus 11 percent) (see Exhibit 5).

“Transgender adults were nearly three times as likely as cisgender adults to delay or not get medicine that a doctor had prescribed to them.”

Exhibit 4

Mental and Physical Health Indicators for Transgender and Cisgender Adults
Ages 18 to 70, 2015-2016 CHIS

Measure	Transgender		Cisgender	
	Percent	95% Confidence Interval	Percent	95% Confidence Interval
Suicidal thoughts, lifetime*	34%	(14%, 62%)	10%	(9%, 11%)
Suicide attempts, lifetime*	22%	(7%, 54%)	4%	(3%, 4%)
Serious psychological distress, past year*	33%	(14%, 61%)	9%	(8%, 9%)
Serious psychological distress, past 30 days*	15%	(5%, 36%)	4%	(4%, 5%)
General health, fair or poor	24%	(10%, 47%)	20%	(19%, 22%)
Disability due to physical, mental, or emotional condition*	60%	(27%, 86%)	27%	(26%, 28%)
Ever tested for HIV (of those with >1 sex partner in past year)	88%	(48%, 98%)	68%	(64%, 72%)
HIV positive* (of those >1 sex partner in past year and tested for HIV)	35%	(6%, 83%)	2%	(1%, 3%)
Prediabetes	32%	(8%, 71%)	12%	(11%, 13%)
Diabetes	14%	(3%, 47%)	8%	(7%, 9%)
Currently has asthma	8%	(2%, 27%)	8%	(8%, 9%)
Ever told by doctor you have asthma	10%	(3%, 28%)	15%	(14%, 16%)
Ever told by doctor you have high blood pressure	40%	(15%, 72%)	25%	(24%, 26%)
Ever told by doctor you have any kind of heart disease	7%	(2%, 30%)	4%	(4%, 5%)
Emotions interfered with ability to do chores, moderate or severe, past 12 months*	45%	(21%, 71%)	14%	(13%, 14%)
Emotions interfered with relationships with family/friends, moderate or severe, past 12 months*	53%	(26%, 78%)	15%	(14%, 16%)
Emotions interfered with social life, moderate or severe, past 12 months*	46%	(22%, 73%)	15%	(14%, 16%)
Emotions interfered with work performance, moderate or severe, past 12 months*	30%	(12%, 59%)	10%	(10%, 11%)
BMI				
BMI, 0-22.9	33%	(14%, 60%)	21%	(20%, 22%)
BMI, 23-27.49	14%	(4%, 37%)	35%	(34%, 36%)
BMI, 27.5+	53%	(27%, 77%)	44%	(43%, 45%)
Current smoker	25%	(8%, 54%)	13%	(12%, 14%)
Flu shot, past 12 months	47%	(21%, 76%)	39%	(37%, 40%)

* Statistically significant at $p < 0.05$.

Conclusion

This report provides the first look at demographics and health-related findings for transgender adults, who were identified through the use of a two-step approach in a state-level representative survey. Findings suggest that although transgender adults in California have many similarities with cisgender adults, transgender adults experience disparities in mental and physical health. Specifically, transgender adults reported a

high prevalence of lifetime suicidal thoughts and attempts, as well as serious psychological distress. They are also more likely to have negative emotions that interfere with some aspects of life, and they are more likely to have a disability due to a physical, mental, or emotional condition. Where we see significant differences in health between transgender and cisgender respondents, it appears that the findings reflect prior research.¹⁴ However, based on prior research, it was unexpected that

Health Care Access for Transgender and Cisgender Adults Ages 18 to 70, 2015-2016 CHIS

Exhibit 5

Measure	Transgender		Cisgender	
	Percent	95% Confidence Interval	Percent	95% Confidence Interval
Delayed/did not get medicine doctor prescribed*	32%	(11%, 64%)	11%	(10%, 12%)
Delayed/did not get other medical care	16%	(6%, 36%)	14%	(13%, 15%)
Eventually received care (of those who delayed/did not get medical care)	15%	(3%, 55%)	39%	(35%, 43%)
Have usual health care provider	85%	(64%, 95%)	83%	(82%, 84%)
Personal doctor is main medical provider (of those with usual health care provider)	79%	(53%, 92%)	83%	(81%, 84%)
Kind of place go to for usual source of health care				
Usually go to doctor's office/HMO	45%	(18%, 75%)	56%	(54%, 57%)
Usually go to clinic/community hospital	35%	(13%, 66%)	24%	(23%, 26%)
Usually go to ER, urgent care, other, or nowhere	21%	(8%, 45%)	20%	(19%, 21%)
Have visited a doctor, past year	84%	(61%, 95%)	79%	(78%, 81%)
Visited emergency room, past year	24%	(8%, 53%)	22%	(21%, 23%)
Routine check-up with doctor, past year	77%	(51%, 91%)	72%	(70%, 73%)
Ever treated unfairly when getting medical care	60%	(32%, 83%)	69%	(68%, 71%)
Health insurance coverage type				
Private health insurance	43%	(16%, 75%)	54%	(53%, 55%)
Public health insurance	51%	(22%, 79%)	35%	(34%, 37%)
Uninsured	6%	(2%, 21%)	11%	(10%, 12%)
Health insurance coverage through Covered California	4%	(1%, 13%)	5%	(4%, 6%)
Have ever used the internet	95%	(79%, 99%)	88%	(87%, 88%)
Ever used internet to find information on health care (of those who have ever used internet)	74%	(37%, 93%)	66%	(64%, 67%)

* Statistically significant at $p < 0.05$. Some categories may not add to 100% due to rounding.

there were no significant differences in some areas, such as poverty, food insecurity, and most measures of health care access.

We cannot currently explain why we did not find significant differences between transgender and cisgender adults on certain domains of health and well-being where prior research suggests these differences exist. It is possible that our findings reveal true similarities between these two populations due to our representative sample, similar to some findings from a study of a representative sample of 19 states.¹⁴ Additionally, some prior studies that identified higher rates of health and health care access concerns were conducted with nonrepresentative samples,

such as community-based surveys. These types of sampling approaches may be more likely to reach highly marginalized segments of the transgender population than representative sampling approaches, which often rely on respondents having telephone access or stable housing, and may therefore be more likely to identify higher levels of poor health outcomes and barriers to health care. Further, some of the previous studies were conducted with national or multistate samples, which combined transgender adults from states with discriminatory and protective public policy climates. This report is based on respondents from California only, which has protective public policies in place.

“There were no significant differences in some areas, such as poverty, food insecurity, and most measures of health care access.”

“Research that focuses on the health of transgender adults should include a direct test of the relationship between delays in getting health care, experiences with discrimination, and health status.”

Because CHIS first included the two-step approach to identifying transgender respondents in 2015, findings in this report are based on only one two-year cycle of the survey (2015-2016). It is possible that the report is limited by the small sample size of the transgender sample collected in this two-year cycle ($n=85$). With additional years of CHIS data, more precise estimates can be generated and additional analyses will be possible, including exploring potential variability in socioeconomic status and health outcomes by gender identity and other demographic characteristics. Importantly, this report establishes a foundation of knowledge about transgender adults in California, and about similarities and differences in the demographic characteristics and health of California adults based on gender identity.

These findings call for future research to explain existing disparities and similarities, as well as for the creation of structural and clinical interventions to improve health care access and mental and physical health outcomes for the transgender population. In particular, public policy research that focuses on the health of transgender adults should include a direct test of the relationship between delays in getting health care, experiences with discrimination, and health status.

Methodology

This policy brief presents data from the new release of the 2015-2016 cycle of the California Health Interview Survey (CHIS), conducted by the UCLA Center for Health Policy Research (CHPR). CHIS is a telephone survey that uses a dual-frame, random-digit-dial (RDD) technique. By using traditional landline RDD and cell-phone RDD sampling frames, the survey is representative of the state's population. Survey items for the adult modules are self-reported, with data collected by trained interviewers. CHIS data are collected continuously throughout the year, and each full cycle is comprised of two years. Data are based on interviews conducted in more than 20,000 California households and cover a diverse array of health-related topics, including health insurance coverage, health status and behaviors, and access to health care. For more information about CHIS, please visit the CHIS website at www.chis.ucla.edu.

CHIS employs a complex survey design that requires analysts to use complex survey weights to provide accurate variance estimates and statistical testing. All analyses presented in this policy brief incorporate replicate weights to provide corrected confidence interval estimates and statistical tests. Differences between transgender and cisgender respondents were tested using the Rao-Scott Chi-Square test.

Author Information

Jody L. Herman, PhD, is a Scholar of Public Policy at the Williams Institute, UCLA School of Law. She holds a PhD in public policy and public administration from The George Washington University.

Bianca D.M. Wilson, PhD, is the Rabbi Barbara Zacky Senior Scholar of Public Policy at the Williams Institute, UCLA School of Law. She holds a doctorate in psychology from the Community and Prevention Research program at the University of Illinois at Chicago.

Tara L. Becker, PhD, is a senior statistician for the California Health Interview Survey at the UCLA Center for Health Policy Research. She holds a PhD in sociology and an MS in statistics from the University of Wisconsin–Madison.

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Endnotes

- 1 “Cisgender” refers to individuals who currently identify with their sex assigned at birth (Schilt & Westbrook, 2009; Green, 2006).
- 2 See, for instance: Meyer IH. 2003. Prejudice, Social Stress, and Mental Health in Lesbian, Gay and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychological Bulletin* 129: 674-697. doi:10.1037/0033-2909.129.5.674; Bockting WO, Miner MH, Swinburne Romine RE, Hamilton A, Coleman E. 2013. Stigma, Mental Health, and Resilience in an Online Sample of the U.S. Transgender Population. *American Journal of Public Health* 103(5): 943-951.
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- 7 The estimate of 92,000 transgender individuals does not include those living in institutions and in group quarters.
- 8 Herman JL, Flores AR, Brown TNT, Wilson BDM, Conron KJ. 2017. *Age of Individuals Who Identify as Transgender in the United States*. Los Angeles, CA: The Williams Institute, UCLA School of Law. Available at <https://williamsinstitute.law.ucla.edu/category/research/transgender-issues/>.
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10960 Wilshire Blvd., Suite 1550
Los Angeles, California 90024



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Editor-in-Chief: Gerald F. Kominski, PhD

Phone: 310-794-0909
Fax: 310-794-2686
Email: chpr@ucla.edu
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