INTRODUCTION AND BACKGROUND

- Tobacco smoking ranks as the top preventable cause of disease and premature death.
- West Virginia ranks as the top state in tobacco use with a 26.7% smoking prevalence compared to the nationwide smoking prevalence of 17.4%.
- About 440,000 people die per year as a result of smoking.
- People with low income and education tend to smoke more.
- Smoking is the leading cause of respiratory disease, cancer and cardiovascular disease.

METHODS.

- Census data from the NHGIS website along with health data from West Virginia department of health and human resource.
- Used Arc map tool, a GIS, to map the data.
- Ran a regression model to test the significance of the results.
- Used Maps and plots to display results.

Primary explanatory factors.
- Low birthweight, poor health, potential years of life lost and mental health.

Other factors
- Graduation rate and income inequality.

HYPOTHESES.

1. Low birthweight is positively related to smoking.
2. Poor / fair health is positively related to smoking.
3. Potential years of life lost is positively related to smoking.
4. Poor mental health is positively related to smoking.

RESULTS.

- Tobacco smoking and poor/fair health.
- Mentally unhealthy days and smoking.
- Years of potential life lost and smoking.

DISCUSSIONS

- Smoking prevalence exhibits a spatial trend in West Virginia. It shows huge variations in tobacco effects across counties.
- The covariates reveal an inequality gap in income and education across counties.

RECOMMENDATIONS

- Effective policies to address poverty in heavy smoking counties.
- Incentives to encourage higher learning.
- Creating awareness about the harmful effects of tobacco smoking.