

AGING LGB ADULTS IN CALIFORNIA

Findings from the 2015–2016 California Health Interview Survey

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EXECUTIVE SUMMARY

This report provides a description of demographic and health characteristics of lesbian, gay and bisexual (LGB) older adults living in California. The data show that 431,786 older Californian adults identified as LGB in 2015–2016: of them, 268,766 were lesbian or gay and 163,020 were bisexual. Of this group, 269,526 LGBs were aged 50–64 and 162,260 were aged 65 and older.

The report draws on data from the 2015–2016 California Health Interview Survey (CHIS). Sexual orientation can be measured through the constructs of identity, attraction and behavior (SMART, 2009). Analysis for this report is based on the CHIS survey measure of sexual identity, that is, people identifying as LGB and straight or heterosexual. In 2015–2016, CHIS included, for the first time, LGB people aged 70 and older who previously had not been asked CHIS survey questions related to sexual identity. Because CHIS is a population-based survey, findings from this report are representative of California's older adult population. We present demographics and health characteristics by sexual identity within different age groups (ages 50–64, and ages 65 and older) and, within the LGB population, by gender, sexual identity, and ethnicity. Throughout the report we noted some large differences even though they did not reach statistical significance, such as psychological distress, because these areas may have important policy and clinical implications. Because of the small sample size of older transgender individuals in the data, we could not analyze the demographics of the transgender population; however, transgender sample characteristics are included in Appendix B1 and B2 to the report.

KEY FINDINGS

Differences between LGB Older Adults and Straight Older Adults

- LGB and straight older adults had similar characteristics in terms of educational levels, employment, and living in rural and urban areas. However, more LGB older adults were male compared with straight older adults.
- LGB older adults were more likely to have never married, and to live alone, than their straight counterparts. In the age group 50–64, 30.6% of LGB adults lived alone compared with 13.6% of straight adults. Among the age group 65 and older, 39.8% of LGB adults lived alone compared with 26.2% of straight adults.
- LGB adults experience different socio-economic disparities by age group. Among the 50–64 age group, more LGB adults than straight adults received Supplemental Security Income (SSI), but there was no difference between LGB and straight adults in the 65 and older age group. In terms of home ownership, LGB adults aged 65 and older (59.6%) were less likely to own a home than their straight counterparts (71.3%), but there was no statistically significant difference in homeownership between LGB and straight adults aged 50–64.
- In both the 50–64 and 65 and older age groups, LGB and straight older adults had similar health outcomes and access to healthcare. In contrast to previous studies, we found no health disparities between LGB and straight older adults in terms of general health and specific health conditions such as diabetes or heart disease: nor did we see healthcare access disparities in terms of having health insurance or delaying care.

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- Perhaps reflecting their need for more specialized health information, more LGB than straight older adults used the internet to look up health information.

Differences by gender (male vs. female), sexual identity (lesbian/gay vs. bisexual), and ethnicity (Hispanic/Latino vs. non-Hispanic/Latino) within California's LGB older adult population

LGB Men and Women

- LGB men and women did not differ on most demographic characteristics and health outcomes. However, gay and bisexual men aged 65 and older were more likely than their lesbian and bisexual women counterparts to have served in the U.S. Armed Forces.

Bisexuals Compared to Gay Men and Lesbians

- We found differences between sexual identity groups (L/G v B) among older adults. Among people aged 50–64, bisexuals were more likely to experience food insecurity, and among those aged 65 and older, more likely to live 200% below the federal poverty level, compared to lesbian and gay adults in the same age groups.
- Among the 65 and older group, more lesbian and gay older adults compared with bisexual older adults have used the internet or used the internet to look up health information.

Hispanic /Latino Compared to non-Hispanic/Latino LGBs

We compared Hispanic/Latino with non-Hispanic/Latino LGBs because the sample size of other non-White race/ethnicities did not afford the necessary statistical power required to examine within-LGB-group analysis of other racial/ethnic groups.

- Compared with their LGB non-Hispanic/Latino peers (of all race groups), more LGB Hispanic/Latino people had a lower level of education, were born outside the U.S., lived 200% below the federal poverty level, and experienced food insecurity. Compared with their non-Hispanic/Latino counterparts, LGB Hispanic/Latinos aged 50–64 were more likely to be food insecure without periodic experiences of hunger and LGB Hispanic/Latinos aged 65 and older were more likely to be food insecure *with* periodic experiences of hunger.
- Compared with non-Hispanic/Latino LGBs, more LGB Hispanic/Latinos aged 50–64 lacked health insurance and more LGB Hispanic/Latinos aged 65 and older had diabetes and experienced psychological distress.
- LGB Hispanic/Latino older adults, compared with all other race groups, were less likely to have used the internet. Additionally, in the 50–64 age group, Hispanic/Latino adults were less likely to look up health information online.

In contrast to many previous studies, which have shown health disparities between LGB and straight older people (see Introduction), LGB older adults in the CHIS have similar health statuses to their straight counterparts. Similar to previous studies, however, LGB older adults were more likely to live alone and therefore may be more isolated in terms of traditional social support systems. Additionally, our findings indicate that LGB older adults' experiences and health statuses differ by sexual identity and ethnicity, particularly in the 65 and older age group.

Our findings show less disparities between LGB and straight older adults than were found in a previous study that also used CHIS 2003, 2005, 2007 data. These differences may be indicative of the improved social and policy environment for LGBT people in California.

Seeing that older LGB adults used the internet more than straight older adults to find information about health needs, utilization of the internet for future public health interventions targeting LGB older adults could be an effective way to reach this population.

Our results are the first to utilize the CHIS revised sexual orientation questions that include people over age 70. There is further need to understand differences between our findings in California, and those of previous studies that documented greater health disparities between LGB and straight older adults. Also, there remains need to further evaluate how intersectional identities can influence the health and healthcare of LGB older adults and, to more fully than we are able to, assess the health of transgender older adults.



INTRODUCTION

To date, there is no census count available of lesbian, gay, and bisexual (LGB) older adults in the U.S. However, an estimated 2.4% of older adults in the country identify as lesbian, gay, bisexual, and transgender (LGBT) including approximately 2.7 million aged 50 and older, of which 1.1 million are 65 and older (Fredriksen-Goldsen & Kim, 2017). The U.S. Department of Health and Human Services and the Institute of Medicine identified aging LGB individuals as a population with health disparities as compared with heterosexuals (HHS, 2000; IOM, 2011).

A significant challenge to understanding the health of sexual and gender minority older adults has been that most national and state health surveys do not measure sexual identity or gender identity, thus not allowing researchers to describe the population of aging LGBT adults. Most available studies that include older LGBT adults are non-probability samples that yield findings that may be biased in representation. For example, studies of individuals recruited in the LGBT community may include people who are more connected to LGBT institutions than are the general LGBT population, may include people with greater health problems that motivate them to participate in surveys, or, conversely, may include people who fare better than most and are motivated to participate in surveys because of their commitment to the LGBT older community.

Still, research related to the experiences of LGB older adults has rendered significant and useful knowledge about this population. These studies have shown that while LGB middle-aged and older adults experience many of the same age-related challenges as the general population, they face more barriers to many aspects of successful aging (e.g., mental and physical health, economic security) than their heterosexual counterparts. Challenges often stem from extensive experiences with stress-inducing stigma and discrimination throughout the life course (SAGE & MAP, 2010; Fredriksen-Goldsen et al., 2011). Specifically, research has shown that LGB middle-aged and older adults are at an increased risk for poor physical (e.g., heart disease, disability, diabetes) and mental (e.g., depression, anxiety, suicide ideation) health conditions, as well as adverse social conditions (e.g., reduced healthcare access and utilization, poverty, isolation) compared to aging heterosexual and cisgender individuals (SAGE, 2018).

Larger, population-based studies, representative of the entire population, may include LGBT individuals in middle or younger-age, but information about older adults' sexual and gender identity is often missing because such questions were not asked of older adults. Some of the more recent studies that use nationally representative data have found that LGB and straight adults have mixed results in health disparities (Gonzales et al. 2016; Dai & Meyer, unpublished). For example, compared to heterosexual adults, gay and bisexual men and bisexual women showed no disparities in general health, but lesbian women had worse health (Gonzales, et al. 2016). To our knowledge, two studies have used population-based samples at the state level to examine LGB older adults (Fredriksen-Goldsen et al. 2013; Wallace et al., 2001), providing a more accurate picture of LGB older adult experiences at the state population level.

One of the studies used the California Health Interview Survey (CHIS) to examine LGB older adults aged 50–70 in California (Wallace et al., 2011). Using combined data of LGB people aged 50–70 from the CHIS surveys of 2003, 2005, and 2007, researchers found that LGB people in California were more likely to be men, White, live alone, and have higher socioeconomic status compared to straight respondents. In terms of health outcomes, gay and bisexual men had higher prevalence of hypertension, diabetes, psychological distress, physical disability, and fair or poor health status than straight men; lesbians and

bisexual women had higher prevalence of psychological distress, physical disability, and had poorer health status than heterosexual women. LGB people did not differ from heterosexuals in access to and utilization of healthcare except that both gay/bisexual men and lesbian/bisexual women had more doctor visits than did straight aging respondents (Wallace et al., 2011).

In this current report, we build upon this prior work to expand our understanding of LGB older adults in California by examining similarities and differences among older adults by age group (age 50–64 and age 65 and older), using the policy-relevant and social service eligibility age of 65 as the critical cut off point between the two groups. Using the 2015–2016 CHIS data, a probability sample representative of the California population, we describe demographic characteristics, including socioeconomic measures, and health indicators of LGB aging adults as compared with heterosexuals by age group. We also describe differences and similarities among LGB older adults by gender (women vs. men), sexual identity (lesbian and gay vs. bisexual), and ethnicity (Hispanic/Latino and non-Hispanic/Latino) to provide a more complete picture of the older LGB adult population in California.



METHODS

CHIS is a health survey managed by the UCLA Center for Health Policy Research. CHIS data are collected on an ongoing basis with more than 20,000 households surveyed each year on a wide range of health topics. Data are collected over the telephone using random-digit-dial sampling frames of landlines and cell-phones. This probability sampling method allows CHIS data to be representative of California's population (UCLA Center for Health Policy Research, 2012a). Individuals in institutionalized (e.g., jails or nursing homes) and non-institutionalized group quarter residencies (e.g., college dorms or military bases) were excluded from the sample (UCLA Center for Health Policy Research, 2012b). Proxy interviews were completed for 274 adults in the 2015–2016 CHIS, but these did not include sexual identity items, so data from proxy interviews are not included in our analysis (California Health Interview Survey, 2017a).

To maximize the sample size, we combined the 2015 and 2016 CHIS adult population data (California Health Interview Survey, 2015–2016). All adults up to and including the age of 70 were asked questions about their sexual identity and sexual behavior in the 2015 CHIS survey. In 2016, this age limitation was removed so that people of all ages were asked about their sexual identity and sexual behavior. To address the absence of these data for people over age 70 in the 2015 dataset, we used CHIS-imputed values for this subgroup of respondents. CHIS has used the model-assisted hot deck imputation method since 2009 (Andridge & Little, 2010). This type of imputation is commonly used by the producers of many large, publicly available datasets. For example, the U.S. Census Bureau uses a similar form of the hot deck procedure to impute values for missing data in the Current Population Survey.

Hot deck imputation is a method of assigning values to observations with missing information (*recipients* of the imputation, here LGB people over age 70 in the 2015 survey) by choosing a *donor* observation from a person with similar characteristics with complete information in the data (i.e., LGB people over age 70 in the 2016 survey) and assigning the donor value to the recipient. To arrive at the hot deck imputations, CHIS statisticians used a set of predictor variables, including: gender, age, race/ethnicity, region of California, educational attainment, income as a percent of the federal poverty level, home ownership, employment status, overall health, and access to a usual source of care (California Health Interview Survey, 2017b).

Analyses were restricted to individuals over the age of 50, resulting in a sample size of 27,286. Of the total sample, 756 (3.4 %) individuals who did not report a sexual identity were excluded, reducing the sample to 26,530. Of those excluded, 491 (70.4 %) reported being not sexual, celibate, or having no sexual identity, 23 (3.9 %) chose *other*, and the remaining 242 (32%) individuals had no information because their responses were provided by a proxy who was not asked about the subject's sexual identity.

Transgender adults over age 50 who identified as straight or LGB were included in all analysis by sexual identity. The transgender sample was too small (N = 50) to produce stable estimates, but we provide some basic statistics on them separately (See Appendix B1 and B2).

We present detailed tables describing the sample sizes and weighted proportions (i.e., the population estimated for the California population based on these analyses) comparing the LGB with the straight (heterosexual) population of California adults over age 50 (Tables 1 – 2). We also present the same data describing, among LGB people only, differences by gender (gay and bisexual men vs. lesbians and bisexual women), sexual identity (lesbian and gay vs. bisexual) and ethnicity (Hispanic/Latino and non-Hispanic/Latino LGBs) (Tables 3 – 8). We focus on comparing Hispanic/Latino with non-Hispanic/Latino LGBs because the sample size comparisons of other non-White race/ethnicities did not afford the necessary statistical power required to examine within-LGB-group analysis.

Within each group, we look at differences by the age groups 50-64 and 65 and older. We did not have a sufficient sample size to disaggregate the age groups further. These age groups are typically studied in geriatric research and are significant for a cutoff of 65 related to Medicare eligibility, which affects access to and utilization of healthcare. In Appendix A, the reader may also examine standard errors and statistical significance tests of difference between groups for each of these characteristics, reported in Tables A1–A8.



FINDINGS

I. OLDER LGB PEOPLE IN CALIFORNIA

Of the 26,530 adults over age 50 who participated in the combined 2015–2016 surveys, 924 individuals, or 3.5% ($SE = 0.3$) identified as LGB. The proportion of LGB individuals was 3.8% ($SE = 0.4$) among people aged 50–64 and 3.3% ($SE = 0.4$) among people aged 65 and older. Of the LGB people, 62.2% were lesbian or gay and 37.7% were bisexual (35.9% of the men and 40.4% of the women were bisexual).

Based on this, we estimate that of the 12,003,312 people over age 50 residing in California in 2015–2016, 431,786 identified as LGB. Among the LGB-identified older individuals, 269,526 were aged 50–64 and 162,260 were aged 65 and older; 268,766 were lesbian or gay and 163,020 were bisexual (of the bisexuals, 92,235 were men and 70,785 were women).

II. SIMILARITIES AND DIFFERENCES BETWEEN HETEROSEXUAL AND LESBIAN, GAY, AND BISEXUAL OLDER ADULTS

DEMOGRAPHIC CHARACTERISTICS

Table 1 (See Appendix Table A1 for standard errors and test statistics) shows demographic characteristics of LGB versus straight populations by age group (50–64 and 65 and older). In both age groups, a larger proportion of LGB people were men compared to straight adults (60.7% vs. 48.2% of respondents aged 50–64 and 57.5% vs. 44.3% of those aged 65 and older, respectively). LGB adults aged 50–64 were more likely to identify as White than Hispanic/Latino compared with straight people (65.7% vs. 51.1%) but the difference among those aged 65 and older (60.8% of LGB vs. 61.1% of straight respondents) was not statistically significant. Following non-Hispanic/Latino White, the second largest ethnic group was Hispanic/Latino for both the straight and LGB populations. There were no differences in terms of education status, employment, nativity, or other demographic characteristics.

LGB respondents in both age groups were less likely to be married or in a domestic partnership than the straight respondents (35.1% of LGB vs. 62.4% of straight respondents aged 50–64; 41.7% of LGB vs. 55.7% of straight respondents aged 65 and older). LGB people were more likely to live alone than straight people (30.6% vs. 13.6% of those aged 50–64 and 39.8% vs. 26.2% of those aged 65 and older, respectively).

Although the majority of older Californian adults owned their homes, LGB people aged 65 and older were less likely than straight people to report home ownership (59.6% of LGB vs. 71.3% of straight respondents). A similar pattern existed among those aged 50–64 (57.8% LGB vs. 69.4% of straight), but this difference was not statistically significant.

LGB older adults were just as likely to live in urban areas as were straight older adults in both age groups (90.7% vs. 93.2% of those aged 50–64 and 90.9% vs. 91.7% of those aged 65 and older). In terms of internet usage, more LGB respondents than straight respondents used the internet to look up health information in the year prior to the interview (68.9% vs. 52.8% among those aged 50–64 and 50.7% vs. 37.5% among those aged 65 and older, respectively).

Table 1. Demographic Characteristics of Older Adults in the 2015–2016 California Health Interview Survey, by Sexual Orientation (N = 26,530)

Variable	Age 50–64		Age 65+	
	Straight n (weighted %)	LGB n (weighted %)	Straight n (weighted %)	LGB n (weighted %)
Gender				
Male	4,907 (48.2)	277 (60.7)	5,758 (44.3)	246 (57.5)
Female	6,399 (51.8)	217 (39.3)	8,542 (55.7)	184 (42.5)
Race/Ethnicity				
Hispanic	2,443 (29)	76 (17.3)	1,567 (20)	58 (20.2)
Non-Hispanic White	6,682 (51.1)	348 (65.7)	10,269 (61.1)	299 (60.8)
Non-Hispanic African American	720 (6.22)	24 (8.22)	622 (5.25)	18 (10.6)
Non-Hispanic American Indian or Alaskan Native	139 (0.53)	6 (0.58)	126 (0.61)	1 (0.07)
Non-Hispanic Asian	1,032 (11.1)	22 (5.38)	1,475 (11.2)	48 (7.33)
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	290 (2.08)	18 (2.87)	241 (1.8)	6 (1.02)
Marital status				
Married or domestic partnership (same or different sex partners)	6,153 (62.4)	184 (35.1)	6,520 (55.7)	153 (41.7)
Living with partner	498 (4.75)	48 (13.8)	324 (2.9)	25 (6.54)
Widowed, separated or divorced	3,197 (23.4)	89 (21.8)	6,613 (37)	143 (31.5)
Never married	1,458 (9.42)	173 (29.3)	843 (4.43)	109 (20.3)
Live alone	2,830 (13.6)	196 (30.6)	6,513 (26.2)	222 (39.8)
Home ownership	7,150 (69.4)	267 (57.8)	10,837 (71.3)	283 (59.6)
Education				
< HS education	1,366 (19.2)	40 (13.7)	1,132 (16.6)	51 (18.9)
HS diploma or some college	5,309 (42.5)	198 (38.4)	6,738 (45.7)	134 (34.3)
College degree or above	4,631 (38.3)	256 (47.9)	6,430 (37.3)	245 (46.7)
Employment status				
Employed	6,965 (65.7)	303 (66.9)	2,680 (20.6)	94 (24.6)
Unemployed, looking for work	340 (3.73)	16 (3.36)	101 (0.996)	4 (0.335)
Unemployed, not looking for work	4,001 (30.6)	175 (29.7)	11,519 (78.4)	332 (75.1)
Nativity (born in US)	8,433 (64.6)	418 (74.4)	11,674 (72.9)	340 (78.6)
Veteran status (ever serve in US armed forces)	854 (7.36)	33 (7.06)	2,858 (19.3)	99 (16.8)
Urbanicity				
Rural	1,789 (6.78)	78 (9.33)	2,327 (8.25)	61 (9.06)
Urban	9,517 (93.2)	416 (90.7)	11,973 (91.7)	369 (90.9)
Internet usage				
Ever used internet	9,386 (80.5)	441 (88)	9,774 (61.8)	320 (71.8)
Use internet to look up health info in past 12 months	6,334 (52.8)	334 (68.9)	6,049 (37.5)	219 (50.7)
Living 200% below the federal poverty level	3,715 (31.9)	175 (29.9)	3,755 (33.1)	120 (39.3)
Food security				
Food secure	9,534 (84.3)	405 (83)	13,257 (88.3)	390 (89.8)
Food insecure without hunger	1,003 (9.63)	43 (6.9)	770 (8.72)	27 (4.86)
Food insecure with hunger	769 (5.89)	46 (10.1)	273 (2.97)	13 (5.39)
Receive food stamp benefits	864 (6.18)	40 (7.3)	392 (4.16)	21 (7.61)
Receive supplemental security income	882 (5.16)	59 (10.8)	1,116 (8.74)	41 (11)
Receive social security disability insurance	1,493 (32.3)	93 (44.6)	–	–
Received social security pension last month	592 (26.6)	14 (29.8)	4,934 (80.1)	160 (86.1)

Note: Bolded numbers indicate statistical significance at $p < .05$

POVERTY, FOOD INSECURITY, AND USE OF SOCIAL SECURITY BENEFITS

There were no statistically significant differences between LGB and straight individuals with regard to poverty and food insecurity, except one: LGB people aged 50–64 (11%) were more likely to receive supplemental security income (SSI) than their straight counterparts (5.2%) (Table 1). SSI is a federal income supplement program that supports adults age 65 and older (also, all-age blind people and individuals with disabilities who have no or little income and limited resources). SSI provides cash to help meet basic needs such as food, shelter, and clothing.

HEALTH OUTCOMES, HEALTH BEHAVIORS, AND ACCESS TO HEALTHCARE

Table 2 (See Appendix Table A2 for standard errors and test statistics) shows health outcomes, health behaviors, and healthcare access comparing LGB and straight respondents. Within the 50–64 and the 65 and older age groups, there were no statistically significant differences in health-related indicators between LGB and straight respondents. However, it is notable that 9.9% of LGB vs. 4.2% of straight people aged 50–64, and 6.0% vs. 2.8% of those aged 65 and older, reported experiencing psychological distress in the month prior to being interviewed.

Table 2. Health Outcomes, Health Behaviors, and Health Access of Older Adults in the 2015–2016 California Health Interview Survey, by Sexual Orientation (N = 26,530)

Variable	Age 50–64		Age 65+	
	Straight n (weighted %)	LGB n (weighted %)	Straight n (weighted %)	LGB n (weighted %)
Health outcomes				
General health fair or poor	2,962 (27.6)	124 (22.9)	3,502 (27.6)	118 (32.7)
Asthma	1,798 (14.3)	106 (16.6)	2,070 (14.5)	74 (16.7)
Diabetes	1,598 (13.7)	54 (11.4)	2,644 (21.4)	72 (26.7)
High blood pressure	4,635 (39.4)	201 (42.4)	8,515 (59.8)	266 (65.3)
Heart disease	915 (7.71)	49 (8.37)	3,024 (19.6)	91 (21.2)
Disability status due to physical, mental or emotional conditions	4,380 (36)	224 (39.8)	7,100 (49.3)	213 (51.8)
Limited basic physical activity	2,994 (23.6)	146 (26.4)	4,872 (33.2)	154 (42.8)
Cognitive difficulty	1,896 (16)	119 (22.3)	2,346 (18)	74 (22.2)
Difficulty dressing, bathing, getting around	898 (6.77)	53 (7.53)	1,024 (7.33)	41 (11.8)
Difficulty going outside home alone	944 (7.37)	66 (11.5)	1,587 (11.8)	43 (12.7)
Psychological distress (Kessler Score > 6) past month	599 (4.24)	44 (9.95)	286 (2.8)	8 (6.03)
Body Mass Index (BMI)				
0–18.49 (underweight)	158 (1.39)	10 (1.12)	311 (2.24)	9 (2.36)
18.5–22.99 (acceptable risk)	1,873 (14)	81 (11)	2,978 (18.9)	84 (19.7)
23–27.4 (increased risk)	3,778 (35.8)	186 (43.9)	5,383 (38)	160 (36.3)
≥ 27.5 (high risk)	5,497 (48.9)	217 (44)	5,628 (40.9)	177 (41.6)
Health behaviors				
Never smoked regularly	6,527 (59.4)	255 (57.6)	7,655 (54.8)	214 (51.9)
Quit smoking	3,064 (26.5)	152 (26.4)	5,738 (38.2)	182 (40.2)
Current smoker	1,715 (14.1)	87 (16.1)	907 (6.94)	34 (7.89)
Healthcare access				
Currently uninsured	818 (8.96)	33 (5.4)	66 (0.792)	3 (1.1)
Covered California insurance	833 (7.27)	40 (8.12)	57 (0.425)	2 (0.162)
3 or more doctor visits in past 12 months	5,907 (49.8)	288 (51.1)	8,819 (59.3)	275 (67.9)
Has no usual place to go when sick or needing health advice	993 (9.49)	43 (12.5)	682 (6.32)	23 (4.63)
Delay/not get prescription in past 12 months	1,413 (12.2)	73 (20.3)	1,151 (8.79)	50 (12.4)
Delay/not get other medical care in past 12 months	1,737 (14.1)	110 (20.3)	911 (6.35)	35 (8.79)

Note: Bolded numbers indicate statistical significance at $p < .05$

III. SIMILARITIES AND DIFFERENCES AMONG LESBIAN, GAY, OR BISEXUAL OLDER ADULTS

Here we describe similarities and differences among LGB older adults in California by gender (male vs. female), sexual identity (lesbian/gay vs. bisexual), and ethnicity (Hispanic/Latino vs. non-Hispanic /Latino). We show results for subgroups within the LGB older adult population that are often analyzed together. We found no statistically significant differences in demographic characteristics and health outcomes between LGB adults who live in rural areas versus urban areas (not included in this report).

SIMILARITIES AND DIFFERENCES BY GENDER AMONG LGB OLDER ADULTS—MEN VERSUS WOMEN

Demographic Characteristics

Table 3 (see Appendix Table A3 for standard errors and test statistics) shows gender differences in demographic characteristics within age groups among older LGB adults. There were no statistically significant differences between male and female LGB older adults in race/ethnicity, home ownership, educational attainment, employment, and residence in urban vs. rural centers in both age groups. Among LGB people aged 50–64, a higher proportion of women were likely to be married or in a domestic partnership than men (45.2% vs. 28.5%); though among those aged 65 and older, a higher proportion of men were likely to be partnered than women (45.2% vs. 36.2%). However, these differences were not statistically significant. In both age groups, a higher proportion of gay and bisexual men reported living alone than lesbian and bisexual women (36.6% vs. 21.2% of those aged 50–64 and 47.3% vs. 29.7% of those aged 65 and older) though these differences were also not statistically significant.

Gay and bisexual men were more likely than lesbian and bisexual women (9.9 % vs. 2.7 % of those aged 50–64 and 26.4 % vs. 3.7 % of those aged 65 and older) to have served in the U.S. Armed Forces, although this difference was significant only for the older group.

Poverty, Food insecurity, and use of Social Security Benefits

LGB men and women had many similarities in terms of socio-economic status indicators such as living below 200% of the federal poverty level, food insecurity, receiving food stamps, and receiving SSI. While not statistically significant, LGB men and women followed different patterns by age group on various socioeconomic status indicators. For example, 13.1% of LB women and 8.17% of GB men reported food insecurity with periodic experiences of hunger in the 50–64 age group. In the 65 and older group, 8.0% of GB men reported food insecurity with periodic experiences of hunger and 2.9% of LB women reported the same experience.

Table 3. Demographic Characteristics of Lesbian, Gay, Bisexual Older Adults in the 2015–2016 California Health Interview Survey, by Gender (Estimated California Population Size)

Variable	Age 50–64		Age 65 +	
	Male (weighted %)	Female (weighted %)	Male (weighted %)	Female (weighted %)
Race/ethnicity				
Hispanic	25,493 (15.6)	21,136 (19.9)	18,460 (19.8)	14,361 (20.8)
Non-Hispanic White	109,818 (67.2)	67,129 (63.3)	53,699 (57.6)	44,942 (65.2)
Non-Hispanic African American	15,396 (9.42)	6,756 (6.37)	14,444 (15.5)	2,702 (3.92)
Non-Hispanic American Indian or Alaskan Native	510 (0.312)	1,060 (0.999)	0	106 (0.153)
Non-Hispanic Asian	8,177 (5)	6,321 (5.96)	5,551 (5.95)	6,337 (9.19)
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	4,089 (2.5)	3,640 (3.43)	1,142 (1.22)	515 (0.747)
Marital status				
Married or domestic partnership (same of different sex partners)	46,542 (28.5)	47,946 (45.2)	42,711 (45.8)	24,992 (36.2)
Living with partnered	27,109 (16.6)	10,003 (9.43)	4,658 (4.99)	5,954 (8.63)
Widowed, separated or divorced	34,536 (21.1)	24,305 (22.9)	20,501 (22.0)	30,573 (44.3)
Never married	55,298 (33.8)	23,789 (22.4)	25,428 (27.3)	7,444 (10.8)
Live alone	59,878 (36.6)	22,470 (21.2)	44,093 (47.3)	20,478 (29.7)
Home ownership	93,298 (57.1)	62,564 (59)	52,106 (55.8)	44,563 (64.6)
Education				
< HS education	20,108 (12.3)	16,704 (15.8)	19,986 (21.4)	10,757 (15.6)
HS diploma or some college	58,228 (35.6)	45,387 (42.8)	27,775 (29.8)	27,897 (40.5)
College degree or above	85,148 (52.1)	43,950 (41.4)	45,536 (48.8)	30,309 (43.9)
Employment status				
Employed	106,252 (65)	74,167 (69.9)	18,208 (19.5)	21,651 (31.4)
Unemployed, looking for work	6,375 (3.9)	2,689 (2.54)	261 (0.28)	282 (0.41)
Unemployed, not looking for work	50,857 (31.1)	29,186 (27.5)	74,829 (80.2)	47,030 (68.2)
Nativity (born in US)	114,468 (70)	86,062 (81.2)	77,142 (82.7)	50,412 (73.1)
Veteran status (ever serve in US armed forces)	16,161 (9.89)	2,881 (2.72)	24,665 (26.4)	2,550 (3.7)
Urbanicity				
Rural	16,138 (9.87)	9,006 (8.49)	5,939 (6.37)	8,765 (12.7)
Urban	147,346 (90.1)	97,037 (91.5)	87,358 (93.6)	60,198 (87.3)
Internet usage				
Ever used internet	145,172 (88.8)	92,102 (86.9)	66,503 (71.3)	50,060 (72.6)
Use internet to look up health info in past 12 months	112,093 (68.6)	73,546 (69.4)	47,370 (50.8)	34,828 (50.5)
Living 200% below the federal poverty level	42,996 (26.3)	37,613 (35.5)	40,717 (43.6)	23,042 (33.4)
Food security				
Food secure	140,506 (85.9)	83,162 (78.4)	79,423 (85.1)	66,207 (96)
Food insecure without hunger	9,620 (5.88)	8,986 (8.47)	6,371 (6.83)	1,516 (2.2)
Food insecure with hunger	13,358 (8.17)	13,893 (13.1)	7,504 (8.04)	1,240 (1.8)
Receive food stamp benefits	14,198 (8.68)	5,470 (5.16)	10,294 (11)	2,052 (2.98)
Receive supplemental security income	13,038 (7.98)	16,010 (15.1)	8,829 (9.46)	9,020 (13.1)
Receive social security disability insurance	20,624 (40.1)	15,937 (52.4)	–	–
Received social security pension last month	2,233 (22.1)	2,479 (43.1)	53,667 (90.7)	23,827 (77.2)

Note: Bolded numbers indicate statistical significance at $p < .05$

Health Outcomes, Health Behaviors, and Access to Healthcare

Lesbian and bisexual women and gay and bisexual men did not differ on health outcome and health behavior indicators (Table 4; Appendix Table A4 shows standard errors and test statistics). However, though not statistically significant, 17.2% of LB women aged 50–64 and 23.7% of LB women aged 65 and older reported difficulty going outside home alone. Among GB men, 7.7% (aged 50–64) and 4.5% (aged 65 and older) reported difficulty leaving the home alone. Among those aged 50–64, 17% of LB women and 5.3% of GB men reported experiencing psychological distress in the prior month to being interviewed. In terms of access to healthcare, though LGB men and women did not differ in terms of delays in getting prescriptions, having a place to visit when sick, or number of doctor visits in the year prior to the interview, for the group aged 65 and older, LB women were more likely to be uninsured than GB men (2.32% vs. 0.20%). Though LB women were about 2 times more likely to be uninsured than GB men (8.4% vs. 3.4%) in the 50–64 age group, this difference was not statistically significant.

Table 4. Health Outcomes, Health Behaviors, and Health Access of Lesbian, Gay, Bisexual Older Adults in the 2015–2016 California Health Interview Survey, by Gender (Estimated California Population Size)

Variable	Age 50–64		Age 65+	
	Male (weighted %)	Female (weighted %)	Male (weighted %)	Female (weighted %)
Health outcomes				
General health fair or poor	34,897 (21.3)	26,711 (25.2)	34,027 (36.5)	19,025 (27.6)
Asthma	18,703 (11.4)	26,007 (24.5)	12,834 (13.8)	14,230 (20.6)
Diabetes	14,723 (9.01)	16,000 (15.1)	30,263 (32.4)	13,001 (18.9)
High blood pressure	73,105 (44.7)	40,665 (38.3)	65,176 (69.9)	40,833 (59.2)
Heart disease	8,443 (5.16)	14,114 (13.3)	18,865 (20.2)	15,460 (22.4)
Disability status due to physical, mental or emotional conditions	58,245 (35.6)	49,071 (46.3)	49,410 (53)	34,600 (50.2)
Limited basic physical activity	33,458 (20.5)	37,798 (35.6)	39,571 (42.4)	29,798 (43.2)
Cognitive difficulty	28,373 (17.4)	31,748 (29.9)	25,484 (27.3)	10,478 (15.2)
Difficulty dressing, bathing, getting around	8,457 (5.17)	11,825 (11.2)	7,838 (8.4)	11,326 (16.4)
Difficulty going outside home alone	12,686 (7.76)	18,245 (17.2)	4,284 (4.59)	16,371 (23.7)
Psychological distress (Kessler Score > 6) past month	8,818 (5.39)	18,007 (17)	5,764 (6.18)	4,025 (5.84)
Body Mass Index (BMI)				
0–18.49 (underweight)	344 (0.21)	2,670 (2.52)	1,751 (1.88)	2,074 (3.01)
18.5–22.99 (acceptable risk)	11,572 (7.08)	18,027 (17)	12,111 (13)	19,903 (28.9)
23–27.4 (increased risk)	79,908 (48.9)	38,495 (36.3)	40,603 (43.5)	18,309 (26.5)
≥ 27.5 (high risk)	71,660 (43.8)	46,850 (44.2)	38,834 (41.6)	28,678 (41.6)
Health behaviors				
Never smoked regularly	96,491 (59)	58,665 (55.3)	48,187 (51.6)	36,090 (52.3)
Quit smoking	39,529 (24.2)	31,498 (29.7)	36,741 (39.4)	28,433 (41.2)
Current smoker	27,463 (16.8)	15,879 (15)	8,368 (8.97)	4,440 (6.44)
Healthcare access				
Currently uninsured	5,610 (3.43)	8,938 (8.43)	194 (0.208)	1,597 (2.32)
Covered California insurance	14,817 (9.06)	7,059 (6.66)	78 (0.0842)	185 (0.268)
3 or more doctor visits in past 12 months	72,188 (44.2)	65,657 (61.9)	68,881 (73.8)	41,264 (59.8)
Has no usual place to go when sick or needing health advice	18,147 (11.1)	15,549 (14.7)	3,984 (4.27)	3,527 (5.11)
Delay/not get prescription in past 12 months	30,969 (18.9)	23,634 (22.3)	13,476 (14.4)	6,574 (9.53)
Delay/not get other medical care in past 12 months	27,509 (16.8)	27,136 (25.6)	6,081 (6.52)	8,181 (11.9)

Note: Bolded numbers indicate statistical significance at $p < .05$

SIMILARITIES AND DIFFERENCES BY SEXUAL IDENTITY AMONG LGB OLDER ADULTS—LESBIAN AND GAY VERSUS BISEXUAL

Demographic Characteristics

To assess differences by sexual identity within LGB older adults by age groups, we analyzed lesbian and gay older adults separately from bisexual older adults (Table 5; Appendix Table A5 shows standard errors and test statistics). There were no statistically significant differences between lesbian and gay, and bisexual, respondents on most demographic characteristics such as education or employment in both age groups, with the exception of home ownership, nativity and employment among the 65 and older age group. Among those aged 65 and older, bisexual (42.3%) respondents were less likely to report owning their home than gay and lesbian respondents (70.4%). Though not statistically significant, 50–64 year old bisexual adults were more likely than gay or lesbian adults to live alone (36.2% vs. 27.2%), but those older than 65 were less likely than gay or lesbian adults to live alone (33.9% vs. 43.5%). Among the 65 and older age group, bisexual respondents (65%) were less likely than lesbians and gay men to have been born in the U.S. (87.2%). In this same age group, bisexuals were more likely than lesbians and gay men to be unemployed but still looking for work. These differences were not statistically significant in the 50–64 age group. As far as differences among LGB subgroups, compared with their bisexual peers, lesbians and gay men aged 65 and older were more likely to have ever used the internet (83% of LG vs. 54.1% of bisexuals) and were about twice as likely to have used the internet to look up health information in the past 12 months (61.1% of LG vs. 34% of bisexuals).

Poverty, Food Insecurity, and Use of Social Security Benefits

With regard to food insecurity, bisexuals aged 50–64 were significantly more likely than their lesbian and gay counterparts to report food insecurity *with* periodic experiences of hunger (18.9% vs. 4.9%). A similar pattern existed with regard to food insecurity *without* periodic experiences of hunger (10.9% vs. 4.5%), but this difference was not statistically significant. Among LGB people aged 65 and older, bisexual respondents were more likely than lesbians and gay men to live 200% below the federal poverty level (55.7% vs. 29%).

Table 5. Demographic Characteristics of Lesbian, Gay, and Bisexual Older Adults in the 2015–2016 California Health Interview Survey, by Sexual Identity (Estimated California Population Size)

Variable	Age 50–64		Age 65+	
	Lesbian and Gay (weighted %)	Bisexual (weighted %)	Lesbian and Gay (weighted %)	Bisexual (weighted %)
Gender				
Male	106,360 (62.9)	57,124 (56.9)	58,186 (58.4)	35,111 (56.1)
Female	62,772 (37.1)	43,270 (43.1)	41,447 (41.6)	27,516 (43.9)
Race/Ethnicity				
Hispanic	22,801 (13.5)	23,828 (23.7)	20,125 (20.2)	12,696 (20.3)
Non-Hispanic White	115,225 (68.1)	61,722 (61.5)	68,959 (69.2)	29,683 (47.4)
Non-Hispanic African American	13,793 (8.16)	8,359 (8.33)	4,676 (4.69)	12,471 (19.9)
Non-Hispanic American Indian or Alaskan Native	814 (0.481)	756 (0.753)	0 (0)	106 (0.169)
Non-Hispanic Asian	10,525 (6.22)	3,973 (3.96)	4,836 (4.85)	7,052 (11.3)
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	5,975 (3.53)	1,755 (1.75)	1,039 (1.04)	619 (0.988)
Marital status				
Married or domestic partnership (same or different sex partners)	63,054 (37.3)	31,434 (31.3)	36,198 (36.3)	31,504 (50.3)
Living with partner	30,366 (17.9)	6,776 (6.75)	4,682 (4.7)	5,930 (9.47)
Widowed, separated or divorced	24,033 (14.2)	34,807 (34.7)	32,732 (32.9)	18,342 (29.8)
Never married	51,709 (30.6)	27,377 (27.3)	26,022 (26.1)	6,850 (10.9)
Live alone	45,992 (27.2)	36,357 (36.2)	43,334 (43.5)	21,237 (33.9)
Home ownership	110,540 (65.4)	45,322 (45.1)	70,169 (70.4)	26,501 (42.3)
Education				
< HS education	15,458 (9.14)	21,355 (21.3)	11,118 (11.2)	19,626 (31.3)
HS diploma or some college	70,851 (41.9)	32,765 (32.6)	36,917 (37.1)	18,755 (29.9)
College degree or above	82,824 (49)	46,274 (46.1)	51,599 (51.8)	24,246 (38.7)
Employment status				
Employed	115,262 (68.1)	65,157 (64.9)	26,405 (26.5)	13,453 (21.5)
Unemployed, looking for work	6,991 (4.13)	2,073 (2.06)	0 (0)	543 (0.868)
Unemployed, not looking for work	46,879 (27.7)	33,164 (33)	73,228 (73.5)	48,630 (77.7)
Nativity (born in US)	136,842 (80.9)	63,688 (63.4)	86,853 (87.2)	40,701 (65)
Veteran status (ever serve in US armed forces)	14,443 (8.54)	4,598 (4.58)	19,865 (19.9)	7,349 (11.7)
Urbanicity				
Rural	15,807 (9.35)	9,337 (9.3)	7,085 (7.11)	7,620 (12.2)
Urban	153,325 (90.7)	91,057 (90.7)	92,549 (92.9)	55,007 (87.7)
Internet usage				
Ever used internet	154,515 (91.4)	82,759 (82.4)	82,705 (83)	33,857 (54.1)
Use internet to look up healthinfo in past 12 months	120,646 (71.3)	64,994 (64.7)	60,914 (61.1)	21,284 (34)
Living 200% below the federal poverty level	37,692 (22.3)	42,918 (42.7)	28,884 (29)	34,876 (55.7)
Food security				
Food secure	153,252 (90.6)	70,417 (70.1)	161,086 (95.2)	88,772 (88.4)
Food insecure without hunger	7,643 (4.52)	10,964 (10.9)	4,449 (4.47)	3,437 (4.86)
Food insecure with hunger	8,238 (4.87)	19,013 (18.9)	6,846 (6.87)	1,899 (3.03)
Receive food stamp benefits	8,046 (4.76)	11,621 (11.6)	10,870 (10.9)	1,476 (2.36)
Receive supplemental security income	11,826 (6.99)	17,222 (17.2)	7,656 (7.68)	10,193 (16.3)
Receive social security disability insurance	19,613 (40.3)	16,947 (51)	–	–
Received social security pension last month	3,322 (33.3)	1,390 (23.7)	43,456 (96.2)	34,038 (75.9)

Note: Bolded numbers indicate statistical significance at $p < .05$

Health Outcomes, Health Behaviors, and Access to Healthcare

Lesbians and gay men did not differ significantly from bisexuals in terms of their health status, health behaviors, and access to healthcare (Table 6; Appendix Table A6 shows standard errors and test statistics). Though not statistically significant, 20% of bisexuals between ages 50–64 and 17.9% of bisexuals aged 65 or older reported difficulty going outside of their homes alone compared with 6.4% and 9.5%, respectively, of lesbians and gay men. Among bisexuals only, 17.2% of bisexual aged 50–64 reported experiencing psychological distress whereas 1.5% of bisexuals aged 65 or older reported feeling distressed in the month prior to being interviewed.

Table 6. Health Outcomes, Health Behaviors, and Health Access of Lesbians, Gay, and Bisexuals in the 2015–2016 California Health Interview Survey, by Sexual Identity (Estimated California Population Size)

Variable	Age 50–64		Age 65+	
	Lesbian and Gay (weighted %)	Bisexual (weighted %)	Lesbian and Gay (weighted %)	Bisexual (weighted %)
Health outcomes				
General health fair or poor	37,085 (21.9)	24,523 (24.4)	28,801 (28.9)	24,250 (38.7)
Asthma	27,506 (16.3)	17,204 (17.1)	16,656 (16.7)	10,409 (16.6)
Diabetes	17,114 (10.1)	13,609 (13.6)	28,066 (28.2)	15,197 (24.3)
High blood pressure	62,769 (37.1)	51,002 (50.8)	66,179 (66.4)	39,830 (63.6)
Heart disease	11,039 (6.53)	11,517 (11.5)	20,108 (20.2)	14,217 (22.7)
Disability status due to physical, mental or emotional conditions	60,248 (35.6)	47,068 (46.9)	46,530 (46.7)	37,480 (59.8)
Limited basic physical activity	35,985 (21.3)	35,271 (35.1)	38,374 (38.5)	30,996 (49.5)
Cognitive difficulty	29,560 (17.5)	30,561 (30.4)	21,046 (21.1)	14,916 (23.8)
Difficulty dressing, bathing, getting around	10,873 (6.43)	9,409 (9.37)	13,029 (13.1)	6,135 (9.8)
Difficulty going outside home alone	10,884 (6.44)	20,047 (20)	9,470 (9.5)	11,185 (17.9)
Psychological distress (Kessler Score > 6) past month	9,576 (5.66)	17,248 (17.2)	8,791 (8.82)	997 (1.59)
Body Mass Index (BMI)				
0–18.49 (underweight)	18,698 (0.97)	1,363 (1.36)	3,251 (3.26)	573 (0.91)
18.5–22.99 (acceptable risk)	1,651 (11.1)	10,901 (10.9)	20,124 (20.2)	11,889 (19.0)
23–27.4 (increased risk)	80,583 (47.6)	37,820 (37.7)	31,561 (31.7)	27,350 (43.7)
≥ 27.5 (high risk)	68,201 (40.3)	50,309 (50.1)	44,697 (44.9)	22,814 (36.4)
Health behaviors				
Never smoked regularly	86,039 (50.9)	69,117 (68.8)	49,850 (50)	34,427 (55)
Quit smoking	53,586 (31.7)	17,442 (17.4)	41,233 (41.4)	23,942 (38.2)
Current smoker	29,507 (17.4)	13,835 (13.8)	8,551 (8.58)	4,257 (6.8)
Healthcare access				
Currently uninsured	7,735 (4.57)	6,813 (6.79)	137 (0.137)	1,655 (2.64)
Covered California insurance	16,444 (9.72)	5,432 (5.41)	0 (0)	264 (0.421)
3 or more doctor visits in past 12 months	91,867 (54.3)	45,979 (45.8)	72,391 (72.7)	37,754 (60.3)
Has no usual place to go when sick or needing health advice	15,807 (9.35)	17,889 (17.8)	4,660 (4.68)	2,851 (4.55)
Delay/not get prescription in past 12 months	28,095 (16.6)	26,507 (26.4)	13,296 (13.3)	6,573 (10.8)
Delay/not get other medical care in past 12 months	27,348 (16.2)	27,297 (27.2)	9,331 (9.37)	4,931 (7.87)

Note: Bolded numbers indicate statistical significance at $p < .05$

SIMILARITIES AND DIFFERENCES BY ETHNICITY AMONG LGB OLDER ADULTS—HISPANIC/LATINO VS. NON-HISPANIC/LATINO POPULATIONS

Demographic Characteristics

We assessed demographic characteristics of Hispanic/Latino and non-Hispanic/Latino LGB adults by age groups (Table 7; Appendix Table A7 shows standard errors and test statistics). More Hispanic/Latino LGBs compared with non-Hispanic/Latino LGBs had a lower than high school level education (43.7% vs. 7.38% among people aged 50–64 and 56.5% vs. 9.4% among those aged 65 and older). There were also statistically significant differences in nativity, with more Hispanic/Latino LGBs than non-Hispanic/Latino LGBs born outside the U.S. (81.8% vs. 39% of people aged 50–64 and 88.3% vs. 40.5% among those aged 65 and older, respectively). Non-Hispanic/Latino LGB adults in both age groups were about twice as likely to have used the internet compared to Hispanic/Latino LGB adults (94% non-Hispanic/Latino vs. 59.4% Hispanic/Latino LGB adults aged 50–64; and 80.7% non-Hispanic/Latino vs. 36.9% Hispanic/Latino LGB adults aged 65 and older). Non-Hispanic/Latino LGB adults aged 50–64 were also more likely to have looked up health information on the internet in the year prior to interview compared with Hispanic/Latino LGBs (77.7% vs. 26.6%). A similar pattern was found among the 65 and older group, but the difference is not statistically significant.

Poverty, Food insecurity, and use of Social Security Benefits

More LGB Hispanic/Latinos than non-Hispanic/Latinos lived 200% below the federal poverty line (61.5% vs. 23.3% among those aged 50–64 and 74.2% vs. 30.4% of those aged 65 and older). There were also significant differences between LGB non-Hispanic/Latino and Hispanic/Latino respondents for both age groups in regard to food security. Among respondents aged 50–64, more LGB Hispanic/Latinos than non-Hispanic/Latinos experienced food insecurity *without* periodic experiences of hunger (18.1% vs. 4.6%). Among respondents aged 65 and older, more LGB Hispanic/Latinos than non-Hispanic/Latinos were food insecure *with* periodic experiences of hunger (23.8% vs. 0.7%). There was a similar pattern between Hispanic/Latinos and non-Hispanic/Latinos reporting food insecurity *with* periodic experiences of hunger (19.5% vs. 8.15%), but this difference was not statistically significant. Also, LGB Hispanic/Latino respondents aged 65 and older were four times more likely to have received supplemental security income than their non-Hispanic/Latino LGB counterparts (27.8% vs. 6.73%).

Table 7. Demographic Characteristics of Lesbian, Gay, Bisexual Older Adults in the 2015–2016 California Health Interview Survey, by Ethnicity (Estimated California Population Size)

Variable	Age 50–64		Age 65 +	
	Non-Hispanic (weighted %)	Hispanic (weighted %)	Non-Hispanic (weighted %)	Hispanic (weighted %)
Gender				
Male	137,991 (61.9)	25,493 (54.7)	74,837 (57.8)	18,460 (56.2)
Female	84,906 (38.1)	21,136 (45.3)	54,602 (42.2)	14,361 (43.8)
Marital status				
Married or domestic partnership (same or different sex partners)	81,315 (36.5)	13,173 (28.3)	51,499 (39.8)	16,204 (49.4)
Living with partner	29,697 (13.3)	7,414 (15.9)	10,612 (8.2)	0 (0)
Widowed/separated/divorced	51,847 (23.3)	6,993 (15)	37,354 (28.9)	13,720 (41.8)
Never married	60,038 (26.9)	19,048 (40.9)	29,975 (23.2)	2,897 (8.83)
Legally married or domestic partner with same sex partner	59,086 (26.5)	7,610 (16.3)	35,697 (27.5)	7,895 (24.1)
Live alone	69,972 (31.4)	12,376 (26.5)	56,657 (43.8)	7,914 (24.1)
Home ownership	136,218 (61.1)	19,644 (42.1)	82,514 (63.7)	14,156 (43.1)
Education				
< HS education	16,458 (7.38)	20,354 (43.7)	12,214 (9.44)	18,530 (56.5)
HS diploma or some college	85,965 (38.6)	17,651 (37.9)	43,957 (34)	11,715 (35.7)
College degree or above	120,474 (54)	8,624 (18.5)	73,269 (56.6)	2,576 (7.85)
Employment status				
Employed	146,915 (65.9)	33,505 (71.9)	34,720 (26.8)	5,138 (15.7)
Unemployed, looking for work	6,711 (3.01)	2,353 (5.05)	543 (0.42)	0 (0)
Unemployed, not looking for work	69,272 (31.1)	10,771 (23.1)	94,175 (72.8)	27,683 (84.3)
Nativity (born in US)	182,327 (81.8)	18,203 (39)	114,246 (88.3)	13,308 (40.5)
Veteran status (ever serve in US armed forces)	17,963 (8.06)	1,078 (2.31)	21,760 (16.8)	5,455 (16.6)
Urbanicity				
Rural	23,156 (10.4)	1,988 (4.26)	12,121 (9.36)	2,584 (7.87)
Urban	199,741 (89.6)	44,641 (95.7)	117,318 (90.6)	30,237 (92.1)
Internet usage				
Ever used internet	209,575 (94)	27,699 (59.4)	104,462 (80.7)	12,100 (36.9)
Use internet to look up health info in past 12 months	173,246 (77.7)	12,393 (26.6)	74,568 (57.6)	7,630 (23.2)
Living 200% below the federal poverty level	51,910 (23.3)	28,700 (61.5)	39,406 (30.4)	24,353 (74.2)
Food security				
Food secure	194,552 (87.3)	29,117 (62.4)	122,344 (94.5)	23,285 (70.9)
Food insecure without hunger	10,169 (4.56)	8,437 (18.1)	6,146 (4.75)	1,740 (5.3)
Food insecure with hunger	18,176 (8.15)	9,075 (19.5)	949 (0.733)	7,795 (23.8)
Receive food stamp benefits	15,777 (7.08)	3,891 (8.34)	5,117 (3.95)	7,229 (22)
Receive supplemental security income	26,850 (12)	2,198 (4.71)	8,709 (6.73)	9,140 (27.8)
Receive social security disability insurance	33,663 (11.5)	2,898 (16.5)	–	–
Received social security pension last month	3,212 (34.8)	1,501 (22.8)	55,837 (88.5)	21,657 (80.4)

Note: Bolded numbers indicate statistical significance at $p < .05$

Health Outcomes, Health Behaviors, and Access to Healthcare

There were few differences in health outcomes between LGB Hispanic/Latinos and non-Hispanic/Latinos (Table 8; See Appendix Table A8 for standard errors and test statistics). However, Hispanic/Latino LGBs in the 65 and older age group were more likely than their counterparts who were non-Hispanic/Latino to have had psychological distress in the month prior to being interviewed (23.5 % vs. 1.6 %) and more Hispanic/Latino LGBs than non-Hispanic/Latino LGBs had diabetes (19.4% vs. 9.7%). In terms of access to healthcare, Hispanic/Latino LGBs aged 65 or older were more likely than non-Hispanic/Latino LGBs to report not having a usual place to go when sick or in need of health advice (13.7% vs. 2.3%); those aged 50–64 were similarly more likely than non-Hispanic/Latino LGBs to report not having a usual place to go for treatment or advice (19.5% vs. 11%), but this difference was not statistically significant. Health insurance coverage differed significantly by ethnicity among those aged 50–64, with more Hispanic/Latinos than non-Hispanic/Latino LGBs lacking health insurance coverage (17.1% vs. 2.9%). There was no difference in health insurance coverage among Hispanic/Latino and non-Hispanic/Latino LGBs aged 65 and older.

Table 8. Health Outcomes, Health Behaviors, and Health Access of Older Adults in the 2015–2016 California Health Interview Survey, by Ethnicity (Estimated California Population Size)

Variable	Age 50–64		Age 65+	
	Non-Hispanic (weighted %)	Hispanic (weighted %)	Non-Hispanic (weighted %)	Hispanic (weighted %)
Health outcomes				
General health fair or poor	42,022 (18.9)	19,586 (42)	34,824 (26.9)	18,228 (55.5)
Asthma	38,445 (17.2)	6,265 (13.4)	18,467 (14.3)	8,597 (26.2)
Diabetes	21,686 (9.73)	9,037 (19.4)	26,712 (20.6)	16,551 (50.4)
High blood pressure	94,384 (42.3)	19,386 (41.6)	80,585 (62.3)	25,424 (77.5)
Heart disease	21,558 (9.67)	999 (2.14)	22,748 (17.6)	11,577 (35.3)
Disability status due to physical, mental or emotional conditions	83,041 (37.3)	24,275 (52.1)	62,646 (48.4)	21,364 (65.1)
Limited basic physical activity	58,239 (26.1)	13,017 (27.9)	50,722 (39.2)	18,648 (56.8)
Cognitive difficulty	44,655 (20)	15,467 (33.2)	25,543 (19.7)	10,419 (31.7)
Difficulty dressing, bathing, getting around	18,177 (8.16)	2,105 (4.51)	13,179 (10.2)	5,984 (18.2)
Difficulty going outside home alone	26,488 (11.9)	4,443 (9.53)	12,344 (9.54)	8,311 (25.3)
Psychological distress (Kessler Score > 6) past month	15,034 (6.74)	11,790 (25.3)	2,071 (1.6)	7,717 (23.5)
Body Mass Index (BMI)				
0–18.49 (underweight)	2,366 (1.06)	648 (1.39)	3,825 (2.95)	0 (0)
18.5–22.99 (acceptable risk)	24,761 (11.1)	4,838 (10.4)	24,162 (18.7)	7,851 (23.9)
23–27.4 (increased risk)	102,645 (46.1)	15,758 (33.8)	52,594 (40.6)	6,317 (19.2)
≥ 27.5 (high risk)	93,125 (41.8)	25,385 (54.4)	48,858 (37.7)	18,653 (56.8)
Smoking				
Never smoked regularly	124,659 (55.9)	30,498 (65.4)	67,963 (52.5)	16,314 (49.7)
Quit smoking	59,639 (26.8)	11,388 (24.4)	51,093 (39.5)	14,082 (42.9)
Current smoker	38,599 (17.3)	4,743 (10.2)	10,383 (8.02)	2,425 (7.39)
Healthcare access				
Currently uninsured	6,567 (2.95)	7,981 (17.1)	1,733 (1.34)	57.6 (0.176)
Covered California insurance	21,154 (9.49)	722 (1.55)	264 (0.204)	0
3 or more doctor visits in past 12 months	115,874 (52)	21,972 (47.1)	90,759 (70.1)	19,387 (59.1)
Has no usual place to go when sick or needing health advice	24,617 (11)	9,079 (19.5)	3,013 (2.33)	4,498 (13.7)
Delay/not get prescription in past 12 months	44,949 (20.2)	9,653 (20.7)	13,313 (10.3)	6,737 (20.5)
Delay/not get other medical care in past 12 months	43,972 (19.7)	10,673 (22.9)	11,106 (8.58)	3,156 (9.62)

Note: Bolded numbers indicate statistical significance at $p < .05$



CONCLUSIONS

This report uses the 2015–2016 CHIS data to assess similarities and differences in demographic characteristics and health outcomes between LGB adults and heterosexuals and among subgroups of LGB adults aged 50 and above. This is the first time that adults over age 70 in California were asked questions about sexual identity in the CHIS, a probability survey. Though data from both probability and non-probability types of surveys are valuable, the availability of data from a representative sample of Californians over age 50 is significant because so little national or state-specific data are available to describe unbiased estimates of the older LGBT population.

CHIS data allowed us to analyze the LGB older adult population in California. It also allowed us to look at similarities and differences by age groups and among LGB subgroups for whom there is not a lot of data from either probability or non-probability samples.

STUDY LIMITATIONS

Even with the large sample size of the CHIS, we are unable to include a sufficient number of transgender individuals in this age group to arrive at stable (i.e., precise) estimates of the population of California transgender older adults. Due to the small number of transgender individuals in the population—our estimate shows that less than 0.2% of California older adults are transgender—we can only describe sample characteristics, without inferring statistical probabilities (Appendix B1 and B2).

We found some similarities and differences between our results and results from California that are about a decade old. Similar to results found in an earlier study of LGB adults aged 50–70 using 2003, 2005, and 2007 CHIS data (Wallace et al., 2011), we found that LGB older adults were more likely to be men and live alone compared to straight older adults. Our 2015–2016 CHIS data also showed that LGB adults were less likely to be married or in a domestic partnership than straight older adults. However, unlike the results reported by Wallace and colleagues (2011) indicating LGB older adults were less likely to live below the 200% federal poverty level than their straight counterparts, we found there were no differences between the groups in terms of living below the 200% federal poverty level.

We also did not find any differences between LGB and straight older adults on various health outcomes and access to healthcare measures. In that, we failed to replicate previous findings from the CHIS surveys conducted in 2003, 2005, 2007. Using these survey data, Wallace and colleagues found that LGB older adults had higher levels of psychological distress, physical disability, and general fair/poor health as compared with heterosexuals. Our results did not show that. We do not know how to explain this other than to note that our survey was conducted 10 years later and included older people (those over age 70). But we cannot, using our data, determine whether time is related to improved conditions for LGB older adults in California, whether the 2015 results are biased somehow, or whether other factors explain this discrepancy in findings. We will have to wait until more data is available in coming years to determine whether our results signal a new trend or are an anomaly. Additional research is needed to help identify further potential explanations.

Our findings stem from California data and therefore are only representative of the California population. To the extent that California is different from other states—and there are many ways in which California is different, including its more progressive health policies and greater protections for LGBT people—then

our data could reflect the impact of the better social and policy environment of California compared with the rest of the United States. Data suggest that along with LGB residents of all ages in few other states, California LGB residents are indeed healthier than their heterosexuals peers (Gonzales & Ehrenfeld, 2018).

In non-probability studies outside of California, we found few statistically significant differences among the populations tested. In particular, we found fewer differences than typically reported in the literature between LGB and straight older adults. While we are unable to test the reasons for the differences between our and other findings reviewed in the Introduction section, we can point out some important differences and speculate on some potential explanations. First, CHIS is a probability sample that does not rely on volunteers from the LGBT community to participate but rather identifies LGBT individuals from among Californians who were called at random. If volunteers were recruited from LGBT communities are less healthy than the general population of older LGB people, that would explain why our results diverge from previous findings. This could be the case, for example, because participants in community organizations go there to receive needed services that healthier people do not seek.

SUMMARY AND IMPLICATIONS

We assessed differences among LGB subgroups by gender, sexual identity, and ethnicity. We found no differences by gender among LGB older adults with the exception that men were more likely to have served in the U.S. military than women and that LB women were more likely to be uninsured than GB men among those aged 65 and older. We found a few differences by sexual identity among LGB adults. In the 50–64 age group, bisexual respondents were more likely to experience food insecurity with hunger than their lesbian and gay counterparts. In the 65 and older age group, lesbians and gay men were more likely to own a home than bisexuals and bisexuals were more likely to live 200% below the federal poverty level. This result aligns with findings showing bisexual adults are more likely to experience poverty than lesbian and gay adults (Badgett et al., 2013).

LGB Hispanic/Latino older adults in both 50–64 and 65 and older age groups were more likely to be born outside the U.S., have lower levels of education, and be poor and food insecure than non-Hispanic/Latino LGB older adults. In terms of health outcomes, a higher proportion of LGB Hispanic/Latinos aged 65 and older had diabetes and experienced psychological distress. Among the 50–64 age group, more LGB Hispanic/Latinos lacked health insurance compared to their non-Hispanic/Latino counterparts. However, we found no disparities in health insurance among those 65 and older, probably due to availability of Medicare at this age. Similar health disparities have been documented between the general Hispanic/Latino and non-Hispanic/Latino populations in the United States (Kaiser, 2018).

Though as a group LGB older adults seem to have similar health statuses compared with their straight counterparts, more LGB older adults live alone and therefore may be more isolated in terms of traditional support systems. Interestingly, perhaps reflecting their need for more specialized health information, more LGB older adults than straight older adults used the internet to find health information. Utilization of the internet for future public health interventions targeting LGB older adults could be an effective way to reach this population, though there is a need to recognize that internet usage among subgroups of LGB older adults differed. Among LGB adults 65 and older, more lesbian and gay older adults, compared to bisexual older adults, use the internet and use the internet to find health information. Compared with non-Hispanic/Latino LGB adults, Hispanic/Latino LGB adults were less likely to use the internet, and within the 50–64 age group, fewer Hispanic/Latino LGB adults looked up health information online.

Our findings suggest that while LGBs who are non-Hispanic/Latino appear to fare well in California, disparities appear between Hispanic/Latino LGBs and their non-Hispanic/Latino counterparts. These findings are congruent with other studies that examined racial/ethnic health and quality of life disparities among LGB older adults, showing that Hispanic/Latino participants were more likely to be foreign-born

with socioeconomically disadvantaged status and experience elevated levels of stress compared to White participants (Kim & Fredriksen-Goldsen, 2017; Kim & Fredriksen-Goldsen, 2016). These findings call on government public health authorities and community health advocates to double their efforts to reduce health disparities by ethnicity. For example, authorities and advocates should consider the cultural context of LGB Hispanic/Latino older adults as both a sexual and racial/ethnic minorities when designing interventions to promote health equity. Future research will help better explain these disparities and can help facilitate appropriate interventions. LGB people with intersecting identities could benefit from more targeted health and social service programs.

Research is also needed to assess our hypothesis that progressive policies in California explain the differences between the results from the earlier CHIS study and this study. In general, more research is needed on LGBT older adults using probability samples, such as the CHIS, in California and other states. Such research would provide researchers and policy makers with statistics that are representative of the LGBT older adult population. Though these specific research areas or approaches are important, we find that there is a need for more research, whether using probability samples or non-probability samples, on LGBT older adults in general. For example, we still do not know much about LGBT older adults over age 70 or about challenges LGBT older adults face in terms of receiving social support. More research is needed to design and provide appropriate services to LGBT older adults.



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APPENDICES

APPENDIX A

Table A1. Standard Errors and Test Statistics for Demographic Characteristics of Older Adults in the 2015-2016 California Health Interview Survey, by Sexual Orientation (N = 26,530)

Variable	Age 50-64		OR [CI]	Age 65+		OR [CI]
	Straight	LGB		Straight	LGB	
	SE	SE	SE	SE		
Gender						
Male	0.57	5.52	1 [Ref]	0.30	6.01	1 [Ref]
Female	0.57	5.52	0.60 [0.37, 0.96]	0.30	6.01	0.58 [0.35, 0.97]
Race/ethnicity						
Hispanic	1	4.34	0.46 [0.24, 0.87]	1.05	5.49	1.01 [0.50, 2.04]
Non-Hispanic White	0.94	5.65	1 [Ref]	1.11	6.93	1 [Ref]
Non-Hispanic African American	0.45	0.46	1.02 [0.40, 2.61]	3.34	5.71	2.02 [0.53, 7.66]
Non-Hispanic American Indian or Alaskan Native	0.10	0.12	0.86 [0.24, 3.00]	0.34	0.11	0.10 [0.00, 2.21 x 10 ¹⁴]
Non-Hispanic Asian	0.71	0.80	0.37 [0.11, 1.26]	2.89	0.48	0.65 [0.26, 1.61]
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	0.26	0.23	1.07 [0.28, 4.09]	1.8	0.77	0.57 [0.11, 2.95]
Marital status						
Married or domestic partnership (same or different sex partners)	1.15	5.19	1 [Ref]	1.06	5.83	1 [Ref]
Living with partner	0.457	4.25	5.16 [2.41, 11.03]	0.424	2.67	3.01 [1.12, 8.05]
Widowed, separated or divorced	1.26	1.02	1.65 [0.65, 4.19]	7.41	5.98	1.13 [0.61, 2.07]
Never married	0.658	0.443	5.54 [3.29, 9.34]	5.6	4.47	6.10 [3.23, 11.53]
Live alone	0.68	6.59	2.79 [1.47, 5.28]	0.80	6.96	1.85 [1.02, 3.36]
Home ownership	9.2	9.56	0.60 [0.33, 1.09]	8.59	8.38	0.59 [0.34, 1.00]
Education						
< HS education	5.3	7.18	1 [Ref]	9.38	6.42	1 [Ref]
HS diploma or some college	8.49	7.26	1.26 [0.57, 2.78]	7.64	9.41	0.65 [0.26, 1.64]
College degree or above	9.44	7.54	1.75 [0.76, 4.03]	7.74	8.7	1.08 [0.47, 2.50]
Employment status						
Employed	1.03	5.35	1 [Ref]	1.04	5.7	1 [Ref]
Unemployed, looking for work	0.48	1.67	0.88 [0.30, 2.58]	0.22	0.25	0.28 [0.05, 1.44]
Unemployed, not looking for work	1.1	5.27	0.95 [0.57, 1.59]	1.08	5.73	0.80 [0.42, 1.51]
Nativity (born in US)	1.01	7.19	1.59 [0.73, 3.42]	0.97	4.5	1.36 [0.80, 2.32]
Veteran status (ever serve in US armed forces)	0.6	3.93	0.95 [0.26, 3.48]	0.72	4.03	0.84 [0.47, 1.49]
Urbanicity						
Rural	0.41	2.73	1 [Ref]	0.40	2.92	1 [Ref]
Urban	0.41	2.73	0.70 [0.36, 1.35]			0.90 [0.43, 1.89]
Internet usage						
Ever used internet	1.05	3.53	1.77 [0.90, 3.48]	1	6.7	1.57 [0.82, 3.02]
Use internet to look up health info in past 12 months	1.24	4.73	1.98 [1.27, 3.08]	0.98	6.77	1.71 [1.00, 2.92]
Living 200% below the federal poverty level	0.98	6.23	0.91 [0.49, 1.66]	1.12	6.17	1.30 [0.79, 2.16]
Food security						
Food secure	0.90	5.01	1 [Ref]	0.88	4.26	1 [Ref]
Food insecure without hunger	0.79	2.46	0.72 [0.33, 1.58]	0.77	2.38	0.54 [0.18, 1.58]
Food insecure with hunger	0.57	4.12	1.74 [0.66, 4.61]	0.61	3.78	1.78 [0.32, 9.69]
Receive food stamp benefits	0.43	2.91	1.19 [0.49, 2.90]	0.69	4.07	1.89 [0.54, 6.64]
Receive supplemental security income	0.45	3.58	2.22 [1.03, 4.76]	0.57	3.41	1.29 [0.62, 2.68]
Receive social security disability insurance	1.89	10	1.68 [0.71, 4.00]	-	-	-
Received social security pension last month	2.53	14.5	1.16 [0.28, 4.72]	1.82	5.84	1.53 [0.57, 4.07]

APPENDIX A

Table A2. Standard Errors and Odds Ratios for Health Outcomes, Health Behaviors, and Health Access of Older Adults in the 2015-2016 California Health Interview Survey, by Sexual Orientation (N = 26,530)

Variable	Age 50-64			Age 65+		
	Straight	LGB		Straight	LGB	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Health Outcomes						
General health fair or poor	1.1	4.66	0.78 [0.45, 1.32]	1.01	6.88	1.27 [0.67, 2.42]
Asthma	0.72	4.23	1.19 [0.63, 2.26]	0.74	4.28	1.18 [0.63, 2.22]
Diabetes	0.87	3.34	0.81 [0.41, 1.59]	0.90	3.34	1.34 [0.75, 2.39]
High blood pressure	0.96	5.84	1.12 [0.68, 1.83]	1.19	6.21	1.27 [0.73, 2.19]
Heart disease	0.57	3.49	1.09 [0.44, 2.70]	1.07	5.26	1.1 [0.59, 2.07]
Disability status due to physical/mental/emotional conditions	1.06	5.81	1.17 [0.73, 1.88]	1.08	6.66	1.1 [0.64, 1.91]
Limited basic physical activity	0.95	4.92	1.16 [0.70, 1.94]	0.99	6.52	1.5 [0.89, 2.55]
Cognitive difficulty	0.91	4.83	1.5 [0.86, 2.63]	1.11	6.26	1.3 [0.61, 2.76]
Difficulty dressing, bathing, getting around	0.60	3.12	1.12 [0.44, 2.88]	0.57	3.58	1.69 [0.84, 3.40]
Difficulty going outside home alone	0.63	3.95	1.63 [0.72, 3.68]	0.75	0.46	1.09 [0.46, 2.58]
Psychological distress (Kessler Score >6) past month	0.40	4.28	2.49 [0.93, 6.69]	0.44	4.11	2.22 [0.45, 11.07]
Body Mass Index (BMI)						
0-18.49 (underweight)	0.40	0.78	1.02 [0.18, 5.76]	0.38	1.46	1.0 [0.23, 4.27]
18.5-22.99 (acceptable risk)	0.77	3.03	1 [Ref]	0.89	5.47	1 [Ref]
23-27.4 (increased risk)	1.02	6.68	1.56 [0.80, 3.04]	1.16	6.17	0.91 [0.43, 1.94]
≥27.5 (high risk)	1.07	6.83	1.14 [0.57, 2.29]	1.06	5.9	0.97 [0.45, 2.06]
Health Behaviors						
Never smoked regularly	1.19	6.23	1 [Ref]	1.23	6.25	1 [Ref]
Quit smoking	1.02	5.36	1.03 [0.60, 1.88]	1.19	6.1	1.12 [0.66, 1.86]
Current smoker	0.80	3.98	1.16 [0.64, 2.13]	0.56	3.09	1.2 [0.49, 2.94]
Healthcare access						
Currently uninsured	0.76	1.92	0.58 [0.27, 1.25]	0.19	1.37	1.4 [0.01, 139.57]
Covered California insurance	0.55	2.79	1.13 [0.52, 2.42]	0.13	0.19	0.38 [0.02, 6.63]
3 or more Doctor visits in past 12 months	1.35	5.94	1.06 [0.65, 1.70]	1.09	5.48	1.45 [0.88, 2.40]
Has no usual place to go when sick or needing health advice	0.74	4.14	1.36 [0.63, 2.93]	0.59	1.66	0.72 [0.34, 1.54]
Delay/not get prescription in past 12 months	1.06	5.15	1.83 [0.94, 3.55]	0.84	3.91	1.47 [0.69, 3.10]
Delay/not get other medical care in past 12 months	0.96	4.27	1.56 [0.90, 2.68]	0.50	3.5	1.42 [0.57, 3.55]

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Table A3. Standard Errors and Test Statistics for Demographic Characteristics of Lesbian, Gay, Bisexual Older Adults in the 2016-2016 California Health Interview Survey, by Gender

Variable	Age 50-64			Age 65 +		
	Male	Female		Male	Female	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Race/Ethnicity						
Hispanic	5.19	5.9	1.35 [0.49, 3.71]	7.48	7.23	0.92 [0.27, 3.17]
Non-Hispanic White	7.73	8.01	1 [Ref]	9.81	7.83	1 [Ref]
Non-Hispanic African American	5.27	3.55	0.71 [0.10, 4.71]	9.31	3.02	0.22 [0.02, 1.70]
Non-Hispanic American Indian or Alaskan Native	0.365	1.05	3.39 [0.02, 436.09]	0	0.243	1.46 x 10 ⁷ [0.02, 9.68 x 10 ¹⁵]
Non-Hispanic Asian	3.13	5.23	1.26 [0.09, 16.85]	3.18	4.89	1.36 [0.29, 6.30]
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	2.41	2.43	1.45 [0.10, 19.59]	1.24	0.717	0.53 [0.02, 13.06]
Marital status						
Married or domestic partnership (same or different sex partners)	6.43	8.22	1 [Ref]	9.29	7.99	1 [Ref]
Living with partner	5.85	4.89	0.35 [0.08, 1.44]	2.38	5.65	2.18 [0.27, 17.11]
Widowed, separated or divorced	11.4	7.75	0.68 [0.11, 4.16]	7.16	9.57	2.54 [0.68, 9.50]
Never married	8.06	6.56	0.41 [0.16, 1.07]	7.34	3.94	0.50 [0.14, 1.77]
Live alone	9.93	5.68	0.46 [0.15, 1.38]	9.33	8.22	0.47 [0.17, 1.27]
Home ownership	9.2	9.56	1.08 [0.39, 2.95]	8.59	8.38	1.44 [0.53, 3.91]
Education						
< HS education	5.3	7.18	1 [Ref]	9.38	6.42	1 [Ref]
HS diploma or some college	8.49	7.26	0.93 [0.21, 4.13]	7.64	9.41	1.86 [0.37, 9.38]
College degree or above	9.44	7.54	0.62 [0.13, 2.89]	7.74	8.7	1.23 [0.30, 5.09]
Employment status						
Employed	7.69	6.55	1 [Ref]	5.75	10.3	1 [Ref]
Unemployed, looking for work	2.55	1.64	0.60 [0.08, 4.22]	0.29	0.436	0.91 [0.01, 44.63]
Unemployed, not looking for work	7.59	6.4	0.82 [0.32, 2.09]	5.74	10.3	0.52 [0.16, 1.73]
Nativity (born in US)	10.5	7.64	1.84 [0.45, 7.49]	6.14	7.66	0.56 [0.16, 1.93]
Veteran status (Ever serve in US armed forces)	6.34	1.33	0.25 [0.40, 1.61]	6.55	2.81	0.10 [0.01, 0.67]
Urbanicity						
Rural	4.46	2.92	1 [Ref]	3.02	4.89	1 [Ref]
Urban	4.46	2.92	1.18 [0.30, 4.61]	3.02	4.89	0.46 [0.13, 1.66]
Internet usage						
Ever used internet	4.39	5.56	0.83 [0.22, 3.04]	9.37	7.76	1.06 [0.35, 3.24]
Use internet to look up health info in past 12 months	6.95	6.89	1.03 [0.40, 2.67]	8.89	9.53	0.98 [0.36, 2.65]
Living 200% below the federal poverty level	7.17	9.74	1.54 [0.52, 4.48]	9.06	8.02	0.64 [0.22, 1.88]
Food security						
Food secure	5.48	7.75	1 [Ref]	6.86	1.96	1 [Ref]
Food insecure without hunger	2.95	4.47	1.57 [0.30, 8.16]	4.01	1.21	0.28 [0.05, 1.52]
Food insecure with hunger	5.03	6.8	1.75 [0.27, 11.10]	6.29	1.48	0.19 [0.01, 2.74]
Receive food stamp benefits	4.61	2.74	0.57 [0.10, 3.07]	6.81	1.86	0.24 [0.03, 1.68]
Receive supplemental security income	3.87	6.19	2.05 [0.49, 8.53]	4.64	5.21	1.43 [0.34, 6.03]
Receive social security disability insurance	13.8	14.1	1.64 [0.30, 8.98]	-	-	-
Received social security pension last month	16.1	25.8	2.66 [0.14, 49.35]	6.32	11	0.34 [0.04, 2.44]

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Table A4. Standard Errors and Odds Ratios for Health Outcomes, Health Behaviors, and Health Access of Lesbian, Gay, and Bisexual Older Adults in the 2015-2016 California Health Interview Survey by Gender

Variable	Age 50–64			Age 65+		
	Male	Female	OR [CI]	Male	Female	OR [CI]
	SE	SE		SE	SE	
Health Outcomes						
General health fair or poor	6.68	6.07	1.24 [0.44, 3.46]	9.94	7.29	0.66 [0.22, 1.92]
Asthma	3.95	7.46	2.51 [0.93, 6.74]	4.99	7.43	1.63 [0.47, 5.56]
Diabetes	4.01	5.99	1.79 [0.44, 7.32]	7.97	7.44	0.48 [0.13, 1.67]
High blood pressure	9.24	7.53	0.76 [0.26, 2.21]	7.71	9.25	0.62 [0.23, 1.70]
Heart disease	2.39	7.51	2.81 [0.55, 14.40]	6.02	8.3	1.14 [0.37, 3.48]
Disability status due to physical/mental/emotional conditions	7.96	7.91	1.55 [0.59, 4.04]	8.52	9.36	0.89 [0.34, 2.29]
Limited basic physical activity	6.27	7.94	2.15 [0.72, 6.35]	9.23	9.65	1.03 [0.34, 3.11]
Cognitive difficulty	5.22	9.29	2.03 [0.61, 6.77]	10.1	6.05	0.47 [0.11, 2.04]
Difficulty dressing, bathing, getting around	3.2	5.75	2.30 [0.37, 14.20]	4.08	8.85	2.14 [0.28, 16.25]
Difficulty going outside home alone	3.19	8.34	2.47 [0.55, 10.90]	3.14	9.7	6.46 [0.87, 47.88]
Psychological distress (Kessler Score >6) past month	3.26	8.85	3.58 [0.58, 21.94]	6.09	4.62	0.94 [0.03, 23.80]
Body Mass Index (BMI)						
0–18.49 (underweight)	0.34	9.78	4.98 [0.00, 3.88]	1.66	2.56	0.72 [0.03, 13.17]
18.5–22.99 (acceptable risk)	2.46	6.42	1 [Ref]	6.28	9.75	1 [Ref]
23–27.4 (increased risk)	8.76	9.78	0.30 [0.07, 1.22]	7.79	8.71	0.27 [0.05, 1.35]
≥27.5 (high risk)	8.96	9.66	0.37 [0.11, 1.58]	7.15	9.77	0.44 [0.09, 2.01]
Health Behaviors						
Smoking						
Never smoked regularly	8.24	7.94	1 [Ref]	8.45	9.35	1 [Ref]
Quit smoking	5.86	8.31	1.31 [0.50, 3.37]	8.24	9.45	1.03 [0.35, 3.03]
Current smoker	5.8	4.64	0.95 [0.30, 3.00]	4.68	3.16	0.70 [0.14, 3.40]
Healthcare access						
Currently uninsured	1.87	3.89	2.59 [0.56, 11.79]	0.331	3.18	11.3 [1.24, 103.86]
Covered California insurance	3.91	3.22	0.71 [0.19, 2.69]	0.12	0.412	3.19 [0.34, 29.75]
3 or more Doctor visits in past 12 months	8.34	7.8	2.05 [0.76, 5.54]	6.72	7.92	0.52 [0.21, 1.31]
Has no usual place to go when sick or needing health advice	4.75	7.2	1.37 [0.31, 6.07]	2.47	2.88	1.20 [0.18, 7.86]
Delay/not get prescription in past 12 months	7.32	7.28	1.22 [0.33, 4.51]	5.32	5.27	0.62 [0.13, 2.95]
Delay/not get other medical care in past 12 months	5.35	6.72	1.69 [0.65, 4.76]	3.35	8.17	1.93 [0.20, 18.00]

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Table A5. Standard Errors and Test Statistics for Demographic Characteristics of Lesbian, Gay, and Bisexual Older Adults in the 2015-2016 California Health Interview Survey, by Sexual Identity

Variable	Age 50-64			Age 65+		
	Lesbian and Gay	Bisexual		Lesbian and Gay	Bisexual	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Gender						
Male	6.58	11.1	1 [Ref]	7.8	9.66	1 [Ref]
Female	6.58	11.1	1.28 [0.44, 3.73]	7.8	9.66	1.10 [0.40, 2.99]
Race/Ethnicity						
Hispanic	4.2	8.92	1.95 [0.54, 6.99]	6.84	7.88	1.46 [0.45, 4.72]
Non-Hispanic White	6.63	12.1	1 [Ref]	7.66	10.3	1 [Ref]
Non-Hispanic African American	4.44	5.99	1.13 [0.11, 11.61]	3.63	12.4	6.19 [0.54, 70.87]
Non-Hispanic American Indian/Alaskan Native	0.472	1.02	1.73 [0.00, 7388.37]	0	0.276	1.36 x 10 ⁸ [833.39, 2.23 x 10 ¹³]
Non-Hispanic Asian	3.9	4.32	0.70 [0.01, 31.52]	3.01	6.05	3.38 [0.56, 20.25]
Other/two or more races	2.66	1.86	0.54 [0.01, 17.09]	0.981	1.28	1.38 [0.01, 113.87]
Marital status						
Married or domestic partnership (same or different sex partners)	5.53	9.92	1 [Ref]	6.34	10.3	1 [Ref]
Living with partner	5.46	4.18	0.44 [0.100, 2.00]	2.21	5.65	1.45 [0.22, 9.26]
Widowed, separated or divorced	6.34	15.4	2.90 [0.47, 17.93]	7.88	8.79	0.64 [0.19, 2.12]
Never married	5.61	10.1	1.06 [0.40, 2.78]	6.2	4.73	0.30 [0.08, 1.05]
Live alone	5.36	14.5	1.52 [0.37, 6.14]	8.07	11.8	0.66 [0.20, 2.14]
Household ownership	6.26	12.7	0.43 [0.14, 1.27]	6.01	9.44	0.30 [0.12, 0.76]
Education						
< HS education	4.06	9.59	1 [Ref]	4.41	12.3	1 [Ref]
HS diploma or some college	6.98	10.8	0.33 [0.06, 1.61]	7.42	8.82	0.28 [0.07, 1.06]
College degree or above	7.01	13.9	0.40 [0.07, 2.17]	8.17	9.68	0.26 [0.05, 1.18]
Employment status						
Employed	6.4	11.5	1 [Ref]	7.82	7.85	1 [Ref]
Unemployed, looking for work	2.4	1.61	0.52 [0.05, 4.65]	0	0.641	2.70 [18.28, 400]
Unemployed, not looking for work	5.82	11.2	1.25 [0.37, 4.20]	7.82	7.98	1.30 [0.38, 4.41]
Nativity (born in US)	5.5	15.2	0.40 [0.08, 1.90]	4.57	9.54	0.27 [0.08, 0.86]
Veteran status (Ever serve in US armed forces)	5.64	4.43	0.51 [0.02, 11.97]	5.53	4.64	0.53 [0.17, 1.61]
Urbanicity						
Rural	2.97	5.83	1 [Ref]	3.34	6.08	1 [Ref]
Urban	2.97	5.83	1.00 [0.18, 5.35]	3.34	6.08	0.55 [0.10, 2.91]
Internet usage						
Ever used internet	3.23	8.42	0.44 [0.09, 1.98]	5.32	11	0.24 [0.08, 0.65]
Use internet to look up health info in past 12 months	5.64	10.5	0.73 [0.23, 2.28]	7.88	8.64	0.32 [0.13, 0.81]
Living 200% below the federal poverty level	5.22	12.8	2.60 [0.90, 7.52]	7.2	9.99	3.07 [1.05, 9.02]
Food security						
Food secure	2.85	11.2	1 [Ref]	2.1	6.87	1 [Ref]
Food insecure without hunger	1.52	6.56	3.12 [0.57, 16.82]	3.37	3.8	1.19 [0.09, 14.49]
Food insecure with hunger	1.93	9.33	5.02 [1.52, 16.56]	5.85	2.08	0.42 [0.03, 5.34]
Receive food stamp benefits	2.1	6.87	2.62 [0.52, 13.10]	6.22	2.18	0.19 [0.01, 2.51]
Receive supplemental security income	2.56	8.66	2.75 [0.64, 11.67]	3.59	6.87	2.33 [0.57, 9.46]
Receive social security disability insurance	12.0	18.4	1.54 [0.25, 9.48]	-	-	-
Received social security pension last month	17.6	28.1	269.18	3.16	11.2	0.12 [0.01, 1.15]

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Table A6. Standard Errors and Odds Ratios for Health Outcomes, Health Behaviors, and Health Access of Lesbian, Gay, and Bisexual Older Adults in the 2015-2016 California Health Interview Survey (CHIS), by Sexual Identity

Variable	Age 50-64			Age 65+		
	Lesbian and Gay	Bisexual		Lesbian and Gay	Bisexual	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Health Outcomes						
General health fair or poor	5.4	9.12	1.15 [0.35, 3.70]	8.41	11.9	1.55 [0.41, 5.78]
Asthma	4.38	7.44	1.06 [0.35, 3.22]	5.28	6.78	0.99 [0.30, 3.27]
Diabetes	3.4	6.94	1.39 [0.34, 5.58]	7.59	8.09	0.81 [0.25, 2.58]
High blood pressure	5.65	12.7	1.74 [0.53, 5.67]	7.27	9.35	0.88 [0.35, 2.22]
Heart disease	3.37	6.57	1.85 [0.37, 9.07]	6.33	8.32	1.16 [0.36, 3.72]
Disability status due to physical/mental/emotional conditions	5.89	13	1.59 [0.49, 5.10]	8.59	9.35	1.70 [0.61, 4.71]
Limited basic physical activity	4.81	11.2	2.00 [0.63, 6.29]	8.38	10.1	1.56 [0.53, 4.58]
Cognitive difficulty	4.34	10.5	2.06 [0.69, 6.16]	7.2	12.2	1.16 [0.21, 6.40]
Difficulty dressing, bathing, getting around	3.28	5.01	1.50 [0.36, 6.27]	5.96	5.75	0.72 [0.10, 5.02]
Difficulty going outside home alone	2.08	9.76	3.62 [0.96, 13.68]	6.56	8.23	2.07 [0.24, 17.44]
Psychological distress (Kessler Score >6) past month	3.35	8.8	3.45 [0.72, 16.55]	6.38	2.15	0.16 [0.00, 225.0]
Body Mass Index (BMI)						
0-18.49 (underweight)	0.85	1.07	1.41 [0.14, 14.0]	2.32	0.86	0.29 [0.02, 4.91]
18.5-22.99 (acceptable risk)	2.53	5.67	1 [Ref]	7.53	7.15	1 [Ref]
23-27.4 (increased risk)	7.28	11.9	0.80 [0.19, 3.29]	7.19	11	1.46 [0.33, 6.51]
≥27.5 (high risk)	6.9	13.8	1.26 [0.24, 6.42]	7.45	9.45	0.86 [0.22, 3.35]
Health Behaviors						
Smoking						
Never smoked regularly	6.22	10.4	1 [Ref]	8.42	10.8	1 [Ref]
Quit smoking	5.8	8.39	0.40 [0.11, 1.42]	7.8	10.4	0.84 [0.25, 2.74]
Current smoker	5.09	5.74	0.58 [0.17, 1.98]	4.54	3.76	0.72 [0.10, 4.72]
Healthcare access						
Currently uninsured	1.95	4.1	1.5 [0.30, 7.67]	0.209	3.49	19.79 [0.01, 20390.73]
Covered California insurance	3.44	3.73	0.53 [0.10, 2.60]	0	0.491	-
3 or more Doctor visits in past 12 months	6.56	12.4	0.71 [0.22, 2.23]	6.56	9.9	0.57 [0.20, 1.62]
Has no usual place to go when sick or needing health advice	4.19	9.22	2.10 [0.39, 11.07]	2.48	2.92	0.97 [0.13, 6.86]
Delay/not get prescription in past 12 months	5.99	10.9	1.80 [0.41, 7.86]	4.45	6.6	0.78 [0.15, 3.88]
Delay/not get other medical care in past 12 months	4.43	9.4	1.93 [0.60, 6.19]	5.75	4.75	0.82 [0.09, 7.54]

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Table A7. Standard Errors and Test Statistics for Demographic Characteristics of Lesbian, Gay, and Bisexual Older Adults in the 2015-2016 California Health Interview Survey, by Ethnicity

Variable	Age 50–64			Age 65 +		
	Non-Hispanic	Hispanic		Non-Hispanic	Hispanic	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Gender						
Male	5.98	10.8	1 [Ref]	6.73	13.7	1 [Ref]
Female	5.98	10.8	1.34 [0.52, 3.48]	6.73	13.7	1.06 [0.31, 3.63]
Marital status						
Married or domestic partnership (same or different sex partners)	5.99	10.3	1 [Ref]	6.41	15.2	1 [Ref]
Living with partner	4.65	8.06	1.54 [0.37, 6.40]	3.25	0	0.00 [0.00, 679]
Widowed/separated/divorced	8.72	7.9	0.83 [0.14, 4.89]	6.4	16	1.16 [0.24, 5.49]
Never married	5.92	12.6	1.95 [0.52, 7.36]	5.39	5.26	0.30 [0.06, 1.39]
Live alone	7.53	9.12	0.78 [0.26, 2.39]	7.38	15	0.40 [0.64, 2.58]
Household ownership	7.76	12.3	0.46 [0.15, 1.36]	6.88	14.2	0.43 [0.12, 1.54]
Education						
< HS education	3.96	12.6	1 [Ref]	6.57	15.4	1 [Ref]
HS diploma or some college	7.21	11.6	0.16 [0.02, 0.96]	7.09	16.2	0.17 [0.01, 1.85]
College degree or above	7.28	7.87	0.05 [0.01, 0.32]	6.67	5.73	0.02 [0.00, 0.25]
Employment status						
Employed	6.22	10.4	1 [Ref]	6.6	12.2	1 [Ref]
Unemployed, looking for work	1.82	3.54	1.53 [0.22, 10.69]	0.31	0	0.00 [0.00, 442116]
Unemployed, not looking for work	6.13	10.2	0.68 [0.18, 2.53]	6.65	12.2	1.98 [0.25, 15.58]
Nativity (born in US)	8.31	10.5	0.14 [0.03, 0.56]	3.51	14	0.09 [0.02, 0.35]
Veteran status (Ever serve in US armed forces)	4.67	1.54	0.27 [0.04, 1.77]	3.4	15	0.98 [0.05, 18.8]
Urbanicity						
Rural	3.27	3.56	1 [Ref]	3.79	4.89	1 [Ref]
Urban	3.27	3.56	2.60 [0.29, 22.88]	3.79	4.89	1.20 [0.19, 7.46]
Internet usage						
Ever used internet	2.6	13	0.09 [0.02, 0.40]	7.12	15.8	0.13 [0.02, 0.72]
Use internet to look up health info in past 12 months	4.22	9.67	0.10 [0.03, 0.33]	7.42	15	0.22 [0.03, 1.55]
Living 200% below the federal poverty level	5.98	11.8	5.27 [1.73, 16.01]	6.97	12.2	6.57 [1.57, 27.3]
Food security						
Food secure	4.56	13.1	1 [Ref]	2.82	15	1 [Ref]
Food insecure without hunger	1.97	9.64	5.54 [0.97, 31.54]	2.77	3.32	1.48 [0.27, 8.17]
Food insecure with hunger	4.2	9.76	3.33 [0.62, 17.82]	0.621	15.7	43.15 [3.38, 550.24]
Receive food stamp benefits	2.8	9.21	1.19 [0.02, 48.02]	2.8	15.6	6.86 [0.50, 93.07]
Receive supplemental security income	4.37	2.86	0.36 [0.07, 1.75]	2.89	12.9	5.34 [1.04, 27.45]
Receive social security disability insurance	11.5	16.5	0.36 [0.04, 2.61]	-	-	-
Received social security pension last month	17.3	26.8	0.55 [0.00, 63.74]	6.04	12.7	0.55 [0.00, 63.74]

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Table A8. Standard Errors and Odds Ratios for Health Outcomes, Health Behaviors, and Health Access of Lesbian, Gay, and Bisexual Older Adults in the 2015-2016 California Health Interview Survey (CHIS), by Ethnicity

Variable	Age 50–64			Age 65+		
	Non-Hispanic	Hispanic		Non-Hispanic	Hispanic	
	SE	SE	OR [CI]	SE	SE	OR [CI]
Health Outcomes						
General health fair or poor	5.03	12.4	3.11 [0.88, 10.9]	7.26	15.2	3.39 [0.84, 13.60]
Asthma	4.36	7.24	0.744 [0.23, 2.34]	4.05	13.4	2.13 [0.45, 10.00]
Diabetes	3.64	9.98	2.23 [0.45, 10.97]	5.33	14.7	3.91 [1.05, 14.49]
High blood pressure	6.82	12.5	0.96 [0.29, 3.22]	6.89	11	2.08 [0.55, 7.76]
Heart disease	4.29	2.05	0.20 [0.01, 2.34]	5.03	14.3	2.55 [0.66, 9.83]
Disability status due to physical/mental/emotional conditions	6.17	11.1	1.82 [0.68, 4.88]	7.48	13.5	1.98 [0.54, 7.22]
Limited basic physical activity	5.81	9.86	1.09 [0.33, 3.61]	7.19	14.5	2.04 [0.56, 7.41]
Cognitive difficulty	4.88	11.3	1.98 [0.63, 6.13]	6.96	15.8	1.89 [0.32, 11.1]
Difficulty dressing, bathing, getting around	3.76	3.23	0.53 [0.07, 3.60]	4.03	11.9	1.96 [0.25, 14.9]
Difficulty going outside home alone	4.33	5.68	0.78 [0.20, 2.99]	5.15	12.9	3.21 [0.47, 21.59]
Psychological distress (Kessler Score >6) past month	3.88	11.9	4.67 [0.89, 24.46]	1.45	16.7	18.90 [1.05, 337.93]
Body Mass Index (BMI)						
0–18.49 (underweight)	0.88	9.16	1.40 [0.02, 81.2]	1.84	0	0.00 [0.00, 0.001]
18.5–22.99 (acceptable risk)	3.19	9.16	1 [Ref]	5.51	15.8	1 [Ref]
23–27.4 (increased risk)	7.43	11.3	0.78 [0.52, 11.66]	6.88	10.4	0.36 [0.03, 4.11]
≥27.5 (high risk)	7.72	11.8	1.39 [0.09, 19.87]	5.94	14.4	1.17 [0.15, 8.66]
Health Behaviors						
Smoking						
Never smoked regularly	7.03	11	1 [Ref]	7.27	14.9	1 [Ref]
Quit smoking	5.87	10.2	0.78 [0.23, 2.63]	6.83	15.6	1.14 [0.26, 4.99]
Current smoker	4.62	5.95	0.50 [0.10, 2.31]	3.39	7.44	0.97 [0.05, 18.90]
Healthcare access						
Currently uninsured	1.55	8.63	6.80 [1.24, 37.30]	1.71	0.337	0.12 [0.00, 37.58]
Covered California insurance	3.38	2.06	0.14 [0.00, 120.65]	0.233	0	–
3 or more Doctor visits in past 12 months	6.8	11.3	0.82 [0.29, 2.30]	5.75	14.7	0.61 [0.16, 2.30]
Has no usual place to go when sick or needing health advice	1.25	7.55	1.94 [0.43, 8.68]	4.37	9.79	6.66 [1.11, 39.95]
Delay/not get prescription in past 12 months	6.32	9.34	1.03 [0.23, 4.59]	3.91	10.4	2.25 [0.52, 9.68]
Delay/not get other medical care in past 12 months	4.79	9.25	1.20 [0.36, 4.01]	4.66	7.99	1.13 [0.07, 16.67]

APPENDIX B

TRANSGENDER OLDER CALIFORNIANS

Because of the small number of transgender people, the estimates are not stable enough to include in our report but we provide sample data in this appendix. Of the 50 transgender adults, 25 (50%) individuals identified as straight, 18 (36%) individuals identified as LGB, and 7 (14%) individuals reported being not sexual, celibate, or having no sexual orientation or said other. Among the transgender adults aged 50-64, 40.9% identified as straight and 50% identified as LGB. Among the 65 and older transgender identified adults, 57% identified as straight and 25% identified as LGB. Among 50–64 year old transgender older adults, 18.1% reported receiving food stamps whereas among 65 and older transgender older adults, 3.5% reported receiving food stamps. The proportion of transgender adults experiencing various health statues was similar regardless of age groups, though more transgender adults in the 50–65 age group experienced psychological distress than those in the 65 and older group. However, because of the small sample size we were unable to test if any differences between the age groups were statistically significant.

APPENDIX B

Table B1. Demographic Characteristics of Transgender Older Adults in the 2015-2016 California Health Interview Survey (N=50)

Variable	Age 50–64		Age 65+	
	n	% (SE)	n	% (SE)
Sexual orientation				
Straight or heterosexual	9	40.9 (10.7)	16	57.1 (9.5)
Gay, lesbian, or bisexual	11	50.0 (10.9)	7	25.0 (8.3)
A sexual orientation identity not listed above	2	9.0 (6.2)	5	17.8 (7.3)
Race/Ethnicity				
Hispanic	5	22.7 (9.14)	6	21.4 (7.89)
Non-Hispanic White	10	45.4 (10.8)	15	53.57 (9.59)
Non-Hispanic African American	0	0 (0)	1	3.57 (3.57)
Non-Hispanic American Indian or Alaskan Native	1	4.5 (4.54)	0	0 (0)
Non-Hispanic Asian	5	22.72 (9.14)	6	21.4 (7.89)
Non-Hispanic other race/ethnicity, or multiple race/ethnicities	1	4.54 (4.54)	0	0 (0)
Marital status				
Married or domestic partnership (same or different sex partners)	12	54.5 (10.8)	16	50 (9.62)
Living with partner	0	0 (0)	2	7.14 (4.9)
Widowed, separated or divorced	7	31.8 (10.1)	8	28.5 (8.6)
Never married	3	13.6 (7.48)	4	14.2 (6.7)
Live alone				
	9	40.9 (10.7)	12	42.8 (9.5)
Home ownership				
	8	36.6 (10.4)	18	64.2 (9.2)
Education				
< HS education	2	9.1 (6.2)	2	7.1 (4.9)
HS diploma or some college	11	50 (10.9)	12	42.8 (9.5)
College degree or above	9	40.9 (10.7)	14	50 (9.6)
Employment status				
Employed	12	54.5 (10.8)	9	32.1 (8.9)
Unemployed, looking for work	3	13.6 (7.40)	0	0 (0)
Unemployed, not looking for work	7	31.8 (10.1)	19	67.8 (8.9)
Nativity (born in US)				
	12	54.5 (10.8)	18	64.2 (9.2)
Veteran status (ever serve in US armed forces)				
	3	13.6 (7.4)	10	35.7 (7.4)
Urbanicity				
Rural	1	4.54 (4.54)	5	17.8 (7.37)
Urban	21	95.4 (4.54)	23	82.1 (7.37)
Internet usage				
Ever used internet	18	81.8 (8.45)	14	50 (9.6)
Use internet to look up health info in past 12 months	11	50 (10.9)	9	32.1 (8.9)
Living 200% below the federal poverty level				
	13	59 (10.7)	14	50 (9.6)
Food security				
Food security	16	72.7 (9.7)	23	82.1 (7.3)
Food insecure without hunger	3	13.6 (7.4)	3	10.7 (5.9)
Food insecure with hunger	3	13.6 (7.4)	3	7.1 (4.9)
Receive food stamp benefits				
	4	18.1 (8.4)	1	3.5 (3.5)
Receive supplemental security income				
	6	27.2 (9.7)	4	14.2 (6.7)
Receive social security disability insurance				
	5	71.4 (18.4)	-	-
Received social security pension last month				
	2	50 (28.8)	8	50 (12.9)

APPENDIX B

Table B2. Health Outcomes, Health Behaviors, and Health Access of Transgender Older Adults in the 2015-2016 California Health Interview Survey (N=50)

Variable	Age 50–64		Age 65+	
	n	% (SE)	n	% (SE)
Health outcomes				
General health fair or poor	6	27.2 (9.7)	8	28.5 (8.6)
Asthma	5	22.7 (9.1)	4	14.2 (6.7)
Diabetes	5	22.7 (9.1)	7	25 (8.3)
High blood pressure	13	59.0 (10.7)	15	53.5 (9.5)
Heart disease	1	4.5 (4.5)	8	28.5 (8.6)
Disability status due to physical/mental/emotional conditions	14	63.6 (10.4)	18	64.2 (9.2)
Limited basic physical activity	10	45.5 (10.8)	14	50 (9.6)
Cognitive difficulty	8	36.3 (10.4)	7	25 (8.3)
Difficulty dressing, bathing, getting around	4	18.8 (8.4)	1	3.5 (3.5)
Difficulty going outside home alone	8	36.3 (10.4)	3	10.7 (5.9)
Psychological distress (Kessler Score > 6) past month	6	27.2 (9.7)	0	0 (0)
Body Mass Index (BMI)				
0–18.49 (underweight)	1	4.5 (4.5)	6	21.4 (7.8)
18.5–22.99 (acceptable risk)	1	4.5 (4.5)	0	0 (0)
23–27.4 (increased risk)	9	40.9 (10.7)	12	42.8 (9.5)
≥ 27.5 (high risk)	11	50 (10.9)	10	35.7 (9.2)
Health behaviors				
Never smoked regularly	13	59.0 (10.7)	13	46.4 (9.5)
Quit smoking	6	27.2 (9.7)	12	42.8 (9.5)
Current smoker	3	13.6 (7.4)	3	10.7 (5.9)
Healthcare access				
Currently uninsured	2	9.0 (6.2)	1	3.5 (3.5)
Covered California insurance	2	9.0 (6.2)	1	3.5 (3.5)
3 or more doctor visits in past 12 months	9	40.9 (10.7)	12	42.8 (9.5)
Has no usual place to go when sick or needing health advice	4	18.1 (8.4)	4	14.2 (6.7)
Delay/not get prescription in past 12 months	3	13.6 (7.4)	2	7.1 (4.9)
Delay/not get other medical care in past 12 months	4	18.1 (8.4)	3	10.7 (5.9)