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# Lesbian, gay, and bisexual men and women in the US military: Updated estimates

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## Executive Summary

This research brief uses new data from the American Community Survey and the General Social Survey to provide updated estimates of how many lesbians, gay men, and bisexuals (LGB) are serving in the US military. It also updates estimates of the cost of the US military's "Don't Ask/Don't Tell" (DADT) policy.<sup>i</sup>

### Estimated number of LGB men and women in the US military

2008 American Community Survey & General Social Survey

Active Duty		All military		Guard/Reserve	
12,952		70,781		57,919	
		Ready Reserve		Standby Reserve	
		35,599		636	
		Retired Reserve		21,684	
Men	Women	Men	Women	Men	Women
7,216	5,736	29,855	22,945	12,965	8,719

Key findings from the analyses are as follows:

- An estimated 48,500 lesbians, gay men, and bisexuals are serving on active duty or in the ready reserve in the US military and an additional 22,000 are in the standby and retired reserve forces, accounting for approximately 2.2% of military personnel.
  - Approximately 13,000 LGB people are serving on active duty (comprising 0.9% of all active duty personnel) while nearly 58,000 are serving in the various guard and reserve forces (3.4%).
  - While women comprise only about 14% of active duty personnel, they comprise more than 43% of LGB men and women serving on active duty.
- Lifting DADT restrictions could attract an estimated 36,700 men and women to active duty service along with 8,700 more individuals to the ready reserve.
- Since its inception in 1994, the "Don't Ask/Don't Tell" policy has cost the military between \$290 million and more than a half a billion dollars.
  - The military spends an estimated \$22,000 to \$43,000 per person to replace those discharged under DADT.

## Introduction

A widely cited study published in 2004 (Gates 2004) used Census 2000 data to estimate that approximately 65,000 lesbian, gay, and bisexual men and women were serving in the US military, accounting for 2.8% of military personnel. In February 2005, the Government Accountability Office (GAO) released a report showing that the costs of discharging and replacing service members fired for homosexuality during the policy's first ten years, from fiscal year 1994 through fiscal year 2003, totaled at least \$217 million (adjusting original figures to 2009 dollars). In 2006, the Palm Center at the University of California, Santa Barbara convened a Blue Ribbon Commission which challenged those GAO estimates and suggested that the DADT policy actually cost nearly \$415 million (also adjusted to 2009 dollars). This research brief updates estimates of the number of LGB men and women serving in the military using 2008 data sources and offers new estimates for the cost of the DADT policy through 2008.

## Data and Methodology

### LGB men and women in the military

Analyses estimating the number of LGB people in the military replicate the statistical methods used in Gates (2004) and are described in the Appendix. The analyses incorporate new estimates of the size of the LGB community derived from the 2008 General Social Survey (Davis and Smith 2009). For these analyses, the percent LGB in the population is defined as the percent of men and women who either identify as gay,

lesbian or bisexual or who have had exclusively same-sex sexual partners in the last five years. Data from same-sex couples in the 2008 American Community Survey are used to estimate the fraction of LGB men and women who are on active duty or who have served in the guard or reserve. Estimates of the size and sex composition of active duty personnel come from US Department of Defense personnel and procurement statistics and are as of September, 2008.<sup>ii</sup> Data on the size and sex composition of the guard and ready reserve are reported in the US Census Bureau's 2010 *Statistical Abstract* and are also from 2008.<sup>iii</sup>

### Comparing prior and new estimates

Two key differences should be considered when comparing these estimates to those derived in Gates (2004). Gates (2004) assumed an underlying prevalence estimate of LGBs in the general population of 3% for women and 4% for men. These analyses use the most recent estimates of LGB prevalence derived from the 2008 General Social Survey and assume that 3.3% of men and 5.2% of women are LGB. Mathematically, this means that new estimates of LGB prevalence in the military will be lower for men and higher for women.

### The cost of Don't Ask/Don't Tell

Existing cost estimates for DADT come from the GAO (2005) and Palm Center Blue Ribbon Commission (2006). Both attempt to estimate costs for the first ten years of the policy (1994-2003). During that period, 9,682 individuals were

discharged under DADT. In order to estimate the costs from 2004 through 2008, this analysis derives a cost per discharge (total costs divided by number of DADT discharges) for the first decade of the policy using both GAO and Palm Center estimates. Those figures are then multiplied by the 3,279 DADT discharges from 2004-2008 to estimate the additional cost accruals. All figures are adjusted and reported in 2009 dollars.<sup>iv</sup>

## Findings

### LGB men and women in the military

Similar to estimates based on Census 2000 data showing that approximately 65,000 LGB men and women were serving in the military, updated estimates shown in Table 1 suggest that 71,000 LGB men and women are currently serving, comprising 2.2% of military personnel (a full summary of findings, including upper- and lower-bound estimates is shown in Appendix Table A). Of that 71,000, approximately 48,500 are serving either in on active duty or in the ready reserve, the portion of the guard and reserve forces who are most likely to be called into active duty.

**Table 1. LGB personnel on active duty and in the guard/reserve.**

		All	Men	Women
% LGB (among military personnel)	Active Duty	0.9%	0.6%	2.9%
	Guard/Reserve	3.4%	2.3%	8.7%
	<b>Total Military</b>	<b>2.2%</b>	<b>1.5%</b>	<b>6.2%</b>
# LGB	Active Duty	12,952	7,216	5,736
	Guard/Reserve			
	Ready Reserve	35,599	21,285	14,314
	Standby Reserve	636	380	256
	Retired Reserve	21,684	12,965	8,719
	<b>Total Military</b>	<b>70,871</b>	<b>41,846</b>	<b>29,025</b>

Several patterns persist when comparing these analyses to those using Census 2000 reported in Gates (2004). Lesbians and bisexual women are still substantially more likely to serve in the military than are gay/bisexual men or heterosexual women. An estimated 2.9% of women on active duty are lesbian/bisexual compared to only 0.6% of men. Women in same-sex couples are twice as likely as other women to report either being on active duty or serving in the guard or reserve.

Also similar to estimates from Census 2000 data, these updated figures suggest that LGB men and women are more common among those in the guard and reserve than among those on active duty, 3.4% versus 0.9% respectively.

One contrast with the estimates based on data from Census 2000 is that the updated figures show lower proportions of LGB men and women on active duty (1.8% in prior estimates versus 0.9% using 2008 data) and higher proportions in the guard and reserve (3.2% versus 3.4%).

### Additional troops if DADT restrictions are lifted

One way to assess the effect of lifting restrictions on LGB service in the military is to assume that, absent Don't Ask/Don't Tell restrictions, the percent of LGB men and women in the military would be the same as their percentage in the population.

Under this assumption, lifting DADT restrictions would attract an additional 36,700 individuals (32,000 men and 4,700 women) to active duty service. Since the estimated percentage of lesbians in the ready reserve exceeds the estimated percentage in the population, we assume no change for women among those personnel. However, there would be an additional 8,700 men among the ready reserve ranks.

### The cost of Don't Ask/Don't Tell

The Palm Center and GAO estimates imply that the government incurs costs of an estimated \$22,000 to \$43,000 per person as a result of DADT-related discharges. From 2004-2008, an additional 3,279 men and women have been discharged, suggesting additional costs of \$74-140 million in that time period (see Table 2).

**Table 2. Cost estimates of Don't Ask/Don't Tell (in 2009 dollars).**

	Palm Center Blue Ribbon Commission (2006)	Government Accountability Office (2005)
Estimate of costs, 1994-2003	\$414.7 million	\$217.2 million
Cost per DADT discharge: 9,682 discharges (1994-2003)	\$42,835	\$22,430
Additional costs, 2004-2008: 3,279 discharges (2004-2008)	\$140.5 million	\$73.6 million
<b>Total cost</b>	<b>\$555.2 million</b>	<b>\$290.7 million</b>

These figures suggest that since the inception of Don't Ask/Don't Tell, the US government has had to spend between \$290 million and more than a half billion dollars to implement the policy.

## References

- Davis, JA and Smith, TW. General social surveys 2008[machine-readable data file] /Principal Investigator, JA Davis; Director and Co-Principal Investigator, TW Smith; Co-Principal Investigator, PV Marsden; Sponsored by National Science Foundation. Chicago: National Opinion Research Center [producer]; Storrs, CT: The Roper Center for Public Opinion Research, University of Connecticut [distributor], 2009.
- Gates, GJ. Gay Men and Lesbians in the Military: Estimates from Census 2000, The Urban Institute, September 2004.
- Gates, GJ and Steinberger, M. Same-Sex Unmarried Partner Couples in the American Community Survey: The role of misreporting, miscoding and misallocation, working paper presented at the Population Association of America Annual Meeting, Detroit, MI, April 2009.
- US Government Accountability Office. Financial Costs and Loss of Critical Skills Due to DOD's Homosexual Conduct Policy Cannot Be Completely Estimated, GAO-05-299, February 2005.
- Palm Center Blue Ribbon Commission. Financial Analysis of "Don't Ask, Don't Tell": How much does the gay ban cost? Palm Center, University of California, Santa Barbara, February 2006.

## APPENDIX

### *Deriving the Proportion of Lesbians, Gay Men, and Bisexuals Serving in the Military*

The ideal way to derive the number of lesbians, gay men, and bisexuals currently serving on active duty would be to conduct a random survey of active duty personnel and ask respondents to identify their sexual orientation. Clearly, the DADT policy restricts such a survey. However, applying a common statistical procedure known as Bayes Rule allows one to derive an estimate of the proportion of men and women in the military who are LGB. The procedure requires the following key estimates:

1. The proportion of all LGB individuals in the U.S. who are in the military
2. The proportion of the non-LGB population in the U.S. who are in the military
3. The proportion of the US population who are LGB.

All respondents in the 2008 American Community Survey Public Use Microdata Sample (PUMS) indicate if they are currently on active duty or serving in the guard or reserve. Estimates in these analyses use the proportion of those in same-sex couples who say they are in the military as a proxy for (1), an estimate of the fraction of LGB people in the military. Similarly, information about those not in same-sex couples is used to derive an estimate for (2). Findings from the 2008 General Social Survey suggest that 3.3% of men and 5.2% of women either identify as LGB or have had exclusively same-sex sexual partners in the last five years. Those estimates are used to derive (3).

Equation (1) shows the Bayes's rule calculation used to derive  $P(\text{LGB} | M)$ , the probability that someone is lesbian, gay, or bisexual given that he or she is in the military.

$$P(\text{LGB} | M) = \frac{P(\text{LGB})P(M | \text{LGB})}{P(\text{LGB})P(M | \text{LGB}) + P(H)P(M | H)} \quad \text{Equation (1)}$$

The terms of the equation and sources for each are as follows:

- $P(\text{LGB})$ : Probability that an adult in the population is LGB. The analyses use estimates from the 2008 General Social Survey: 3.3% for men and 5.2% for women.
- $P(M | \text{LGB})$ : Probability that someone is in the military given that he or she is LGB. This estimate is derived from the proportion of individuals in same-sex unmarried partner couples who report military service.
- $P(H)$ : Probability that an adult in the population is heterosexual. This is calculated as one minus the fraction of LGB men and women in the adult population (96.7% for men and 94.8% for women).
- $P(M | H)$ : Probability that someone is in the military given that he or she is heterosexual. ACS figures are used to estimate the proportion of the adult population other than those in same-sex unmarried partnerships who report active military service.

Estimates are calculated separately for men and women as they differ substantially in the probability of serving in the military.

### *Same-sex couples in the 2008 American Community Survey*

Same-sex couples in the 2008 ACS PUMS are identified when a household includes two adults of the same sex where one is designated as either a "husband/wife" or an "unmarried partner" of the other. US Census Bureau procedures recode all same-sex husbands and wives to be unmarried partners in the PUMS data. Gates and Steinberger (2009) have shown that a potentially large

portion of same-sex couples who designate one partner as a “husband/wife” may be comprised of different-sex married couples who miscode the sex of one of the spouses. While same-sex spouses cannot be directly identified in the 2008 ACS data, Gates and Steinberger (2009) show that a variable indicating that the original marital status response has been altered provides a proxy for indicating that a same-sex unmarried partner couple originally used the terms husband or wife to describe a partner. Consistent with their recommendations, the sample used in these analyses is restricted to only those couples whose marital status was not altered (meaning they called themselves “unmarried partners”) along with couples who responded via a computer-assisted interview that verifies the sex of any same-sex husband or wife. The data are further restricted to only men and women aged 18-60 since very few individuals over age 60 are serving in the military.

**Appendix Table A. Estimates of the percent and number of LGB people in the US military.**

		Estimate		95% Confidence Interval			
		Men	Women	Men	Women	Men	Women
General Social Survey, 2008	LGB-identified or same-sex sexual behavior in last five years	3.3%	5.2%	1.9%	3.5%	4.6%	6.9%
	<b>Total</b>	4.3%		3.2%		5.4%	
American Community Survey, 2008	Same-sex couples						
	Active duty	0.2%	0.1%	0.04%	0.01%	0.4%	0.2%
		Guard/reserve	0.9%	0.8%	0.5%	0.5%	1.2%
	Other adults						
	Active duty	1.1%	0.2%	1.1%	0.2%	1.2%	0.2%
		Guard/reserve	1.2%	0.5%	1.2%	0.4%	1.3%
Derived estimates	% LGB						
	Active duty	0.6%	2.9%	0.1%	0.2%	1.5%	6.7%
		Guard/reserve	0.9%	8.7%	0.1%		2.2%
	All military	2.3%	8.7%	0.8%	4.1%	4.4%	14.4%
		3.4%		1.4%		6.1%	
	All military	1.5%	6.2%	0.5%	2.4%	3.0%	11.1%
		2.2%		0.8%		4.3%	
	Number of LGB						
	Active duty	7,216	5,736	774	407	18,093	13,360
		12,952		1,181		31,453	
Ready reserve	21,285	14,314	7,722	6,685	40,784	23,677	
	35,599		14,407		64,461		
Standby reserve	380	256	138	119	728	423	
	636		257		1,151		
Retired reserve	12,965	8,719	4,704	4,072	24,843	14,422	
	21,684		8,776		39,265		
All military	41,846	29,025	13,338	11,284	84,448	51,882	
	70,871		24,622		136,330		

<sup>i</sup> This brief replaces a version published in January 2010. The prior version had incomplete figures for the size of the guard and reserve. Percentages of LGB in the military have not been altered, only the number of LGB in the guard and reserve forces, which are now separated by ready, standby, and retired reserve forces.

<sup>ii</sup> See <http://siadapp.dmdc.osd.mil/personnel/MILITARY/rg0809.pdf> for statistics on all active duty personnel and <http://siadapp.dmdc.osd.mil/personnel/MILITARY/rg0809f.pdf> for statistics on women.

<sup>iii</sup> See <http://www.census.gov/compendia/statab/2010/tables/10s0501.pdf> for data on the Guard and Reserve and <http://www.census.gov/compendia/statab/2010/tables/10s0503.pdf> for data on the sex ratio in the Army and Air Force National Guard. This sex ratio is applied to all Guard and Reserve estimates.

<sup>iv</sup> Adjustments use the US Bureau of Labor Statistics Consumer Price Index inflation calculator found at [http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm).