# THE EFFECTS OF SMOKING ON HUMAN HEALTH IN WEST VIRGINIA STATE.

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#### 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

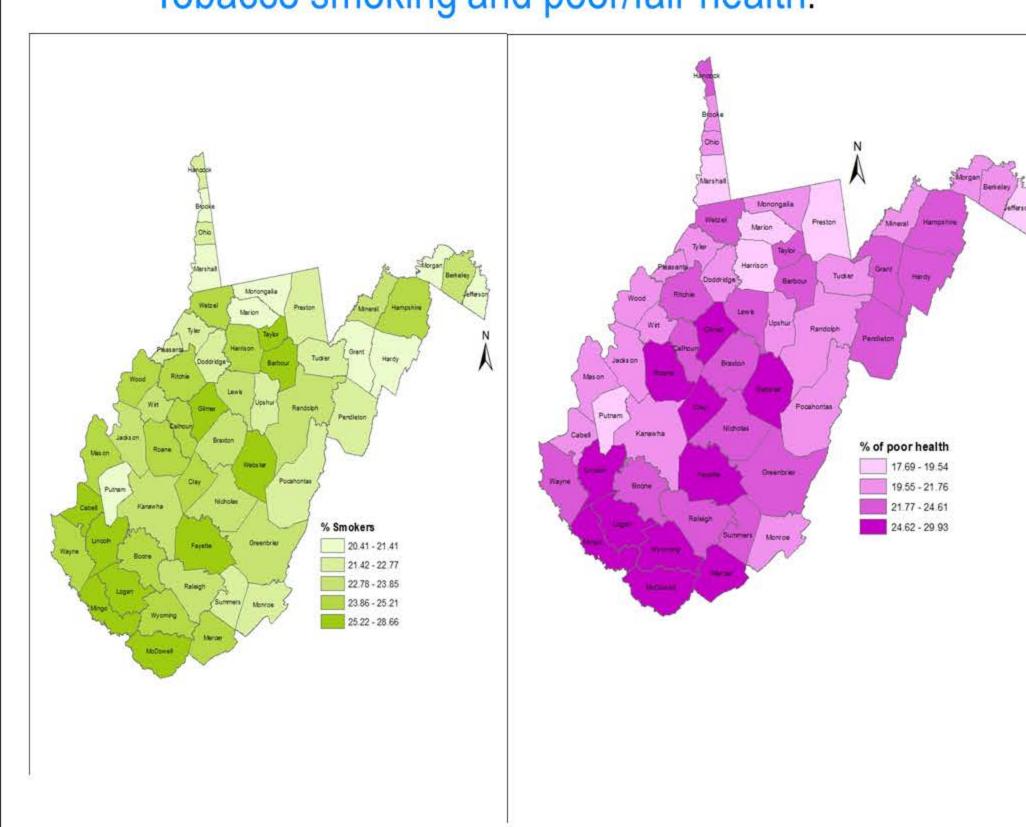
graduation rate and income inequality.

#### HYPOTHESES.

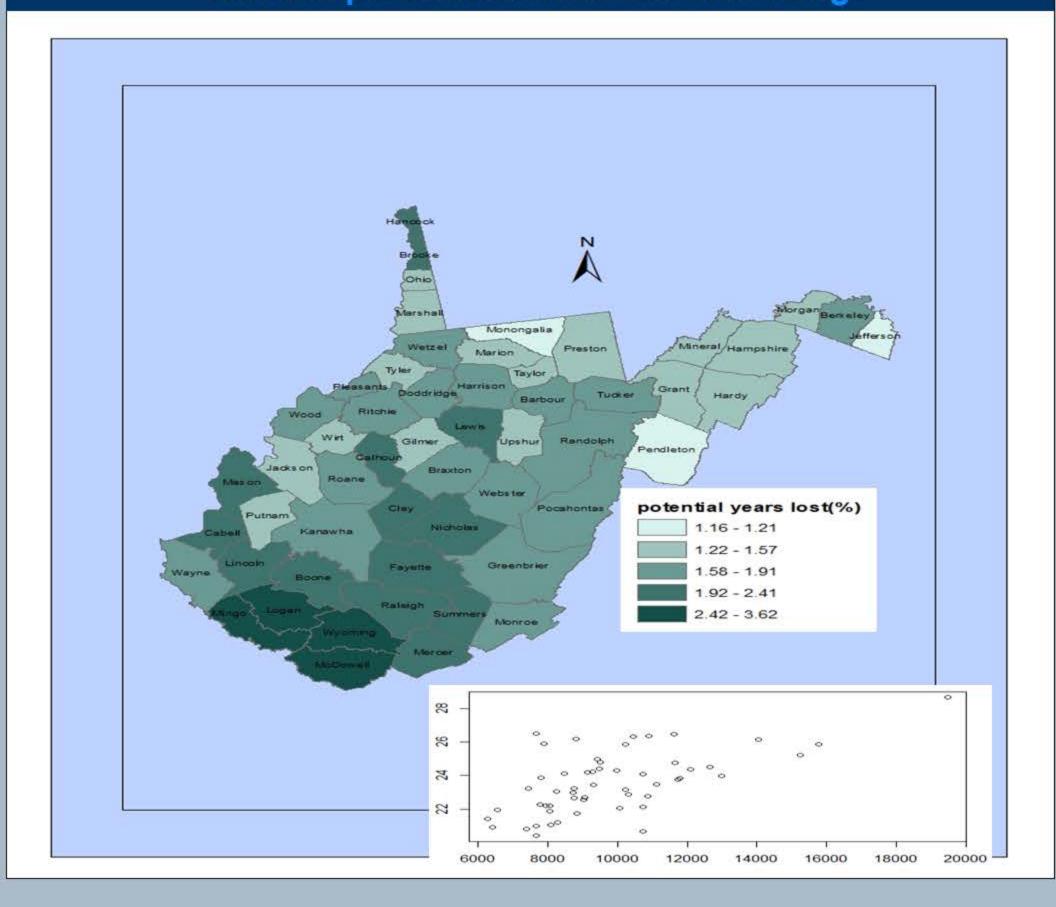
- 1. Low birthweight is positively related to smoking.
- 2. Poor / fair health is positively related to smoking.
- 3. Potential years of life lost is positively related to smoking.
- 4. Poor mental health is positively related to smoking.

## RESULTS.

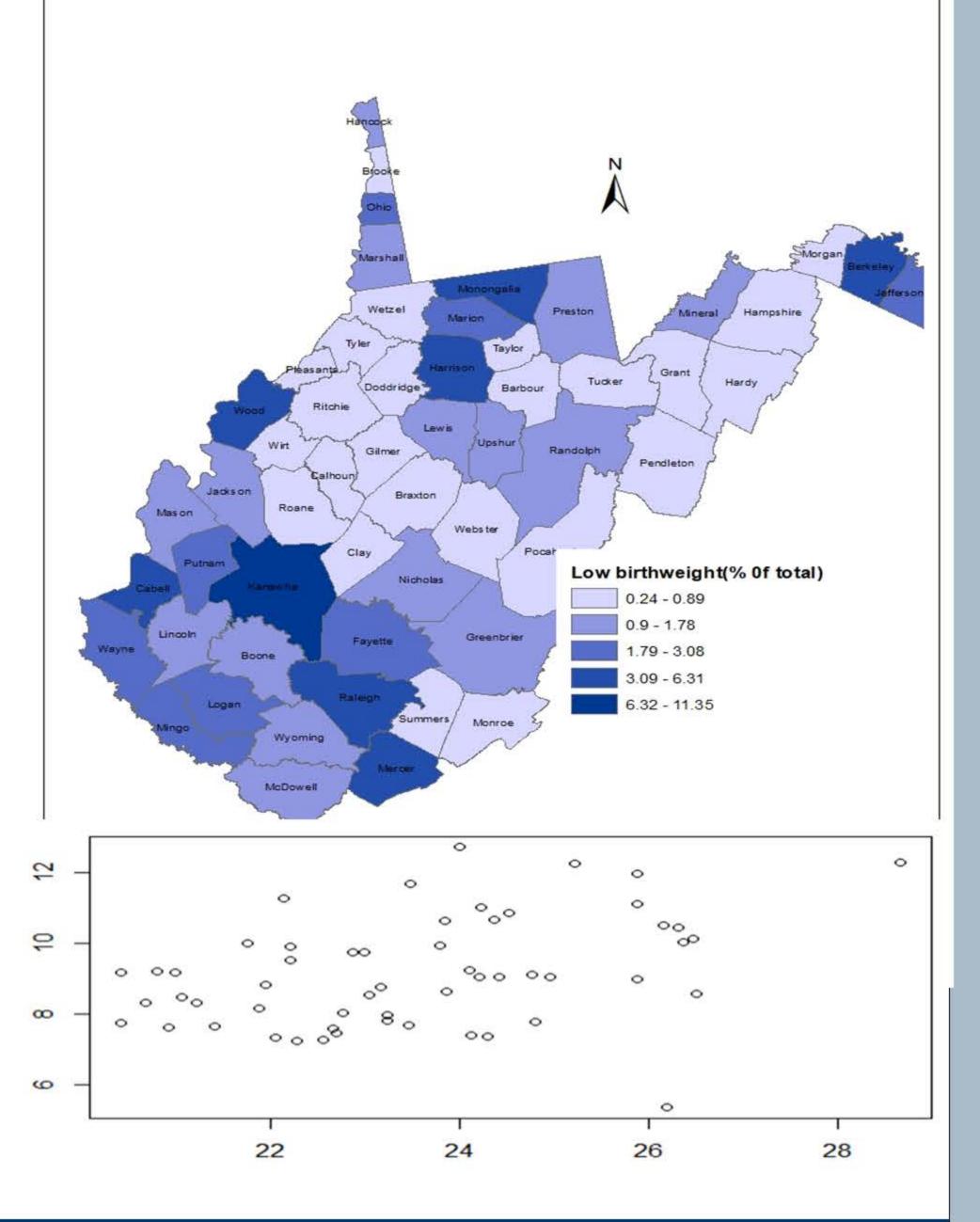
Tobacco smoking and poor/fair health.



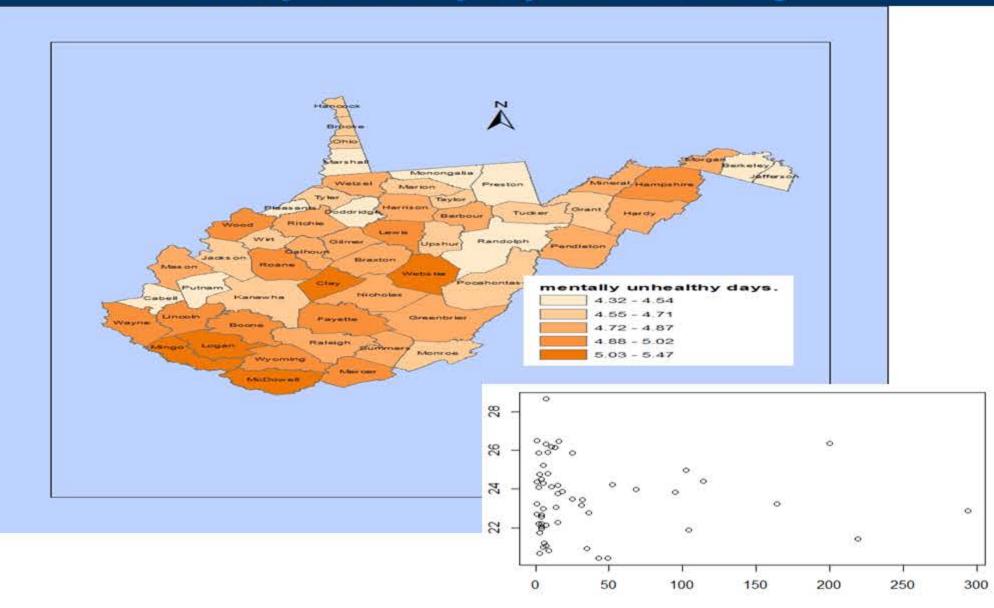
Years of potential life lost and smoking.



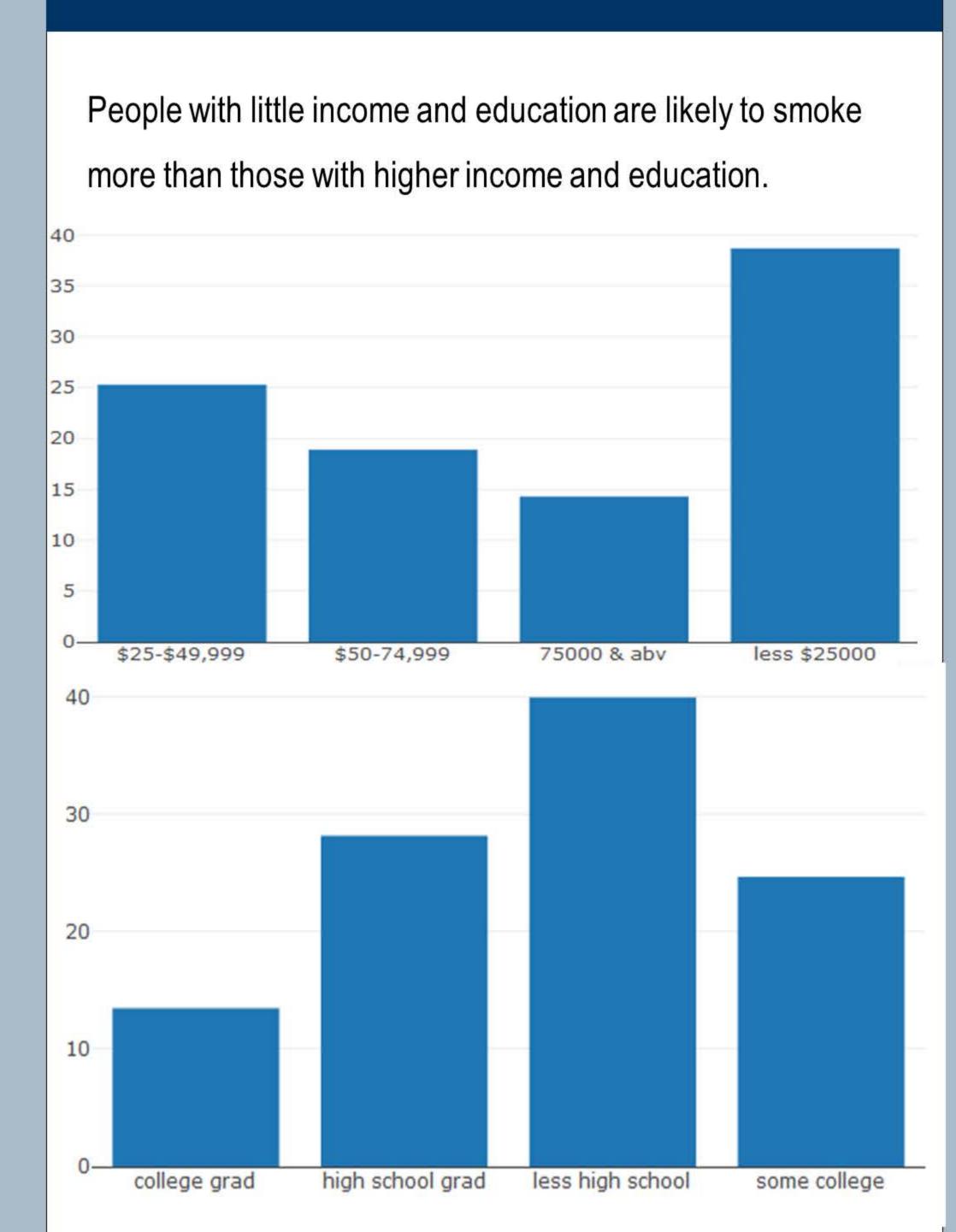
#### Lower birth weight and smoking.



Mentally unhealthy days and smoking.



- Poor health is positively related to smoking.
- The average potential years of life lost by smokers increases with an increase in tobacco use.
- Tobacco smoking is positively associated with lower birth weight.
- There is no strong relationship between smoking and mental health.



#### 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.