



# The Hilltop Institute

analysis to advance the health of vulnerable populations

# Effects of Uninsurance on Tobacco Use Rates and Implications for New Medicaid Enrollment: Evidence from Maryland

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## The Issue

The absence of health insurance is associated with lower socioeconomic status and higher smoking rates. Nationwide, in 2012, about 30% of uninsured adults aged 18 to 64 years were smokers, compared to about 15% of the insured population aged 18 to 64 (NCHS, 2014).

## Objective

While various markers of low socioeconomic status can also be shown to correlate with higher smoking rates, the objective of this analysis was to **test the independent effect of the lack of health insurance on smoking**, controlling for other correlates of tobacco use.

## Methods

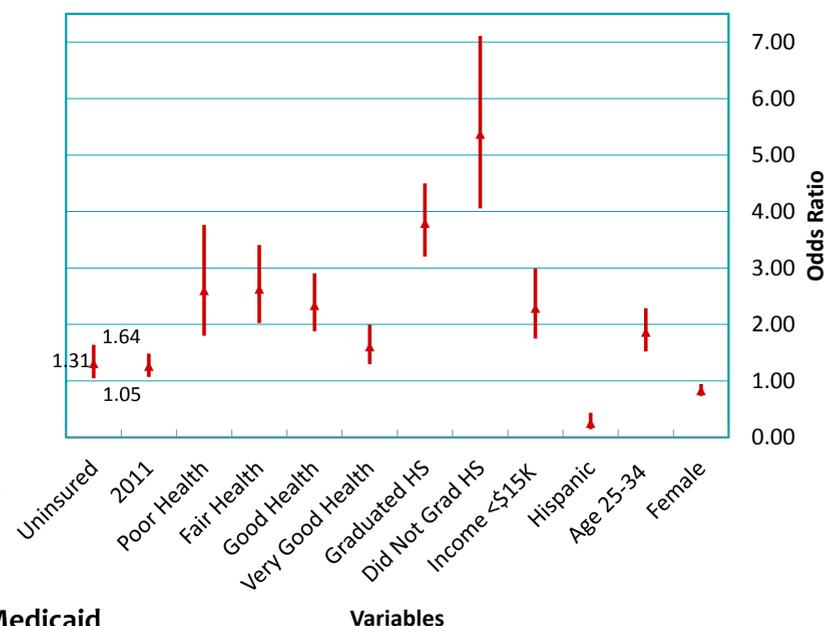
In order to achieve sufficient statistical power to identify predictive effects from small subgroups, we pooled data for persons aged 18 to 64 from the 2011-2013 Behavioral Risk Factor Surveillance Survey (BRFSS) in Maryland. The 2011-2013 BRFSS had comparable methodologies but represented a break from previous administrations of the survey. First we adjusted the sampling weights proportionately for each year's contribution to the combined sample. Then we used SAS PROC SURVEYLOGISTIC to calculate logistic regression models that adjusted parameter estimates and standard errors for the complex stratified survey design.

## Findings

In Maryland, the absence of health insurance is associated with 31% higher odds of smoking (odds ratio = 1.309, confidence interval = 1.046 - 1.639)—after controlling for age, race and ethnicity, income, education level, health status, and urban vs. non-urban residence.

- Of the race and ethnic groups, Hispanics were significantly less likely to smoke. Differences for other racial or ethnic groups did not achieve statistical significance.
- There were no significant differences in the odds of smoking according to urban and rural residence.

Odds Ratios and 95 Percent Confidence Intervals for Statistically Significant Variables



2014 Enrollment in Newly Eligible Medicaid Coverage Groups, by Age & Gender

Age	Women	Men	Total
18-24	12,998 47.8%	14,184 52.2%	27,182 12.7%
25-34	21,173 38.4%	33,949 61.6%	55,122 <b>25.7%</b>
35-44	12,190 36.5%	21,205 63.5%	33,395 15.6%
45-54	25,396 47.7%	27,855 52.3%	53,251 24.8%
55-64	25,828 56.6%	19,820 43.4%	45,648 21.3%
<b>Total</b>	97,585 45.5%	117,013 <b>54.5%</b>	214,598 100.0%

- Women were less likely to smoke than men.
- Compared to individuals aged 55 to 64, only people aged 25 to 34 were significantly more likely to smoke.
- As expected, other variables indicated an association between lower socioeconomic status and higher odds of smoking.

## Conclusion & Policy Implications

**Persons newly eligible for Medicaid coverage who were previously uninsured will likely have a higher risk of smoking than insured people with similar socioeconomic characteristics.**

We observed enrollment patterns in 2014 for the newly eligible in Maryland, which show that higher proportions of persons at risk of smoking were males, aged 25 to 34, and, by definition, low-income and highly likely to be uninsured.

The results illustrate the potential for targeting smoking cessation services to previously uninsured populations that will become enrolled in Medicaid in states adopting expanded eligibility criteria under health reform.

Smoking cessation services are required under Medicaid, and the take-up rates among the population of childless adults who are newly eligible should be measured. This group may benefit the most from offering such services, perhaps even at the point of Medicaid enrollment.

## Reference

National Center for Health Statistics (NCHS). (2014). Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2012. *Vital and Health Statistics*, 10(260).

