

# Maternal Smoking, Wyoming 2016-2019

Wyoming Department of Health | June 2021

Between 2016 and 2019, **10.4%** of women reported **smoking during the last 3 months pregnancy**. This was significantly less than the **14.2%** who reported smoking during pregnancy from 2012-2015.

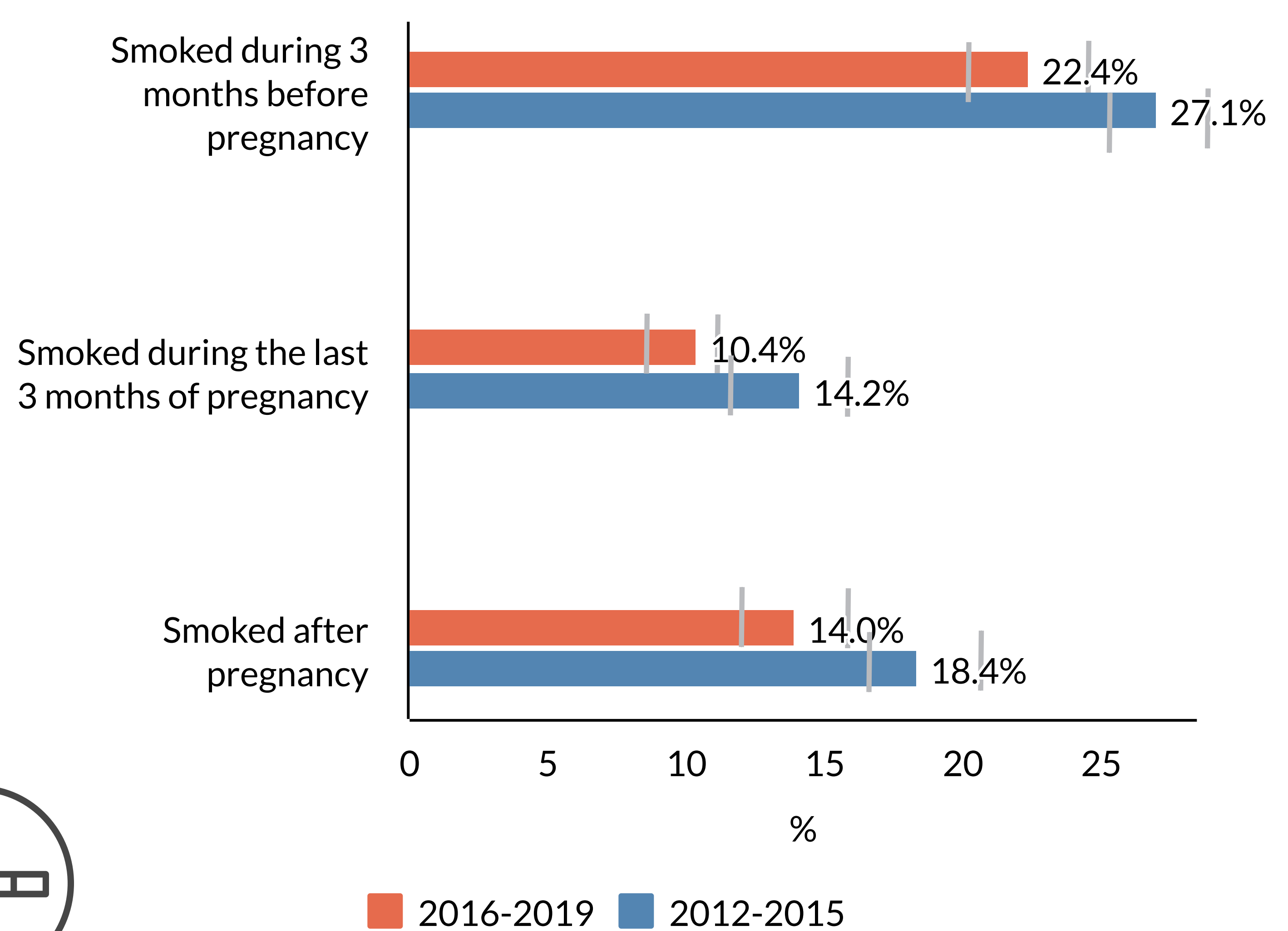
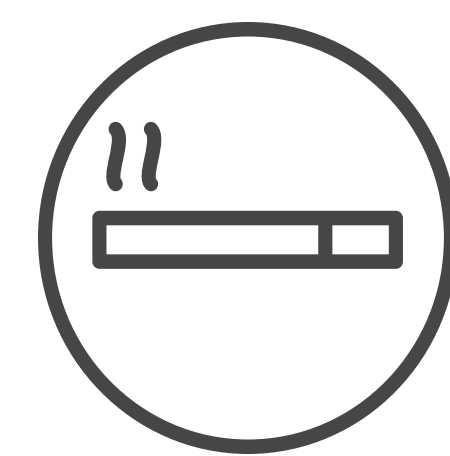


In comparison, the 2017 national estimate of women in all PRAMS States who reported smoking during the last 3 months of pregnancy was **8.1%**.

Smoking prior to pregnancy has been linked to reduced fertility in women and studies have also suggested a relationship between tobacco and miscarriage.

Evidence also suggests that preterm deliveries (early deliveries, less than 37 weeks gestations) and babies with low birth weight (weighing less than 2500gm or about 5.5 pounds at birth) are more common among mothers who smoke during pregnancy.

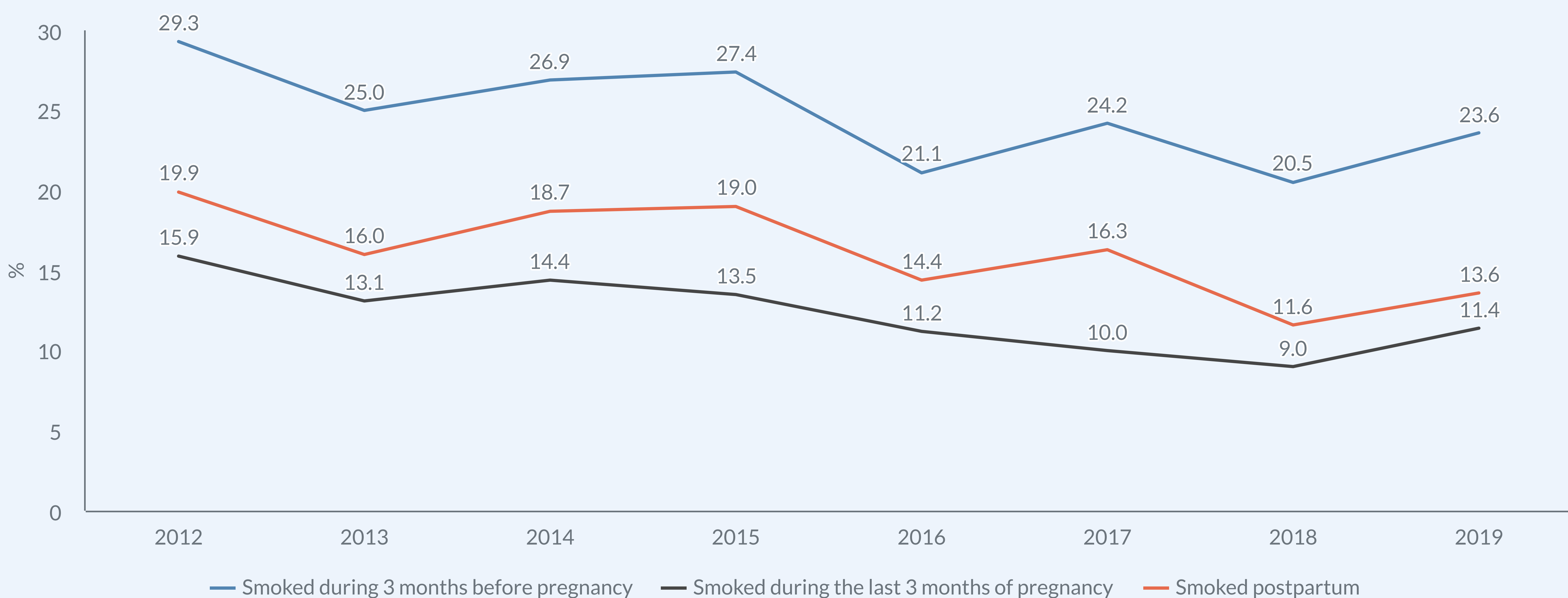
Babies are also 3 times more likely to die from SIDS if their mothers smoke.<sup>1</sup>



Significantly less women reported smoking in the 3 months prior to pregnancy from 2016-2019 compared to 2012-2015.

Significantly less women also reported smoking after pregnancy from 2016-2019 compared to 2012-2015.

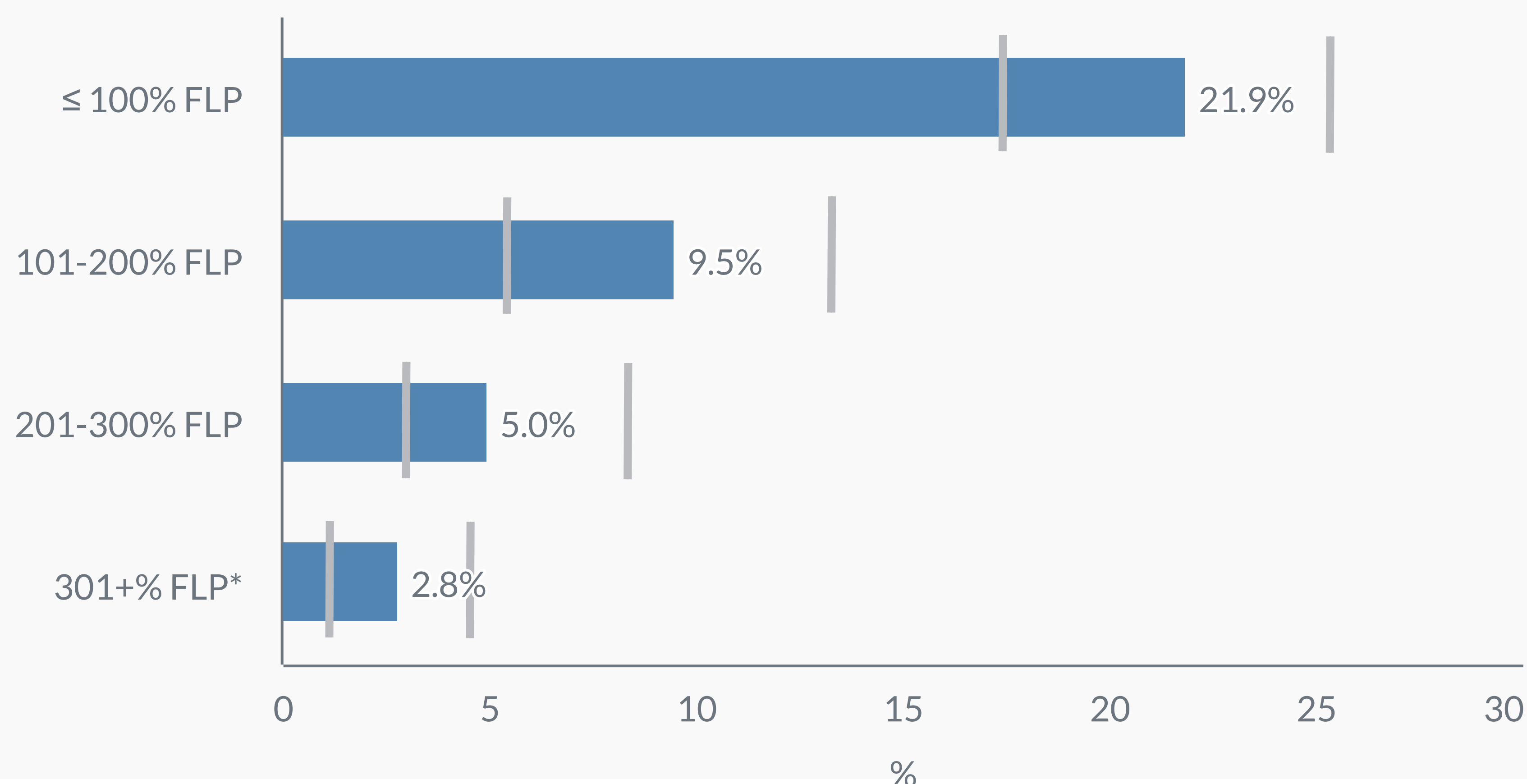
Trends in Smoking Before, During and After Pregnancy, 2012-2019 (WY PRAMS)



# Characteristics Among Women Who Smoked During Pregnancy (2016-2019)

Wyoming PRAMS data show disparities in smoking during the last 3 months of pregnancy by poverty level and Medicaid status.

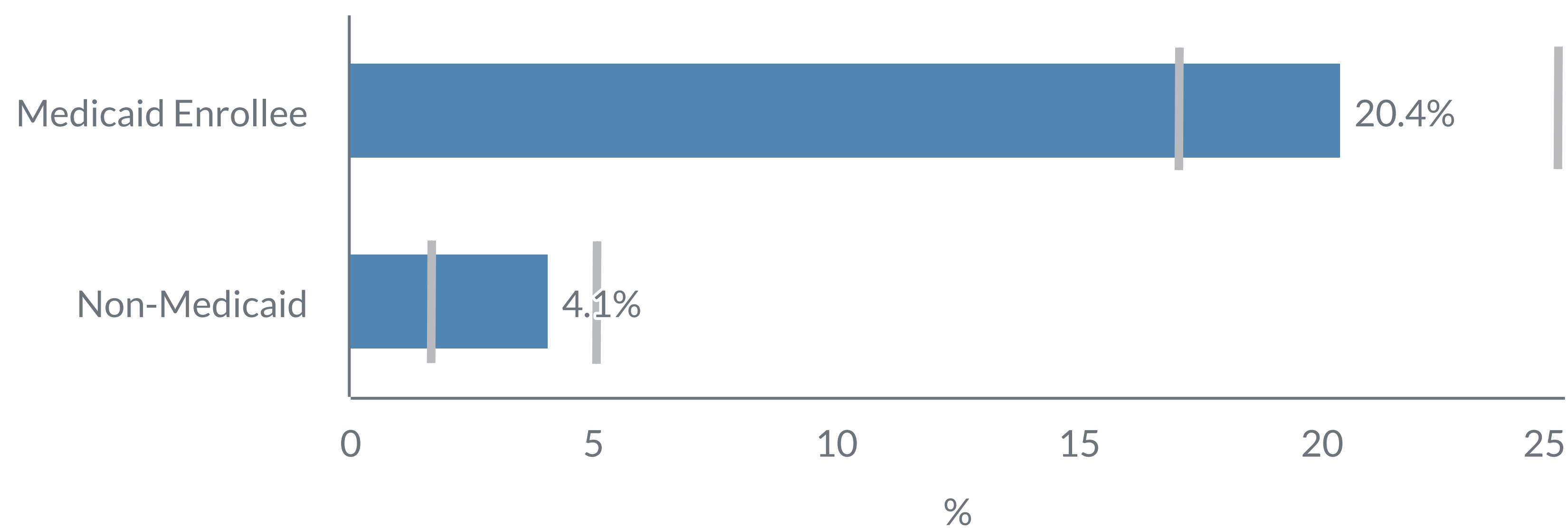
### Smoking During the Last 3 Month of Pregnancy By Federal Poverty Level (FPL)



The prevalence of smoking during the last 3 months of pregnancy was significantly higher among women living at 100% or less of the FPL compared to those living at >100% of the FPL.

Significantly more women enrolled in Medicaid smoked during the last 3 months of pregnancy (20.4%), compared to those who were not enrolled in Medicaid (4.1%).

### Smoking During the Last 3 Month of Pregnancy By Medicaid Status



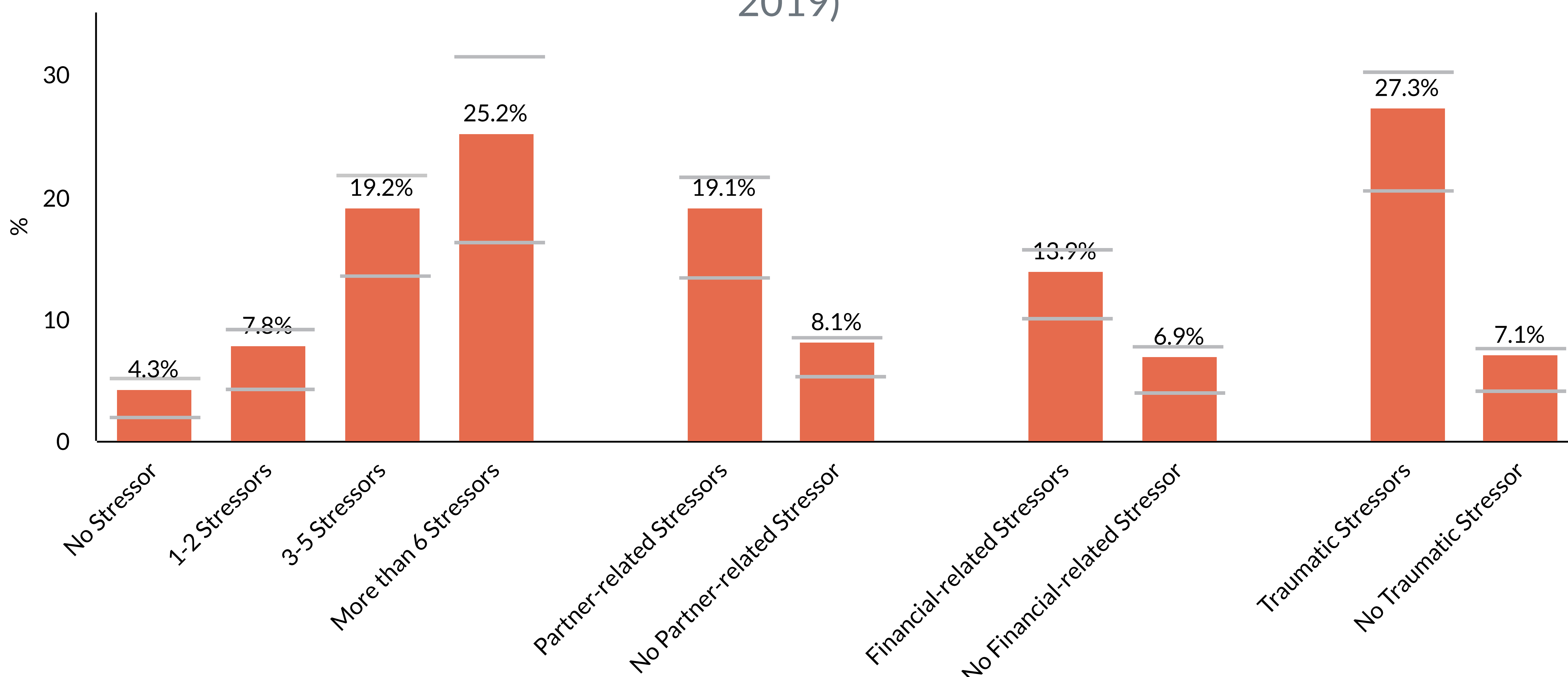
The prevalence of smoking during the last 3 months of pregnancy was significantly higher among women who experience 3-5, or 6 or more stressors during pregnancy compared to women who experienced 1-2 stressors or none during pregnancy.

The prevalence of smoking during the last 3 months of pregnancy was significantly higher among women who reported experiencing partner-related, financial-related and traumatic stressors compared to those who did not experience those types of stressors.



Psychosocial stress has been shown to be associated with greater odds of persistent smoking and failure to quit.

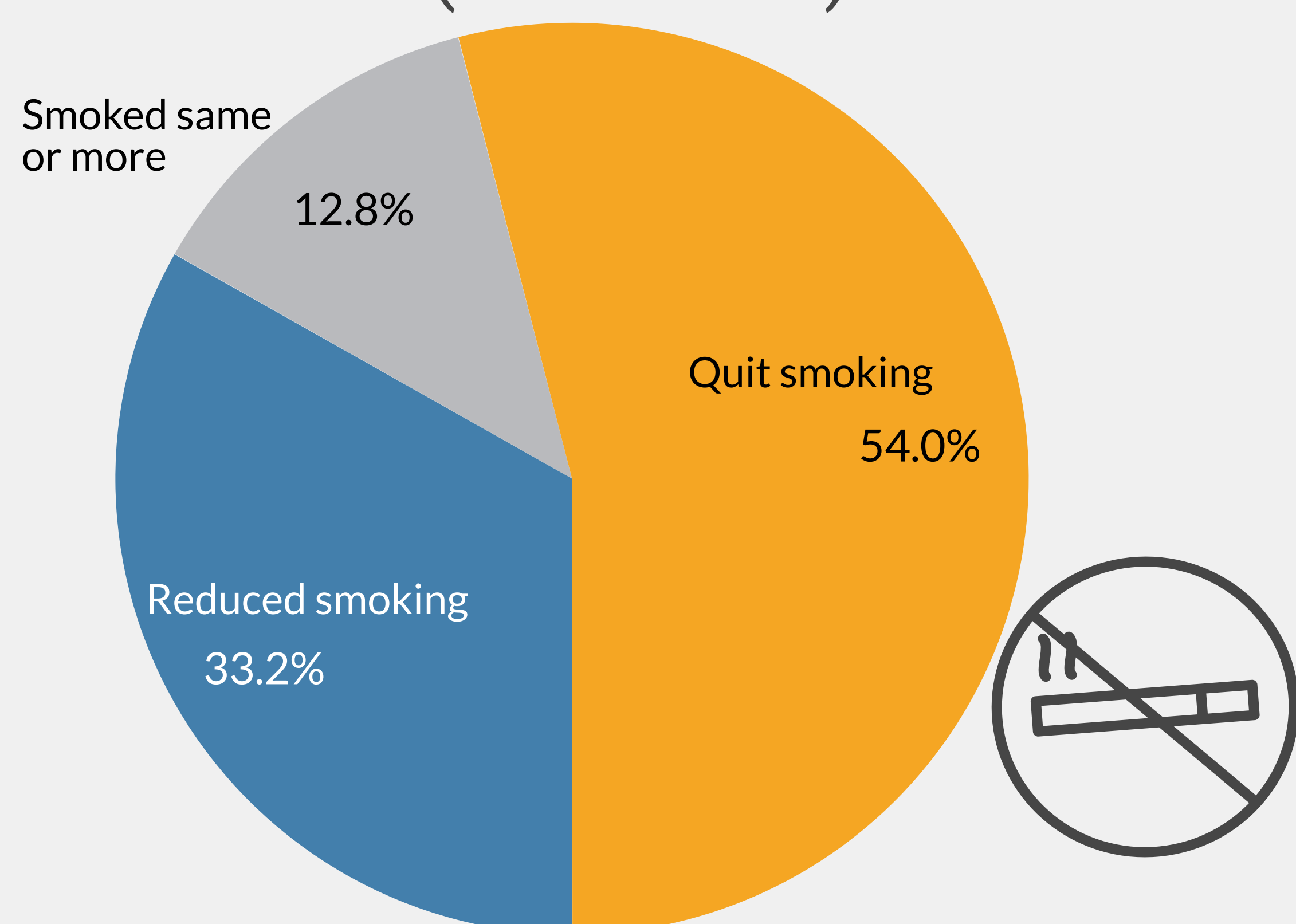
### Prevalence of Women Who Smoked During Pregnancy by Experienced Stressors (2016-2019)



\* should be interpreted with caution due to small numbers

# Quitting and Reducing Smoking During Pregnancy

## Change in Smoking Status During Pregnancy Among Women Smoking Prior (2016-2019)

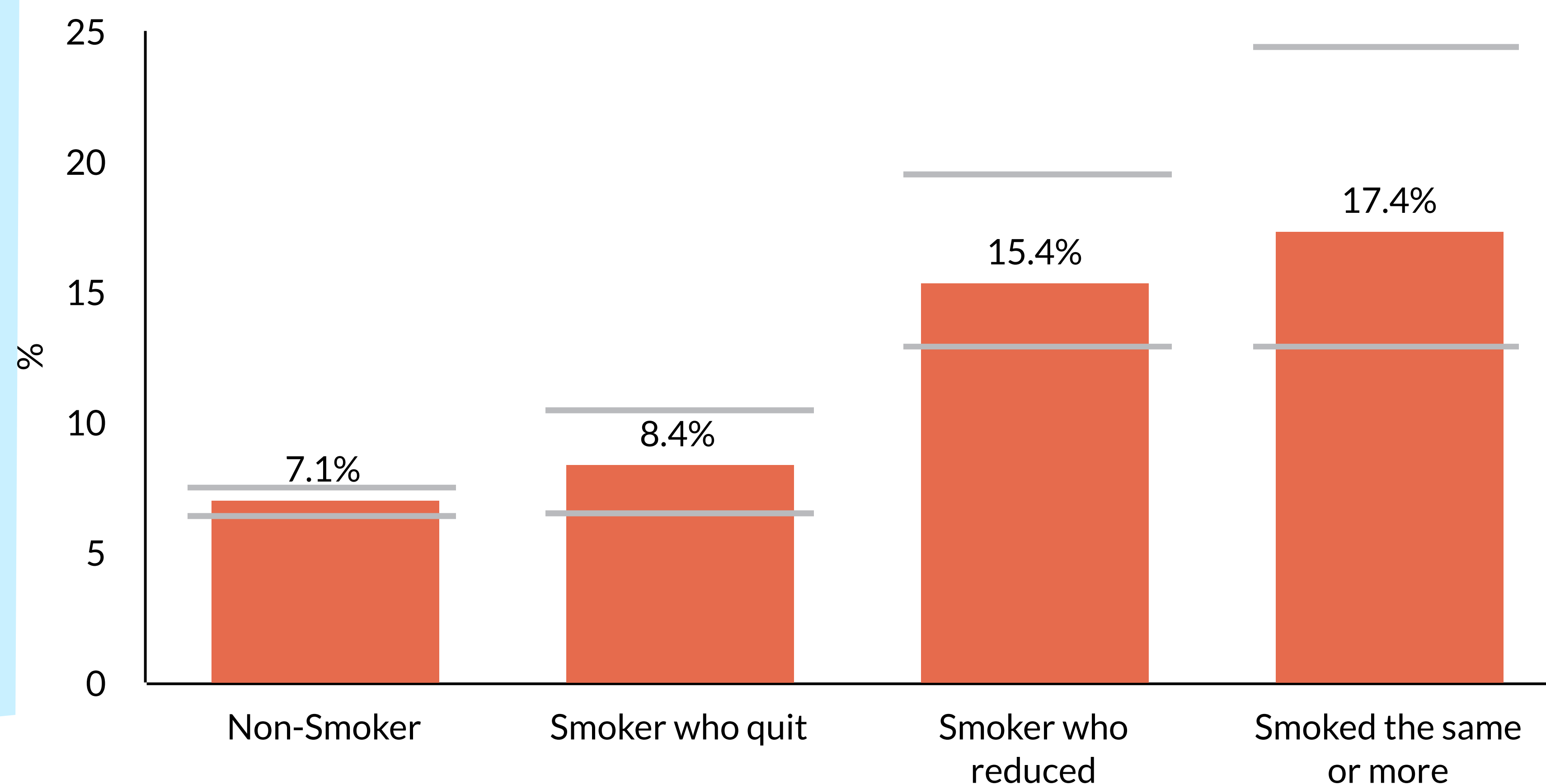


More than half the women who smoked prior to pregnancy, **quit smoking during pregnancy.**

## Low Birth Weight (LBW) Deliveries

Wyoming PRAMS data shows the prevalence of LBW babies born to women who continued to **smoke the same or more** during pregnancy, and those who **reduced smoking** during pregnancy were **significant higher** compared to the prevalence of LBW babies born to women who **quit** smoking during pregnancy or those who were **non-smokers** before and during pregnancy.

## Prevalence of Low Birthweight (LBW), <2500 grams, by Smoking Status During Pregnancy (2016-2019)



## *2 times the risk*

Among women who smoked prior to pregnancy, those who **reduced smoking** during pregnancy still had almost **2 times the risk** of delivery a low birth weight baby compared to those women who **quit smoking** during pregnancy.



Per WY PRAMS Data (2016-2019), Smokers who **reduced smoking** during pregnancy still had a **1.8** (95%CI: 1.6-2.1) **relative risk** of delivering a LBW baby compared to smokers who **quit** during pregnancy.

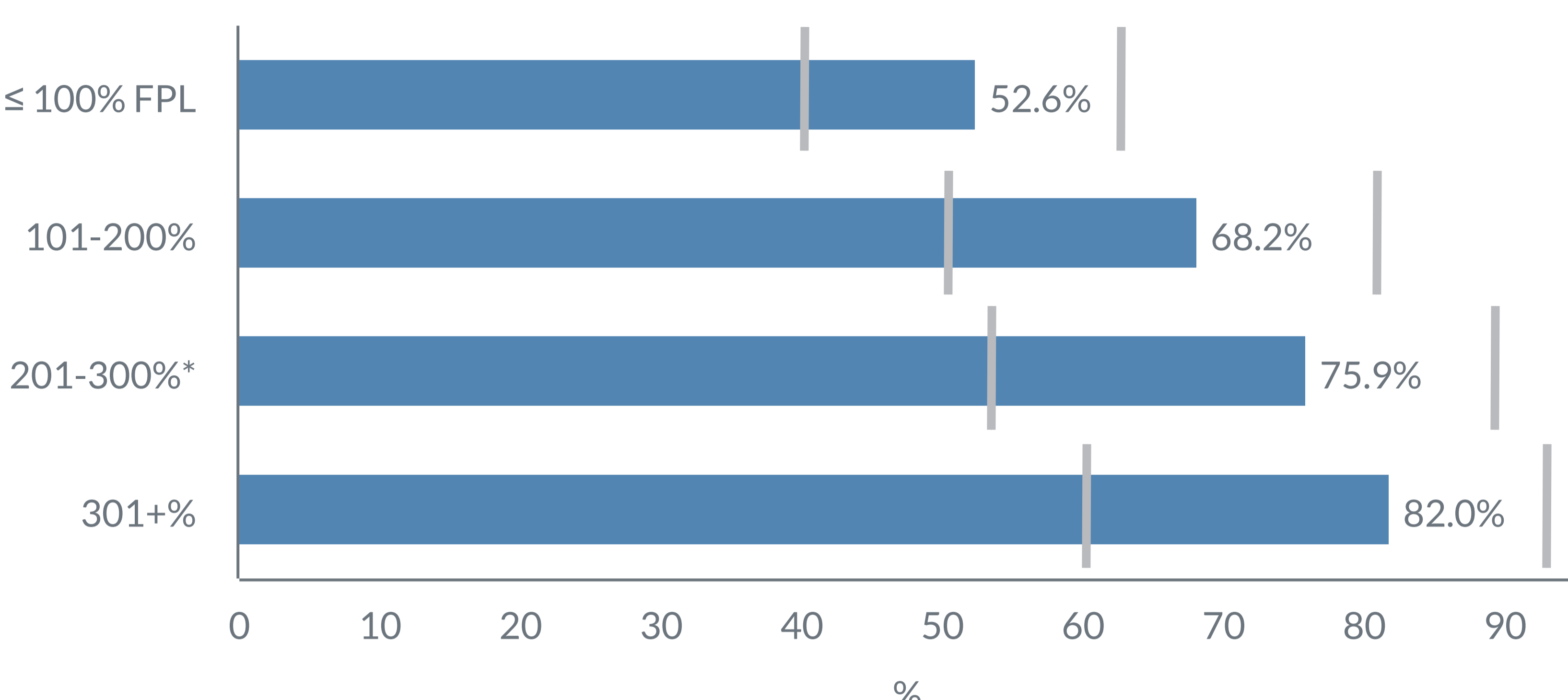
## Postpartum

Prevalence of Women who Stayed Quit Postpartum after Quitting During Pregnancy  
WY PRAMS 2012-2019



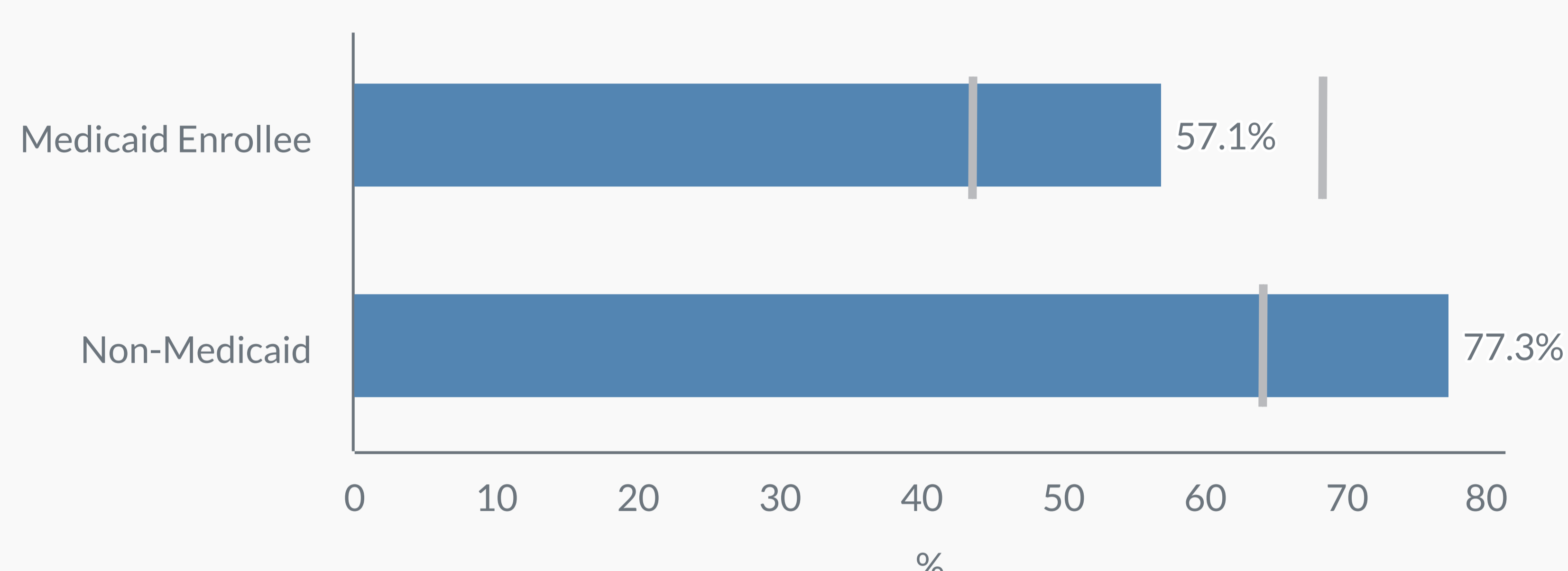
The majority of women who smoked 3 month prior to pregnancy then quit during pregnancy, also reported to have stayed quit after pregnancy, compared to those who relapsed in smoking postpartum, from 2012 to 2019.

Prevalence of Women Staying Quit Postpartum By Federal Poverty Level (FLP)



The prevalence of women who stayed quit postpartum, among those who quit during pregnancy, was highest among those women living at 301+% FLP.

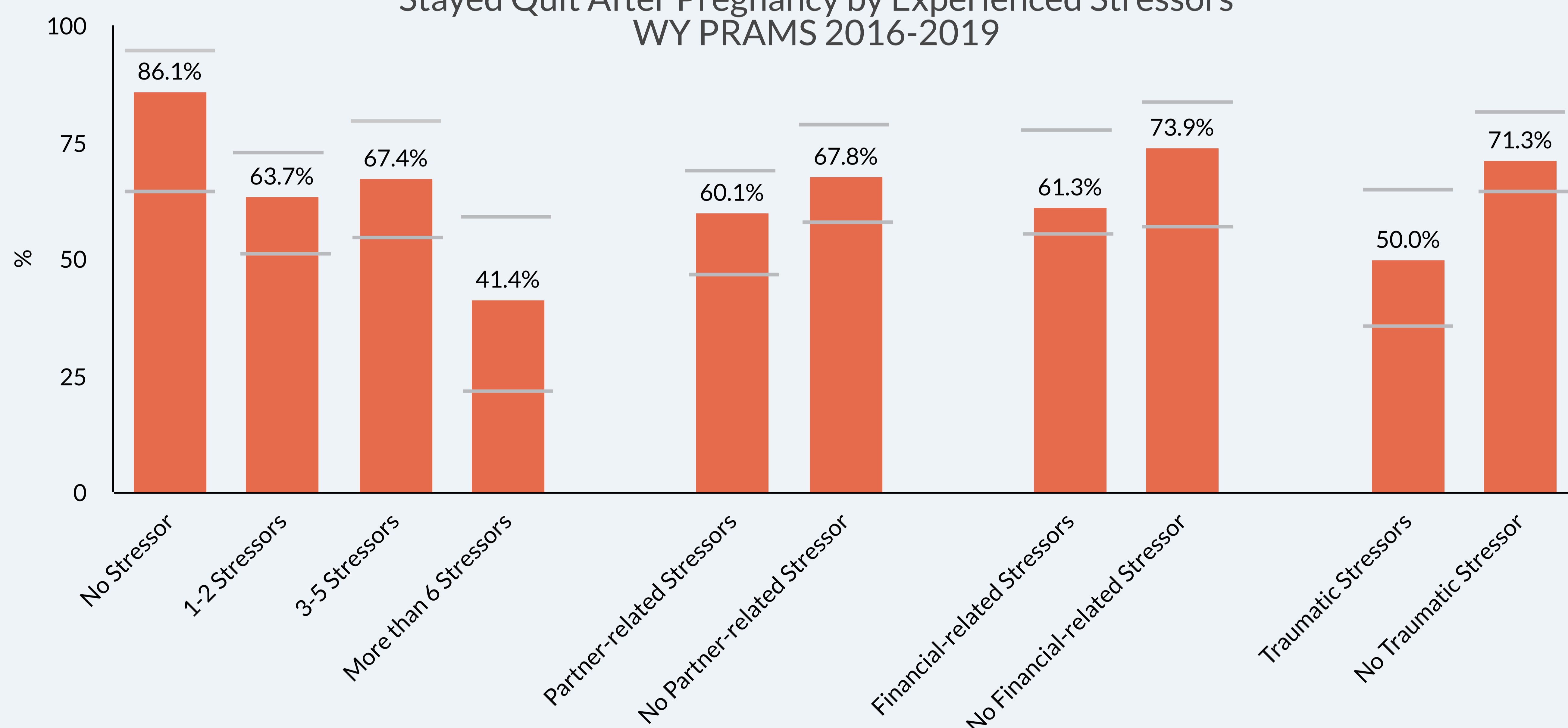
Prevalence of Women Staying Quit Postpartum By Medicaid Status



More non-Medicaid enrollees stayed quit postpartum, after quitting during pregnancy, compared to Medicaid enrollees.

Per PRAMS data, the prevalence of women who stayed quit postpartum, among those who quit smoking during pregnancy was significantly higher for those women who experienced no stressor during pregnancy compared to those who experience more than 6 stressors during pregnancy.

Prevalence of Women Who Quit Smoking During Pregnancy and Stayed Quit After Pregnancy by Experienced Stressors  
WY PRAMS 2016-2019



## What is PRAMS?



The Wyoming Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project of the Wyoming Department of Health and the Centers for Disease Control and Prevention (CDC). Wyoming PRAMS collects Wyoming-specific, population-based data on maternal attitudes and experiences before, during and shortly after pregnancy. The goal of the PRAMS project is to improve the health of mothers and infants by reducing adverse outcomes such as low birth weight, infant mortality and morbidity, and maternal morbidity.

To learn more about Wyoming PRAMS, visit our website:

<https://health.wyo.gov/publichealth/chronic-disease-and-maternal-child-health-epidemiology-unit/mch-epi/pregnancy-risk-assessment-monitoring-system-prams/>

Wyoming PRAMS estimates are computed using sampling weights.

Statistical significance between weighted estimates was established utilizing chi square tests with a 0.05 significance level. 95% confidence intervals are displayed by two grey bars on either side of the estimates in the bar graphs.

### References:

1. U.S. Department of Health and Human Services. A Report of the Surgeon General: How Tobacco Smoke Causes Disease: What It Means to You. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010 [accessed 2012 May 10].
2. Slopen, N., Kontos, E. Z., Ryff, C. D., Ayanian, J. Z., Albert, M. A., & Williams, D. R. (2013). Psychosocial stress and cigarette smoking persistence, cessation, and relapse over 9-10 years: a prospective study of middle-aged adults in the United States. *Cancer causes & control : CCC*, 24(10), 1849-1863. <https://doi.org/10.1007/s10552-013-0262-5>