

# Circumstances of Suicide Among Lesbian, Gay, Bisexual and Transgender Individuals

Monica Patten, Heather Carmichael, MD, Allison Moore, Catherine Velopulos, MD, MHS

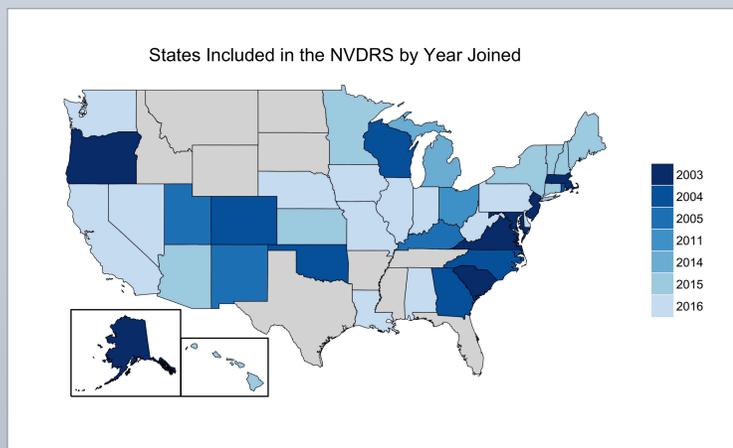
University of Colorado, Department of Surgery

## ABSTRACT

Suicide rates for sexual minorities are higher than the heterosexual/cisgender population. The purpose of this study is to **explore circumstances surrounding suicide completion for lesbian, gay, bisexual and transgender (LGBT) individuals as compared to their heterosexual counterparts** to inform future intervention strategies for this population.

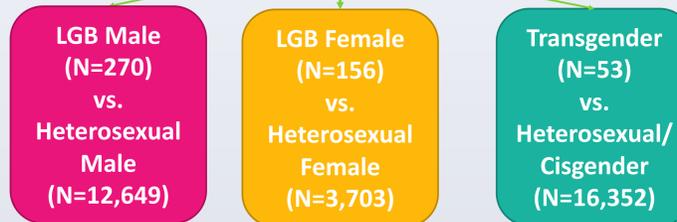
## METHODS

We completed an analysis of data from the National Violent Death Reporting System (NVDRS) from 2013-2017. Victims identified as transgender were considered separately, as this is an important population with unique characteristics. Data was further excluded from state/year combinations when sexual orientation was documented for <20% of patients. We stratified analysis by identified sex of the victim (male or female) for the LGB population.



Velopulos CG, Carmichael H, Zakrisson TL, Crandall M. Comparison of male and female victims of intimate partner homicide and bidirectionality-an analysis of the national violent death reporting system. *J Trauma Acute Care Surg.* 2019;87(2):331-336.

Victims with known sexual orientation or transgender status (N=16,831)



## RESULTS

- 479 (2.8%) of victims were identified as LGBT; of these, 53 (11%) were transgender
- LGBT victims were younger than non-LGBT victims.
- Male LGB victims were more likely to have a history of prior suicide attempts, past or current mental illness diagnosis, and were less likely to use firearms than male heterosexual victims.
- Female LGB victims were more likely to have known problems in an intimate partner relationship than heterosexual women.
- LGB men were more likely to have problems in family or other relationships.
- Transgender victims were again more likely to have mental health problems and a history of prior attempts, but less likely to have intimate partner problems and more likely to have a history of child abuse.
- All LGBT victims were more likely to disclose intent, with female LGB victims most often disclosing to an intimate partner, while male LGB and transgender individuals were most likely to disclose to a family member.

	Male			Female			Transgender		
	LGB	Heterosexual	p-value	LGB	Heterosexual	p-value	Transgender	Cisgender*	p-value
n	270	12,649		156	3703		53	16,352	
Age in Years	39	49	<0.001	34	48	<0.001	34	48	<0.001
Median [IQR]	[27, 51]	[34, 61]		[24, 48]	[35, 57]		[19, 50]	[34, 60]	
Minority Race/Ethnicity (%)	17.4	15.2	<0.001	26.9	15.6	<0.001	11.3	15.1	0.57
Used a Firearm (%)	29.3	57.3	<0.001	37.8	33.7	0.32	24.5	51.9	<0.001
Past Treatment Mental Illness (%)	44.8	30.4	<0.001	46.2	51.1	0.26	60.4	35.1	<0.001
IPV Related (%)	41.1	43.9	0.40	65.4	36.9	<0.001	17.0	42.3	<0.001
Prior Suicide Attempts (%)	30.0	15.8	0.40	39.7	33.6	<0.001	35.8	19.9	<0.001
Intent Disclosed (%)	31.9	26.2	0.04	34.6	23.6	0.002	32.1	25.6	0.36

Table 1: Characteristics of LGBT suicide victims versus heterosexual counterparts. \*Male & Female combined

## CONCLUSIONS

Circumstances surrounding suicide have important distinctions between LGBT and heterosexual/cisgender individuals. It is important to note that post-mortem identification of sex presents issues of misgendering and could contribute to a degree of bias in understanding the way suicide circumstances differ for transgender individuals. These results highlight the importance of promoting suicide interventions that recognize the complex intersection between stated gender, sex, and sexuality and the different cultural impacts these interplaying identities can have.

## CONTACT INFORMATION

Monica Patten, BS  
Medical Student  
monica.patten@cuanschutz.edu

Heather Carmichael, MD  
Research Resident, General Surgery  
University of Colorado  
12631 East 17th Avenue, Mail Stop C313  
Aurora, CO 80045  
heather.carmichael@ucdenver.edu

Catherine Velopulos, MD, MHS  
Assistant Professor of Surgery  
Trauma and Acute Care Surgery, Critical Care  
University of Colorado  
12631 East 17th Avenue, Mail Stop C313  
Aurora, CO 80045  
catherine.velopulos@ucdenver.edu