

## Health and Disease among Transgender and Gender Non-Conforming Persons in New Mexico

Transgender or gender non-conforming (TGNC) is a term that describes individuals whose gender identity is incongruent with the sex assigned to them at birth (transgender) or whose behavior or gender expression does not match culturally bound masculine or feminine gender norms (gender non-conforming).<sup>1</sup> People whose gender identity matches their sex assigned at birth are known as cisgender. A lack of knowledge about TGNC health has led to the exclusion from many public health programs and health policies for TGNC people.<sup>2</sup> Among the TGNC population, research has shown high prevalence of suicide, psychological distress, substance use, HIV and other sexually transmitted diseases (particularly among transgender people) compared to cisgender individuals.<sup>3</sup> TGNC individuals have consistently lacked access to health care compared to the general population.<sup>4</sup> Historically, data on TGNC people has come from nonprobability samples or data from probability samples that use the lesbian, gay, or bisexual (LGB) population as a proxy for gender identity.

This report provides a comprehensive view of the TGNC population in New Mexico by describing the basic demographics, health risk behaviors, health status of TGNC individuals, and identifying health disparities between TGNC and cisgender individuals.

### Methods

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing, nationwide surveillance system that routinely collects data on the prevalence of a variety of health conditions and behaviors that affect health. The surveillance system uses a telephone survey to collect data in all 50 states, the District of Columbia, Guam, Puerto Rico and the U.S. Virgin Islands. The CDC established the BRFSS in 1984 with 15 states participating. Eligible individuals included non-institutionalized adults (aged 18 years or older). New Mexico began participating in the BRFSS in 1986. Participation in the survey is voluntary, and all data collected are confidential.

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Beginning in 2016, the NM BRFSS asked a set of two questions that identify TGNC respondents. This gender-identity question set utilizes a two-step strategy, first asking “What was your sex assigned at birth on your original birth certificate?” (with possible responses Male and Female), and then asking, “How do you describe yourself?” (with possible responses Male, Female, Transgender male, Transgender Female, and Gender non-conforming). This strategy allowed the NM BRFSS to capture a broader range of adults who do not identify themselves as either transgender or gender non-conforming, but who do meet our definition of transgender as someone whose gender-identity does not match sex assigned at birth. This is important because many gender non-conforming adults do not identify with the term transgender.

This report presents bivariate percentages and confidence intervals for TGNC respondents compared to cisgender respondents. Additional multiple regression analyses with odds ratios (ORs) that have been adjusted for age, since the TGNC population tends to be younger, are presented comparing TGNC respondents to cisgender respondents.

### Results

*Demographic Characteristics and Sexual Orientation.* Approximately 0.8% of NM adults were TGNC individuals ( $n=113$ ; 95%CI= 0.6%,1.0%), representing 12,945 adults. TGNC adults were somewhat younger and more likely to be non-White than were cisgender adults (Table 1). TGNC adults did not differ from cisgender adults with respect to gender or rurality of county of residence.

**Table 2. Socioeconomic and Health Characteristics of Adults by Gender Identity, New Mexico, 2016-2018**

Characteristic	Transgender/GNC % (95% CI)	Cisgender % (95% CI)	Transgender/GNC vs Cisgender Adjusted OR* (95%CI)
<b>Socioeconomic</b>			
Less Than High School Education	24.8 (14.5, 39.2)	16.3 (15.5, 17.2)	1.8 (0.9, 3.6)
Poverty <sup>a</sup>	66.5 (52.6, 78.0)	52.3 (51.2, 53.4)	1.7 (1.0, 3.0)
Not Employed	61.3 (48.6, 73.2)	47.1 (46.1, 48.2)	2.2 (1.2, 3.9)
<b>Health Status</b>			
Fair or Poor Health <sup>b</sup>	20.9 (12.5, 32.8)	21.9 (21.1, 22.8)	1.0 (0.6, 2.1)
Disability <sup>c</sup>	45.7 (32.7, 59.4)	29.1 (28.1, 30.0)	2.4 (1.3, 4.3)
Overweight/Obese <sup>d</sup>	55.3 (36.6, 72.6)	65.3 (64.0, 66.6)	0.6 (0.3, 1.4)
Poor Mental Health <sup>e</sup>	27.7 (17.5, 40.9)	13.4 (12.6, 14.1)	2.5 (1.4, 4.2)
<b>Health Care Access</b>			
No Healthcare Coverage	14.4 (7.5, 25.7)	10.5 (9.8, 11.2)	1.3 (0.6, 2.6)
No Usual Source of Care	33.5 (22.1, 47.2)	29.4 (28.4, 30.5)	1.1 (0.6, 1.9)
Cost Prevented Care	22.3 (13.8, 34.1)	13.2 (12.5, 14.0)	1.9 (1.0, 3.4)

Note CI= confidence interval; OR = odds ratio. Percentages are weighted. The sample size was 18,518.  
 \* Adjusted for age group.  
<sup>a</sup> Below 200% federal poverty level  
<sup>b</sup> Self-reported health status  
<sup>c</sup> Having at least one disability  
<sup>d</sup> Body mass index > 25  
<sup>e</sup> 14 or more days of poor mental health in past 30 days

In terms of health status, TGNC adults had a significantly higher prevalence of having at least one disability (OR = 2.4; 95% CI = 1.3, 4.3, P <.01) and having had 14 or more days of poor mental health in the past month (OR = 2.5; 95% CI = 1.4, 4.6, P <.01). TGNC adults did not differ significantly with respect to self-reported health status or body mass index compared to cisgender adults.

TGNC individuals were more likely to not have health care coverage compared to cisgender individuals (OR = 1.3; 95% CI = 0.6, 2.6), and were more likely to report that cost precluded needed care (OR = 1.9; 95% CI = 1.0, 3.4, P=0.3).

*Health Conditions and Health Behaviors.* TGNC adults had

a higher prevalence of having ever been diagnosed with a depressive disorder (OR = 2.1; 95% CI=1.1, 3.5, P <.05). TGNC adults had a lower prevalence of

Among the 113 TGNC adults, 60 were transgender and 53 were gender non-conforming (54% vs. 46%). Among cisgender individuals, 3.8% (95% CI=3.4%,4.3%) self-identified as lesbian, gay, bisexual, or other (LGB/Other). Among TGNC adults 51.5% (95% CI=38.1, 64.7) self-identify as LGB/Other.

*Socioeconomic and Health Characteristics.* Table 2 compares differences in socioeconomic and health characteristics by gender identity. TGNC respondents were more likely than cisgender respondents to have less than a high school education, (OR = 1.8; 95% CI = 0.9, 3.6), more likely to have incomes below 200% of the federal poverty level (OR = 1.7; 95% CI = 1.0, 3.0) and more likely to not be employed (OR = 2.2; 95% CI = 1.2, 3.9, P <.01).

**Table 3. Health Conditions and Health Behaviors of Adults by Gender Identity, New Mexico, 2016-2018**

Characteristic	Transgender/GNC % (95% CI)	Cisgender % (95% CI)	Transgender/GNC vs Cisgender Adjusted OR* (95%CI)
<b>Chronic Disease and Health Conditions</b>			
Diagnosed Diabetes	3.8 (1.7, 8.3)	11.9 (11.3, 12.5)	0.4 (0.2, 0.9)
Cancer	8.9 (4.5, 16.8)	11.2 (10.6, 11.8)	1.0 (0.5, 2.1)
COPD	3.7 (1.4, 9.3)	6.1 (5.7, 6.5)	0.8 (0.3, 2.1)
Kidney Disease	1.7 (0.4, 6.6)	3.2 (2.9, 3.5)	0.7 (0.2, 3.0)
Asthma	10.8 (5.0, 21.8)	10.8 (10.1, 11.5)	1.0 (0.5, 2.4)
CHD or MI	3.8 (1.3, 10.6)	6.4 (6.0, 6.9)	0.8 (0.3, 2.7)
Diagnosed Depression <sup>a</sup>	33.3 (22.3, 46.5)	18.8 (18.0, 19.6)	2.1 (1.1, 3.5)
<b>Risk and Health Behaviors</b>			
Current Smoker	15.9 (8.2, 28.7)	16.5 (15.7, 17.3)	0.8 (0.3, 1.6)
Binge Drinking in past 30 days	15.1 (6.6, 30.8)	14.6 (13.8, 15.5)	0.9 (0.4, 2.3)
Heavy Drinking in past 30 days	7.2 (2.4, 19.4)	5.4 (5.0, 5.9)	1.4 (0.4, 4.2)
Ever Sexually Assaulted <sup>b</sup>	35.2 (21.8, 51.4)	11.4 (10.7, 12.2)	4.0 (2.0, 7.7)
Ever Attempted Suicide <sup>c</sup>	12.9 (5.8, 26.2)	2.3 (2.0, 2.7)	5.4 (2.2, 13.3)

<sup>a</sup> t=2.42 P = <.02  
<sup>b</sup> t=4.06 P = <.01  
<sup>c</sup> t=3.70 P = <.01

diagnosed diabetes (OR=0.4; 95%CI= 0.2, 0.9, P<.01). There were no statistically significant differences by gender identity of other chronic diseases and health conditions.

TGNC adults were more likely than cisgender adults to have been a victim of sexual assault in their lifetime (OR = 4.0; 95% CI = 2.0, 7.7, P <.01) and to have ever attempted suicide (OR = 5.4; 95% CI = 2.4, 13.3, P <.01). There were no statistically significant differences by gender identity for cigarette smoking or alcohol use.

### Discussion

These data provide an urgent reminder that the TGNC population is at high risk for poor health and socio-economic outcomes. TGNC adults were at a higher risk than cisgender adults for low educational attainment, low socio-economic status, unemployment, and living in poverty. They were also at an increased risk of living with a disability, having poor mental health and depression, and were at an extremely high risk of being sexually assaulted and attempting suicide. Because the TGNC representation in the BRFSS is relatively low, with only 113 individuals participating in the survey over a combined three-year period, there are likely to be other important differences between the TGNC and cisgender populations that are not apparent or are not statistically significant in the BRFSS data. The TGNC population should be appropriately prioritized for all health promotion and disease prevention interventions.

Many of the public health programs that provide services to the TGNC population combine their efforts with those that focus on the LGB community. While this may be appropriate in some instances, only 22% of respondents who were identified as transgender also identified as LGB and 78% of gender nonconforming respondents identified as LGB, and those who do not identify as LGB are less likely to benefit from programs that specifically target LGB people. There were significant differences in health conditions and behaviors between the LGB and TGNC populations in the BRFSS (Table 4). Further study and discussion is needed on the difference between the LGB population and the TGNC population in order to appropriately prioritize these varying populations for disease prevention and health promotion.

These results underpin the need for more data describing the TGNC population in the New Mexico, an often-overlooked group with specific needs. BRFSS data can help to inform public health programs and public health policy about the ways in which this population is vulnerable, and what characteristics have led to resiliency in the TGNC population. These data are vital to better meet the needs of TGNC people in New Mexico.

**Table 4. Weighted Health Conditions and Health Behaviors of Adults by Transgender and LGB Status, New Mexico, 2016-2018**

Characteristic	Transgender/GNC % (95% CI)	LGB % (95% CI)
<b>Chronic Disease and Health Conditions</b>		
Diagnosed Diabetes	3.8 (1.7, 8.3)	7.9 (11.4, 12.6)
Cancer	8.9 (4.5, 16.8)	8.6 (6.4, 11.5)
COPD	3.7 (1.4, 9.3)	6.5 (4.5, 9.2)
Kidney Disease	1.7 (0.4, 6.6)	2.5 (1.5, 4.3)
Asthma	10.8 (10.1, 11.5)	16.4 (12.7, 20.8)
CHD or MI	3.8 (1.3, 10.6)	2.3 (1.4, 3.8)
Diagnosed Depression	33.3 (22.3, 46.5)	39.8 (34.5, 45.4)
<b>Risk and Health Behaviors</b>		
Current Smoker	15.9 (8.2, 28.7)	25.2 (20.8, 30.3)
Binge Drinking in past 30 days	15.1 (6.6, 30.8)	20.8 (16.2, 26.3)
Heavy Drinking in past 30 days	7.2 (2.4, 19.4)	6.7 (3.9, 11.1)
Ever Sexually Assaulted	35.2 (21.8, 51.4)	36.3 (30.7, 42.4)
Ever Attempted Suicide	12.9 (5.8, 26.2)	10.4 (7.3, 14.6)

### References

1. Bockting W, Coleman E, Deutsch MB et al. Adult development and quality of life of transgender and gender nonconforming people. *Curr Opin Endocrinol Diabetes Obes.* 2016; 23(2): 188-197
2. Grand JM, Mottet LA, Tanis J, Harrison J, Herman JL, Keisling M. *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey.* Washington, DC: National Center for Transgender Equality and National LGBTQ Task Force; 2011.
3. Winter S, Diamond M, Green J, Karasic D, Reed T, Whittle S, Wylie K. *Transgender People: health at the margins of society.* *The Lancet.* 2016; 388:390-398.
4. Hughto J, Reisner S, Pachankis J. *Transgender Stigma and Health: A Critical Review of Stigma, Determinants, Mechanisms, and Interventions.* HHS Public Access. 2015; 14: 222-231.

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**Table 1. Demographic Characteristics of Adults by Gender Identity, New Mexico, 2016-2018**

Characteristic	Transgender/GNC (n=113), % (95% CI)	Cisgender (n=18,405), % (95% CI)
Age		
18-49	71.2 (59.5, 80.6)	52.1 (51.0, 53.1)
50+	28.8 (19.4, 40.5)	47.9 (46.9, 49.0)
Gender		
Male	49.4 (36.4, 62.5)	49.0 (48.0, 50.1)
Female	50.6 (37.5, 63.6)	51.0 (49.9, 52.0)
Race/Ethnicity		
White	39.6 (27.6, 52.9)	59.7 (58.7, 60.8)
Non-White*	60.4 (47.1, 72.4)	40.3 (39.2, 41.3)
Relationship Status		
Ever Married	42.7 (30.4, 56.0)	70.2 (69.1, 71.2)
Never Married/Unmarried Couple	57.3 (44.0, 69.6)	29.8 (28.8, 30.9)
County of Residence		
Metropolitan/Small Metro County	65.7 (52.2, 77.0)	67.0 (66.3, 67.7)
Mixed Urban Rural/Rural County	34.3 (23.0, 47.8)	33.0 (32.3, 33.7)
Sexual Orientation		
Straight	48.5 (35.3, 61.9)	96.2 (95.7, 96.6)
LGB/Other	51.5 (38.1, 64.7)	3.8 (3.4, 4.3)

Note: BRFSS = Behavioral Risk Factor Surveillance System; CI= confidence interval

The sample size was 18,518.

\* There were too few respondents of non-White race/ethnicity to calculate a percentage for the individual race/ethnicities, American Indian or Alaskan Native, Asian or Pacific Islander, Black or African American, and Hispanic.