## Background

Smoking is the leading cause of preventable death in the nation. While smoking has declined in the last decade, nearly 40 million American adults still smoke and more than 16 million live with smoking-related illnesses. Tobacco use has long been pervasive in military culture. Many smokers who have served report their smoking began during military service and often say they continue smoking to cope with stress. In this analysis we compare smoking prevalence between veterans and nonveterans, overall, and by sex and race/ethnicity.

# Methodology

Four years of BRFSS data were combined to generate prevalence estimates and 95% confidence intervals (2012-2015). Data were ageadjusted to the 2000 U.S. Standard Population. Data were limited to adults aged 18 to 64 to exclude the Medicare population and limited to adults with at least a high school education to mirror minimum acceptance requirements for military service. Statistically significant differences between veteran and nonveteran groups were determined by non-overlapping 95% confidence intervals.

Smoking was defined as the percentage of adults aged 18 to 64 who reported smoking at least 100 cigarettes in their lifetime and currently smoke every or somedays. Veteran status was defined as those who have ever served on active duty in the U.S. Armed Forces.



## Differences in Smoking Prevalence between Veterans and Nonveterans Laura Houghtaling MPH, Matt Turner PhD, MPH\*, Tom Eckstein MBA, Sarah Milder MPH, Arundel Metrics Inc \*Texas Health Institute

## Results

- Percentage of veterans who are smokers is significantly greater than nonveterans
  - Veterans 23.2%, 95% CI: 22.6%-23.9%
  - Nonveterans 17.4%, 95% CI: 17.3%-17.6%.
- Percentages of male and female veterans who are smokers are significantly greater than nonveterans
  - Males 24.1% vs. 19.1%;
  - Females 18.8% vs. 15.9%
- Smoking prevalence significantly higher for white, black, Hispanic, Asian, and multiracial veterans.
- statistically significant.
- Estimates of smoking by both sex and race/ethnicity show a higher smoking prevalence among male and female veterans compared to nonveterans for the majority of race/ethnicity groups.
- This difference is statistically significant for white and Asian males and females, Hawaiian/PI females, and multiracial males (Figure 1).



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• While higher among Hawaiian/PI, American Indian/AN, and other race veterans, difference is not

#### Disclosure

Arundel Metrics receives funding from United Health Foundation to produce America's Health Rankings. Arundel Metrics (arundelmetrics.com) is a small, data-driven consulting firm specializing in public health measurement and index generation.

## Results, cont'd

- Smoking prevalence is the same for both veteran and nonveteran other race females (Figure 1).
- Smoking prevalence is lower among black female veterans vs nonveterans (13.9% vs 15.1%) but is not statistically significantly different (Figure 1).
- Smoking prevalence is slightly lower among American Indian/AN male veterans compared to the same group of nonveterans (Figure 1).

## Conclusions

Veterans, both male and female, and of certain race/ethnicity groups face higher rates of smoking than their peers who have not served. More effective and tailored interventions are needed to reduce smoking prevalence among veterans.

## Limitations

The samples of veterans and nonveterans may be different from one another in additional demographic factors such as citizenship status. Such differences may contribute to observed differences in results between groups.

In addition, education requirements for the Armed Forces have changed over time and may affect the comparability of estimates between veteran and nonveteran groups. A future analysis could attempt to limit to a smaller age range to control for differences in the definition of high school graduates.

