

While youth smoking has declined in the last decade, we still see large disparities based on sexual orientation. Nationally, LGB youth are about two times as likely to smoke cigarettes compared to their heterosexual peers (Kann et al., 2015). Minority stress – chronic, unique, socially-based stressors experienced through stigmatization – has helped to explain the disparities in health outcomes (Meyer, 2003). These stressors are related to individual experiences of marginalization as well as place-based factors, such as non-discrimination policies and availability of LGB-friendly organizations.

This data brief examines whether tobacco-related sexual orientation disparities have widened, narrowed, or remained the same over time. Because Vermont is one of a few states to measure sexual orientation in the Youth Risk Behavior Survey (YRBS) since 2005, we were able to use six cohorts of VT YRBS in a logistic regression with a year-by-sexual orientation interaction term to test differences in trends over the last decade. We looked at several smoking-related outcomes: current cigarette use, frequent use, and initiation before age 13. In all analyses we adjusted for grade, race, and gender.

## KEY POINTS

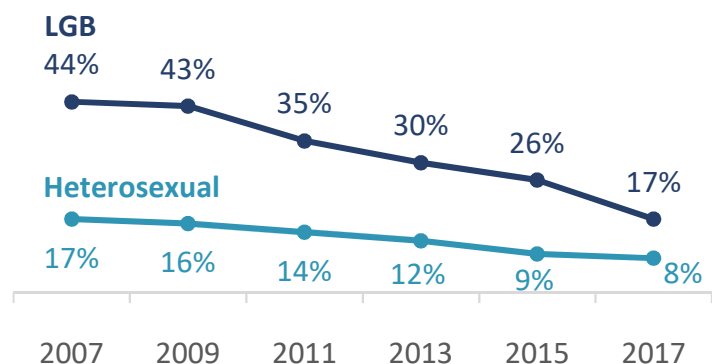
- **Steeper declines over the past decade in current and frequent smoking among LGB youth have narrowed the gap with heterosexual youth in these outcomes.**
- **Still, LGB youth in VT are 2.5 times as likely to smoke and 3.3 times as likely to start before age 13 compared to their heterosexual peers.**

## Current Cigarette Use

In Vermont, 17% of LGB youth reported smoking in 2017 compared to 8% of heterosexual youth. In fact, LGB youth in VT smoked at the same rate in 2017 that their heterosexual peers smoked in 2007. Trends in cigarette use show that there have been declines for both LGB and heterosexual youth in the decade from 2007 to 2017. Within each year, however, prevalence is statistically higher among LGB youth compared to their heterosexual peers. This was most pronounced in 2007, when smoking was 44% among LGB youth and only 17% among heterosexual youth.

A significant interaction showed that the disparity in current cigarette use between LGB and heterosexual youth was statistically smaller in 2017 than in 2007 ( $\beta = -0.45$ ;  $p < 0.01$ ), indicating that the gap has narrowed. This is mostly due to steeper declines among LGB than heterosexual youth. In 2007, the odds of LGB youth smoking were 3.8 times more than their heterosexual peers (adjusted odds ratio [aOR]=3.8; 95% CI=2.8-5.0;  $p < .001$ ). While still significantly higher, by 2017 the odds of LGB youth smoking were 2.5 times more than their heterosexual peers (aOR=2.5; 95% CI=2.2-2.8;  $p < .001$ ).

**Current Cigarette Use among LGB and Heterosexual High School Youth in VT (YRBS)**



# Smoking-Related Sexual Orientation Disparities among Youth

## Frequent Use and Current Cigarette Use

In 2007, the odds of LGB youth smoking frequently was 2.1 times that of their heterosexual peers (aOR=2.1; 95% CI=1.4-3.3;  $p < .01$ ). Trends from 2007 to 2017 show declines for both LGB and heterosexual youth. A significant interaction showed that the degree of difference in frequent use between LGB and heterosexual youth has narrowed between 2007 and 2017 ( $\beta = -0.55$ ;  $p < 0.05$ ). In fact, by 2017 there was no longer a disparity based on sexual orientation, mostly due to steeper declines among LGB than heterosexual youth.

In 2005, the odds of LGB youth who report smoking their first whole cigarette before the age of 13 was 3.9 times that of their heterosexual peers (aOR=3.9; 95% CI=3.0-5.1;  $p < .001$ ). Trends in early initiation show declines for both LGB and heterosexual youth in the decade from 2005 to 2015. Within each year, however, prevalence remains statistically higher among LGB youth compared to their heterosexual peers. In fact, the size of the disparity in early initiation of smoking between LGB and heterosexual youth has remained similar from 2005 to 2015 ( $\beta = -0.27$ ;  $p = 0.77$ ). In 2015, LGB youth were still 3.3 times as likely to start smoking by age 13 as their heterosexual peers (aOR=3.3; 95% CI=2.8-3.9;  $p < .001$ ).

## Conclusion

Youth prevention and cessation work in VT, plus gains over the last decade in non-discrimination policies and welcoming social environments may have had a cumulative impact on improving smoking-related health outcomes for LGB youth. While VT has already met our Healthy Vermonter's 2020 goal for youth smoking overall (10%), this goal has not been met for all youth; the rate of smoking among LGB youth remains significantly higher (17%). The VT Tobacco Control Program has developed strategic initiatives to work specifically towards reducing and preventing smoking among LGB youth in the next five years.

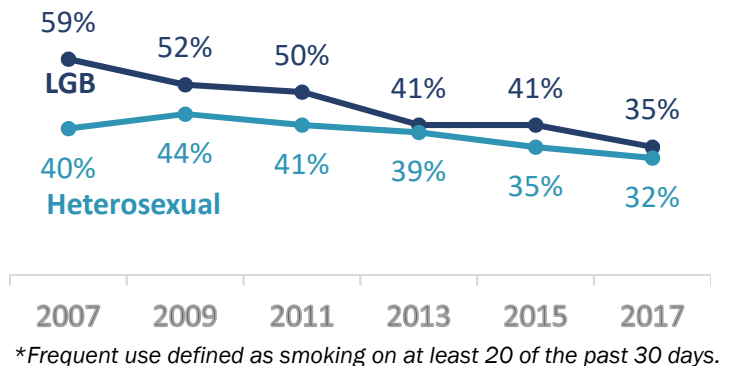
### References:

Kann L, Olsen EO, McManus T, et al. Sexual Identity, Sex of Sexual Contacts, and Health-Related Behaviors Among Students in Grades 9–12 – United States and Selected Sites, 2015. *MMWR Surveill Summ* 2016;65(No. SS-9):1-202. DOI: <http://dx.doi.org/10.15585/mmwr.ss6509a1>.

Meyer, I.H. (2003). Prejudice, social stress, and mental health in lesbian, gay and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697. doi:10.1037/0033-2909.129.5.674

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## Frequent use of Cigarettes\* among LGB and Heterosexual High School Youth in VT (YRBS)



## Early Initiation (< age 13) of Smoking among LGB and Heterosexual High School Youth in VT\* (YRBS)

