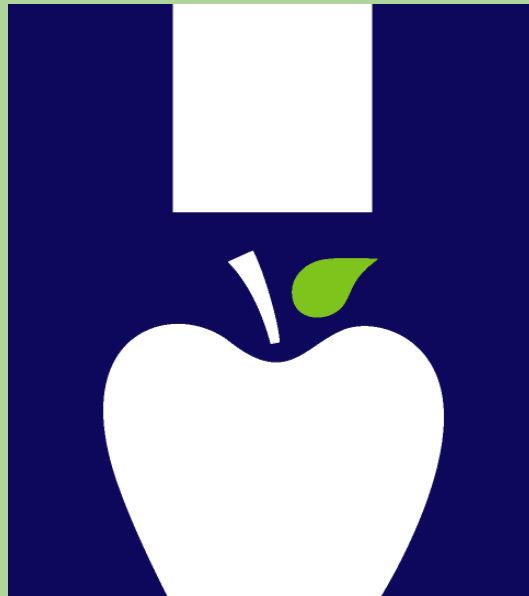


Oklahoma Health Outcomes

OKLAHOMA STATE DEPARTMENT OF HEALTH · SEPTEMBER 2011

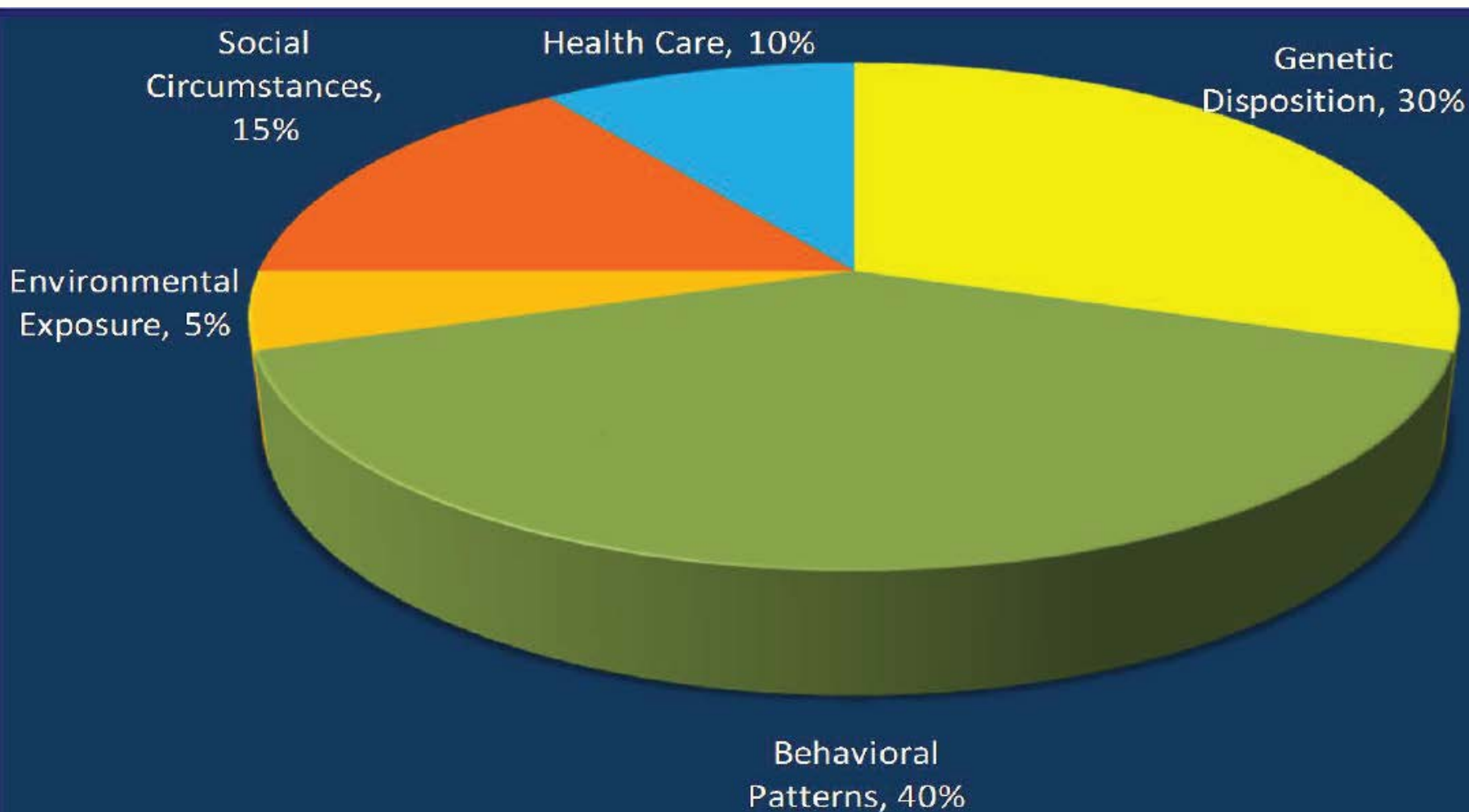


Julie Cox-Kain, M.P.A.
Chief Operating Officer

Determinants of Health and Excess Mortality & Overall Health Rankings



Determinants of Health and Their Contribution to Premature Death



United Health Foundation Rankings Oklahoma (2010)

Selected Health Measures	Data	Rank
Cardiovascular Deaths (per 100,000)	345.1	48
Prevalence of Smoking (% of pop)	25.4	48
Early Prenatal Care (% visit first trimester)	76.4	47
Prevalence of Obesity (% of pop)	32.0	46
Preventable Hospitalizations (per 1,000 Medicare)	88.7	46
Occupational Fatalities (per 100,000)	7.2	44
Infant Mortality (per 1,000 live births)	8.3	44
Immunization Coverage (% 2 year olds)	91.3	18
Lack of Health Insurance (% population uninsured)	16.1	35
Primary Care Physicians (per 100,000)	80.3	49
Overall Health Ranking		46



United Health Foundation Rankings Oklahoma (2010)

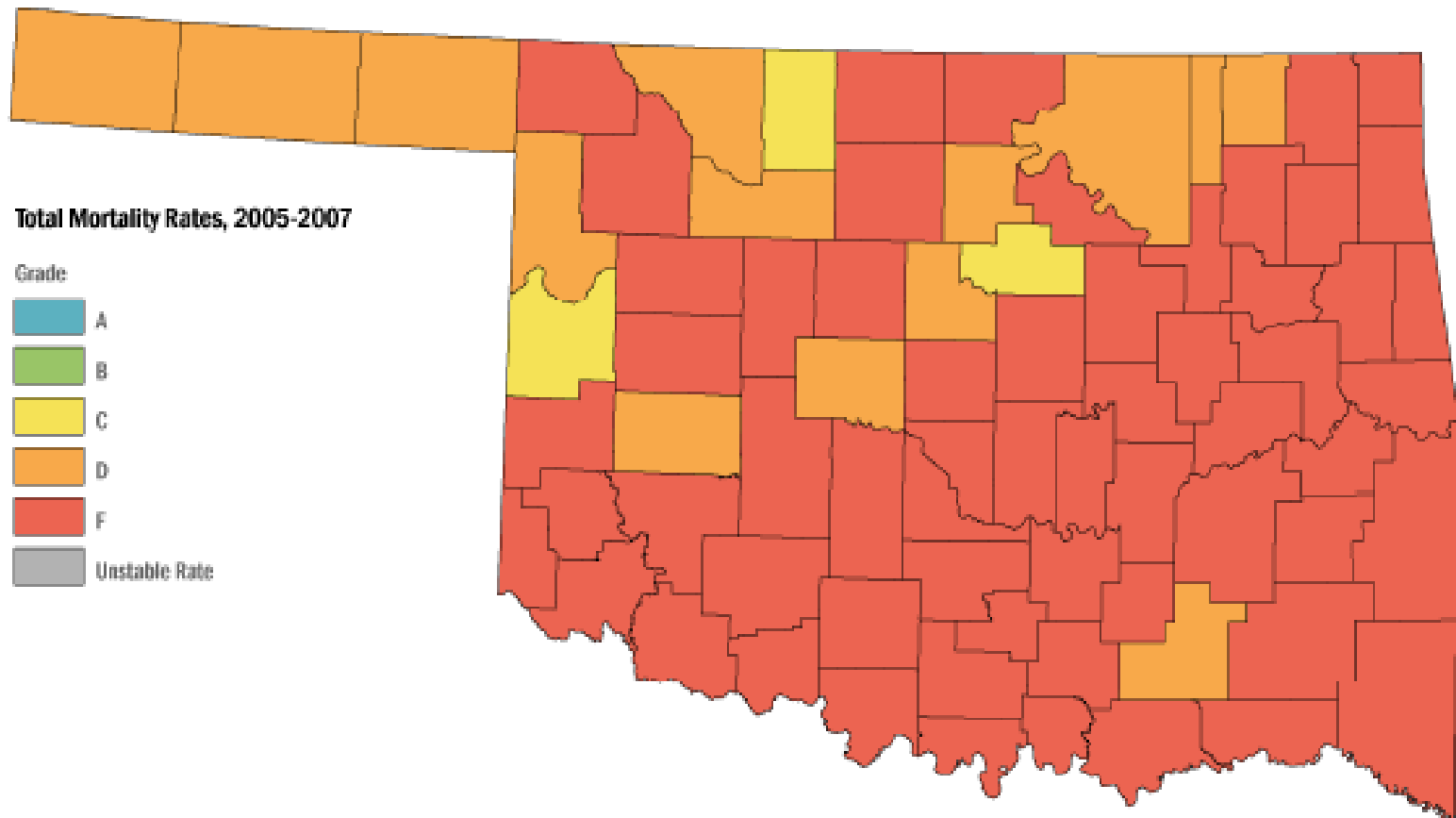
Selected Supplemental Measures	Data	Rank
Daily Fruit & Vegetable Consumption (% of pop)	14.5	50
Physical Activity (% of adult pop)	68.6	48
Stroke (% of adult pop)	3.8	49
High Cholesterol (% of adult pop)	40.2	45
High Blood Pressure (% of adult pop)	34.3	44
Diabetes (% of adult pop)	11.0	45
Preterm Birth (% of births under 37 wks gestation)	13.5	37
Health Status (% report fair or poor health)	19.5	42



Leading Causes of Death in Oklahoma



Total Mortality Rate per 100,000 Population 2005-2007



Leading Causes of Death in Oklahoma

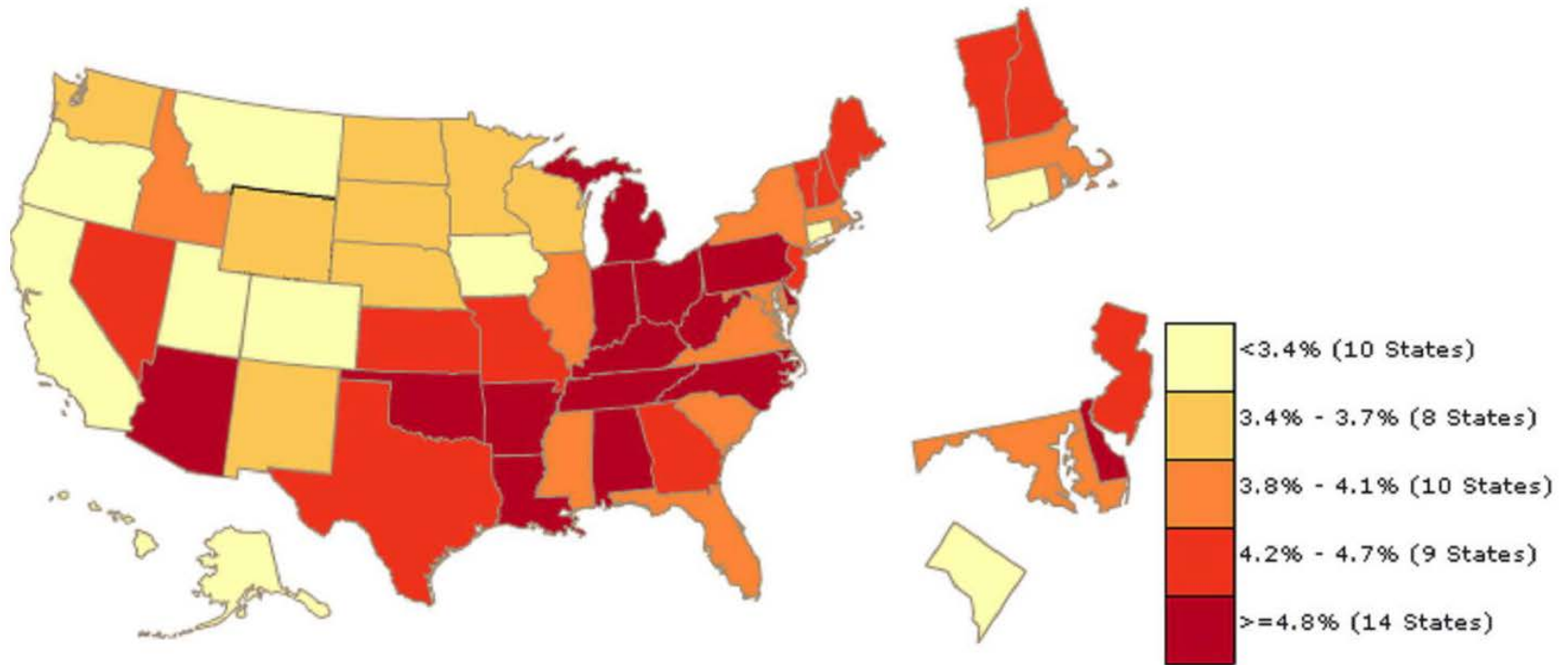
1. Heart Disease
2. Cancer
3. Chronic Obstructive
Pulmonary Disease
4. Stroke
5. Unintentional Injuries
6. Diabetes
7. Alzheimer's Disease
8. Influenza & Pneumonia
9. Suicide
10. Nephritis, nephrotic
syndrome and nephrosis
(kidney disease)

*2010 Preliminary Death Data from Oklahoma State Health Department Vital Statistics – Ranked by Age-Adjusted Death Rate Normalized to 2000 US standard population - found at www.health.ok.gov/ok2share



Heart Disease Rates

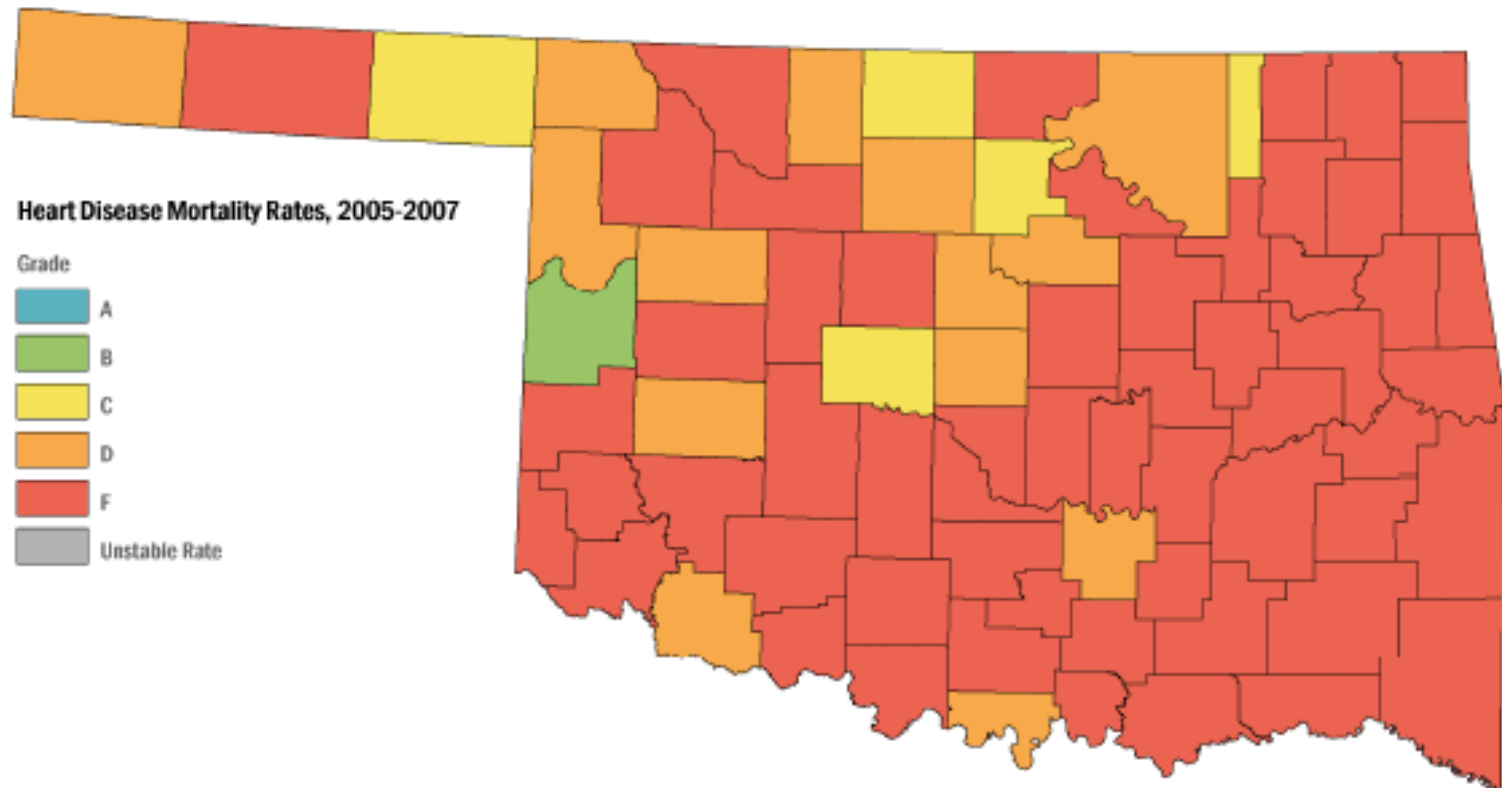
2007 Prevalence of coronary heart disease among US adults (18+) (Percentage)†



Citation: Division for Heart Disease and Stroke Prevention: Data Trends & Maps Web site. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Atlanta, GA, 2010. Available at <http://www.cdc.gov/dhdsp/>.



Heart Disease Death Rate per 100,000 Population, 2005-2007



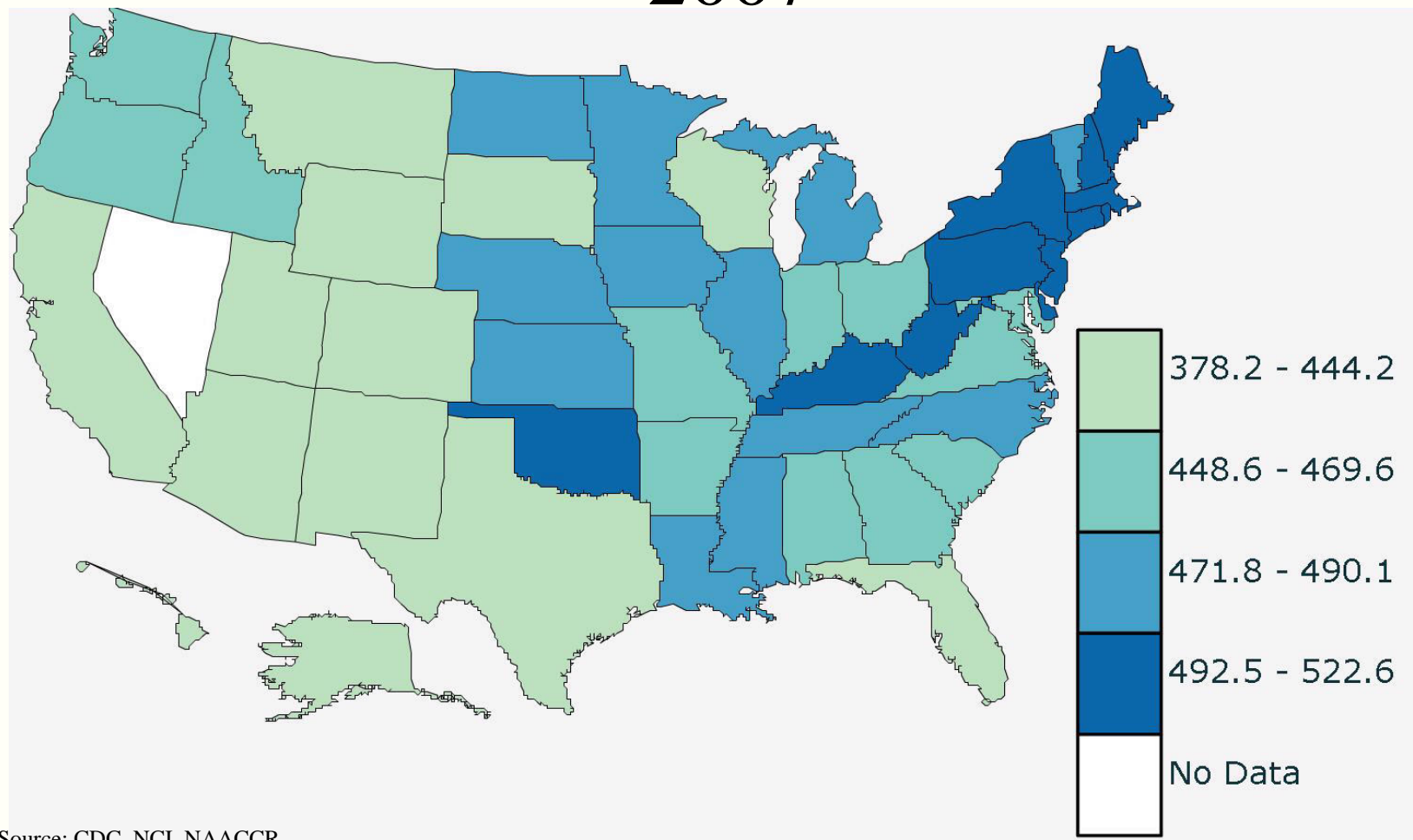
Leading Risk Factors for Heart Disease

in order of prevalence among people with heart disease (US)

- Physical inactivity
- Overweight and obesity
- High blood pressure
- Cigarette smoking
- High cholesterol
- Diabetes



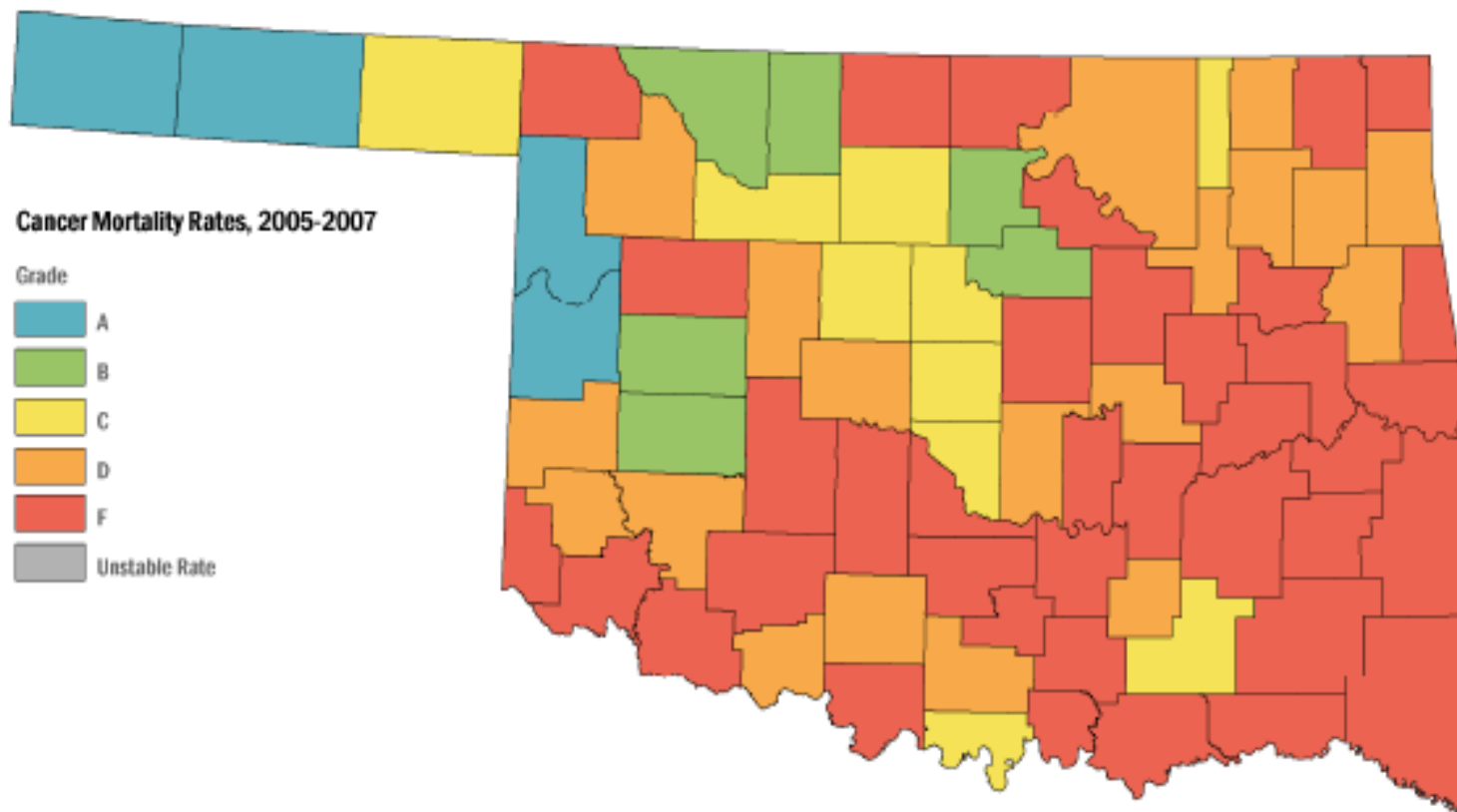
Cancer Rates per 100,000 Population 2007



Source: CDC, NCI, NAACCR



Cancer Death Rate per 100,000 Population 2005-2007



Leading Cancer Deaths in Oklahoma

Men	Women
<ul style="list-style-type: none">• Lung• Prostate• Colorectal• Pancreas• Leukemia	<ul style="list-style-type: none">• Lung• Breast• Colorectal• Pancreas• Ovary

* Cancer death rates in men are due to lung cancer more than the other four top causes of cancer death combined.

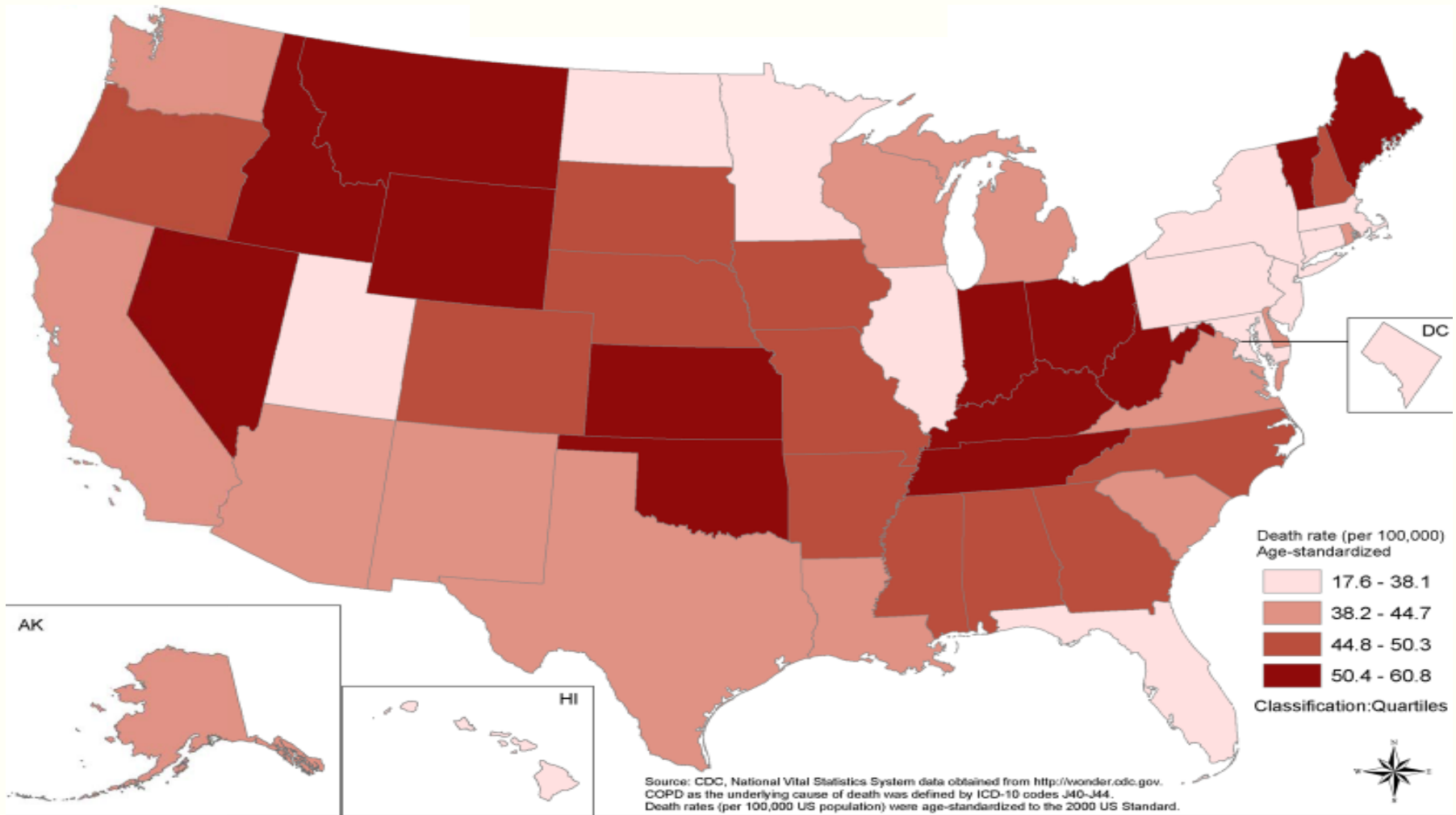


Risk Factors for Lung Cancer

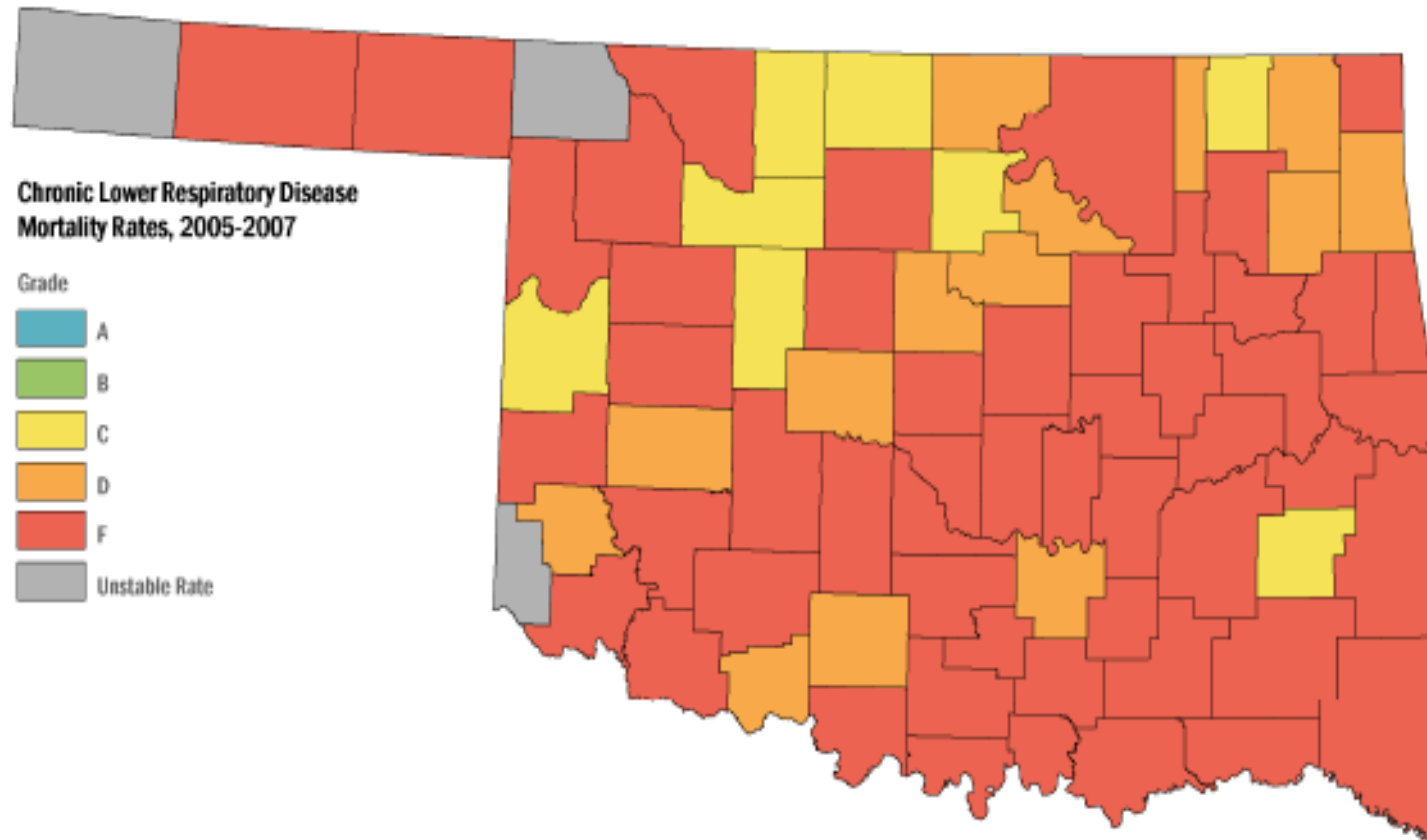
- In the United States, about 90% of lung cancer deaths in men and almost 80% of lung cancer deaths in women are due to smoking.
- People who smoke are 10 to 20 times more likely to get lung cancer or die from lung cancer than people who do not smoke.
- Nonsmokers who are exposed to secondhand smoke at home or at work increase their risk of developing lung cancer by 20-30%.
- The longer a person smokes and the more cigarettes smoked each day, the more risk of lung cancer goes up.
- People who quit smoking have a lower risk of lung cancer than if they had continued to smoke, but their risk is higher than the risk for people who never smoked.
- Smoking also causes cancer of the voicebox (larynx), mouth and throat, esophagus, bladder, kidney, pancreas, cervix, and stomach, and causes acute myeloid leukemia.



Chronic Obstructive Pulmonary Disease in US 1999 - 2006



Chronic Lower Respiratory Disease Death Rate per 100,000 Population 2005-2007



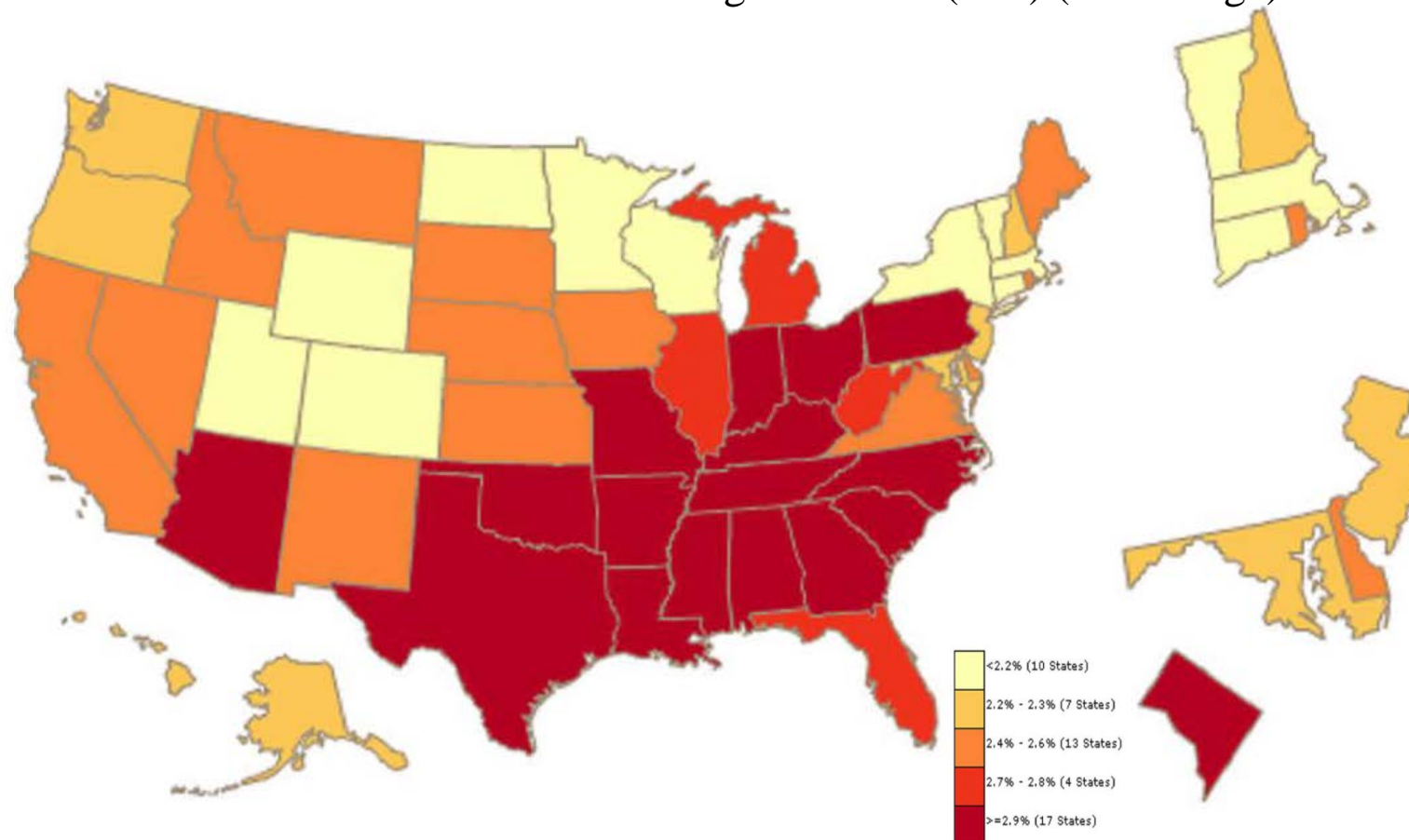
Risk Factors for COPD Death

- Tobacco use
- Asthma
- Exposure to air pollutants
- Genetic factors
- Respiratory infections



Stroke Rates

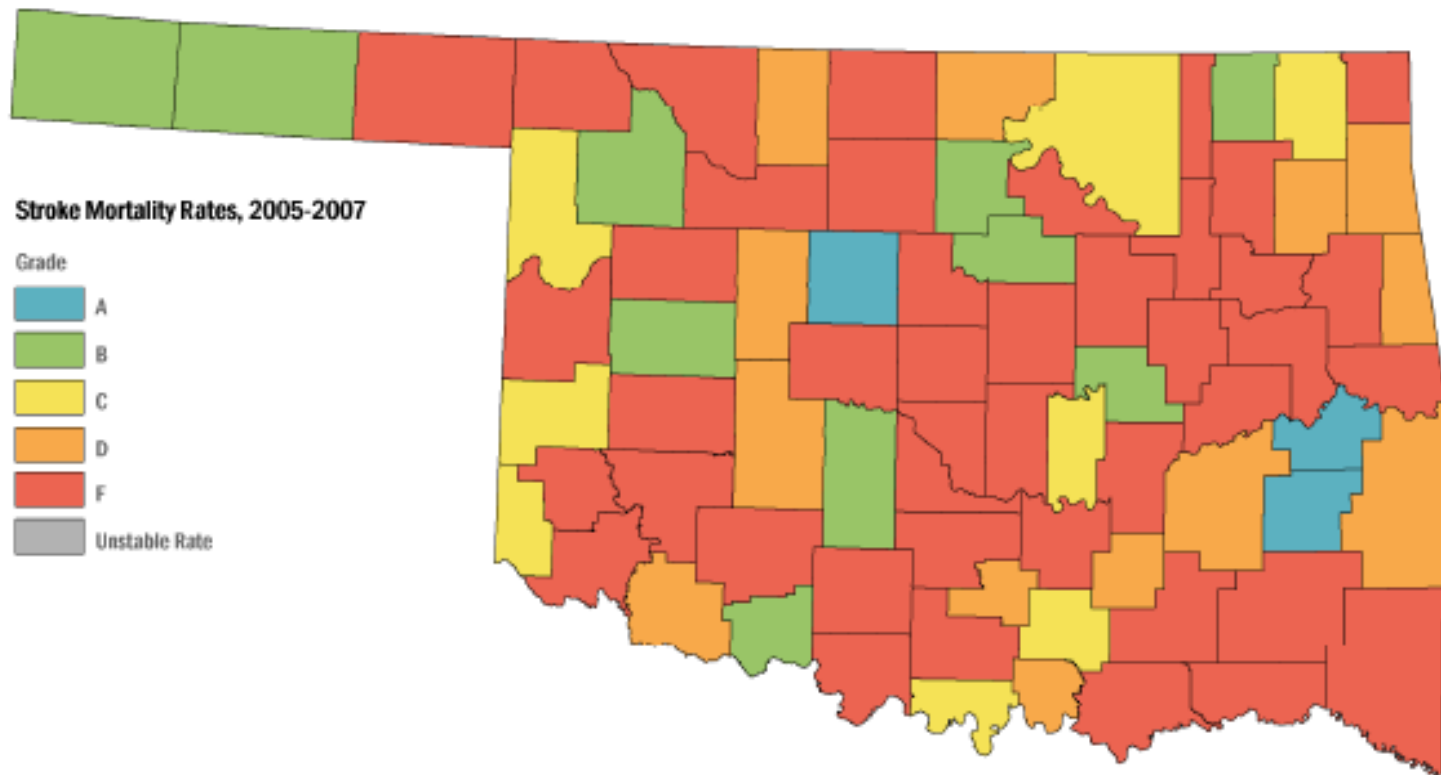
2007 Prevalence of stroke among US adults (18+) (Percentage)t



Citation: Division for Heart Disease and Stroke Prevention: Data Trends & Maps Web site. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Atlanta, GA, 2010. Available at <http://www.cdc.gov/dhdsp/>.



Stroke Death Rate per 100,000 Population 2005-2007



Risk Factors for Stroke Death

- High Blood Pressure
- High Cholesterol
- Heart Disease
- Overweight/Obesity
- Diabetes
- Tobacco Use
- Alcohol Use
- Physical Inactivity
- Heredity



Hospital Costs Associated with Top Four Causes of Death in Oklahoma 2009

- Heart disease - \$2.1 billion
- All cancer - \$603 million
- COPD - \$221 million
- Stroke - \$358 million

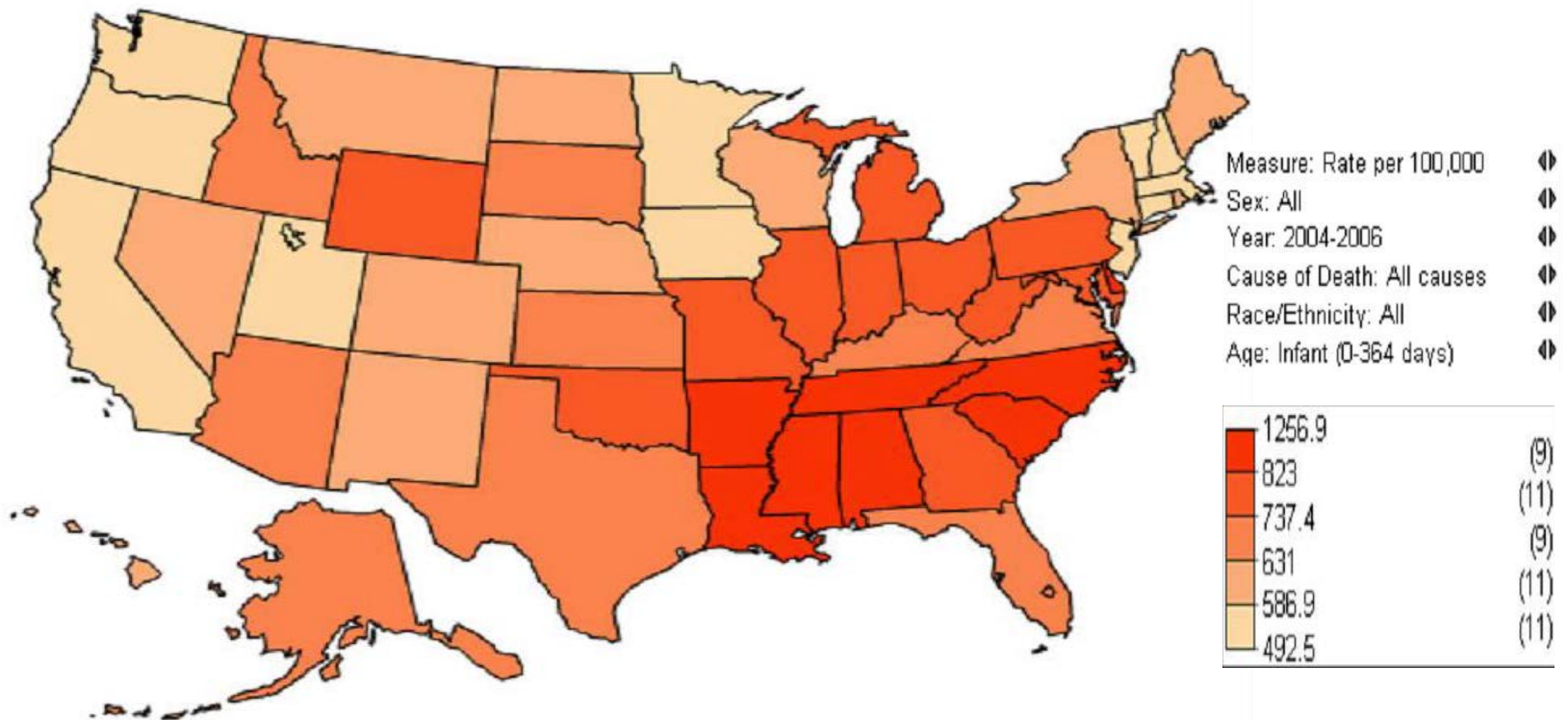
Source: OSDH, OK2Share



Infant Mortality in Oklahoma



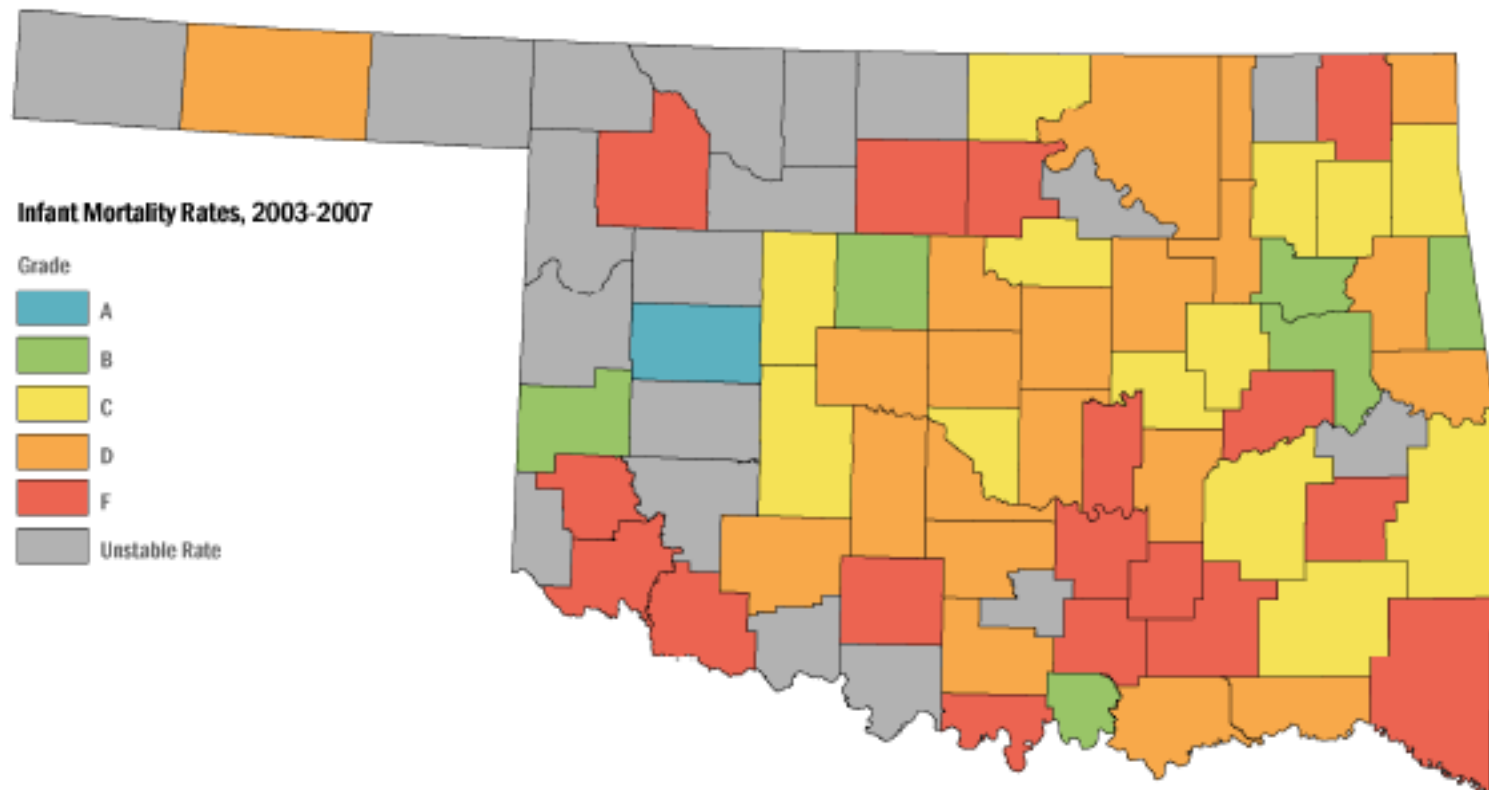
Infant Mortality Rate per 100,000 Population 2001-2006



Source: NVSS, NCHS, CDC. Oklahoma 795



Infant Mortality Rate per 1,000 Population 2003-2007



Top 3 Causes of Infant Death in Oklahoma

- Medical Condition Present at Birth
- Early Birth or Low Birth Weight
- Sudden Infant Death Syndrome



Risk Factors for Infant Mortality

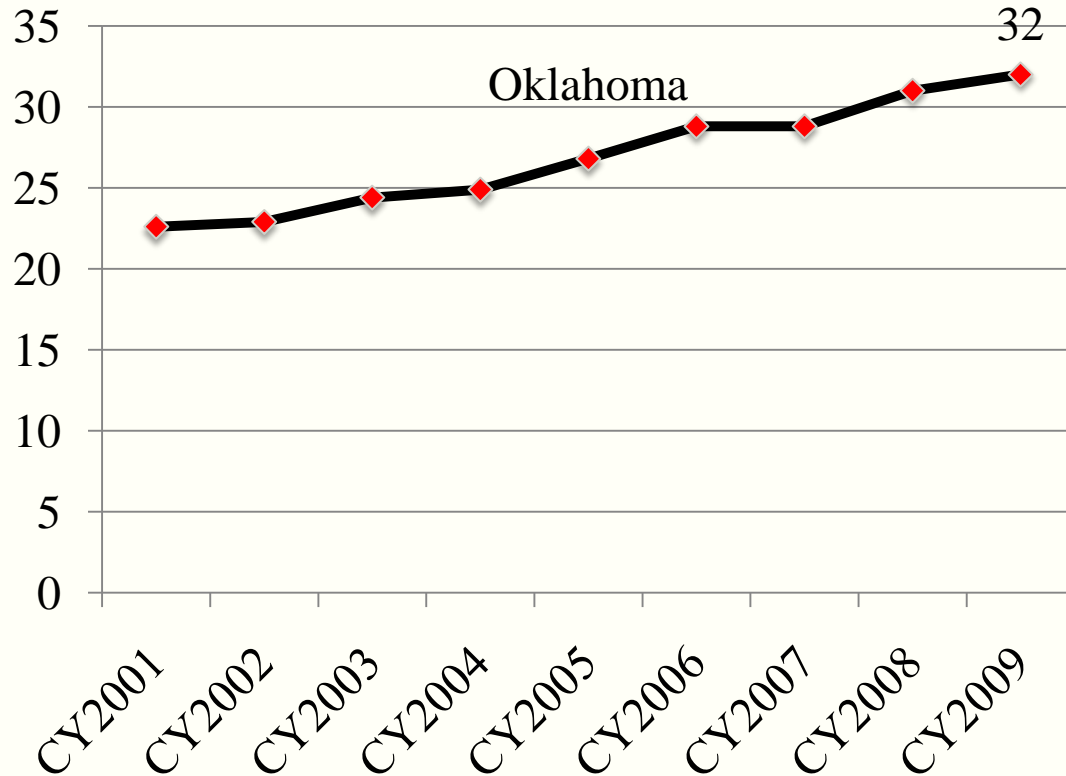
- Lack of Prenatal Care
- Poor Nutrition
- Maternal Smoking/Exposure to Smoke
- Substance Abuse
- Unhealthy Mother/Maternal Infection
- Infant Sleeping Position



Health Behaviors & Risk Conditions in Oklahoma



ADULT OBESITY

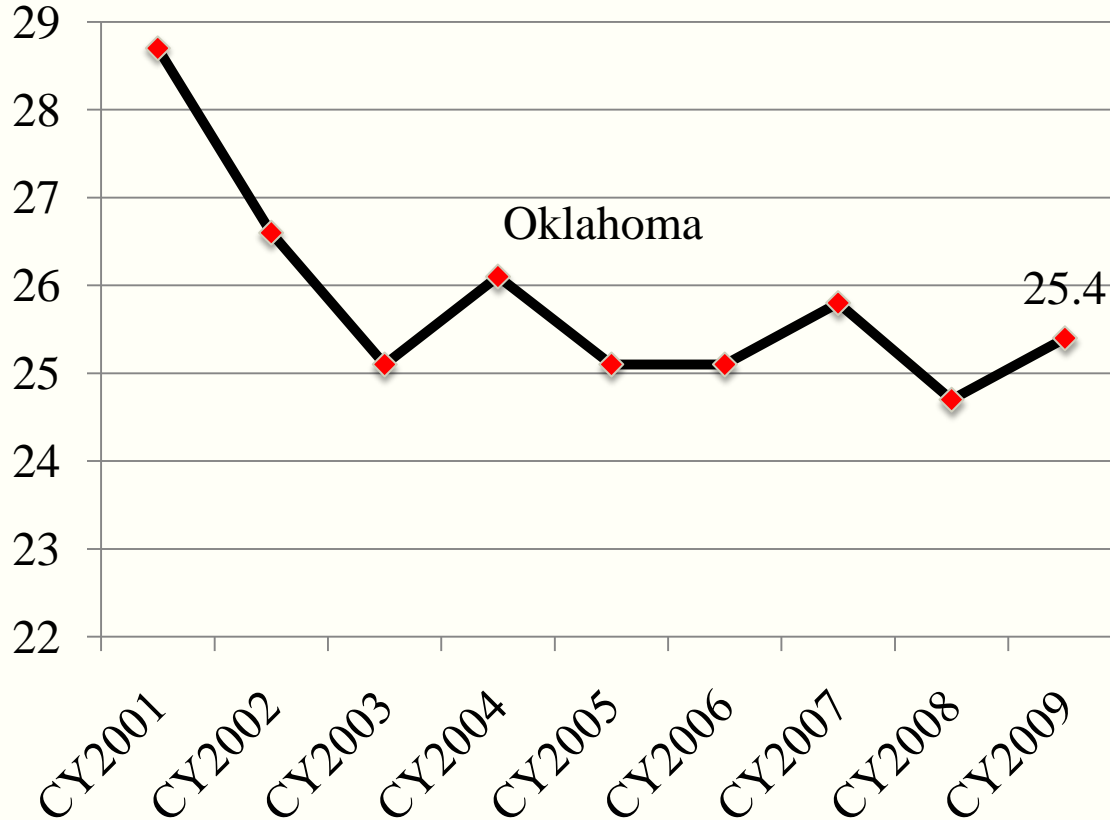


OBESITY FAST FACTS

- Trend rates indicate Oklahoma may be the most obese state in the nation by 2018 at 56.1%.
- Direct healthcare costs associated with treating obesity in Oklahoma are estimated at \$5,102,000,000 by 2018, up from \$1,069,000,000 in 2008.



TOBACCO

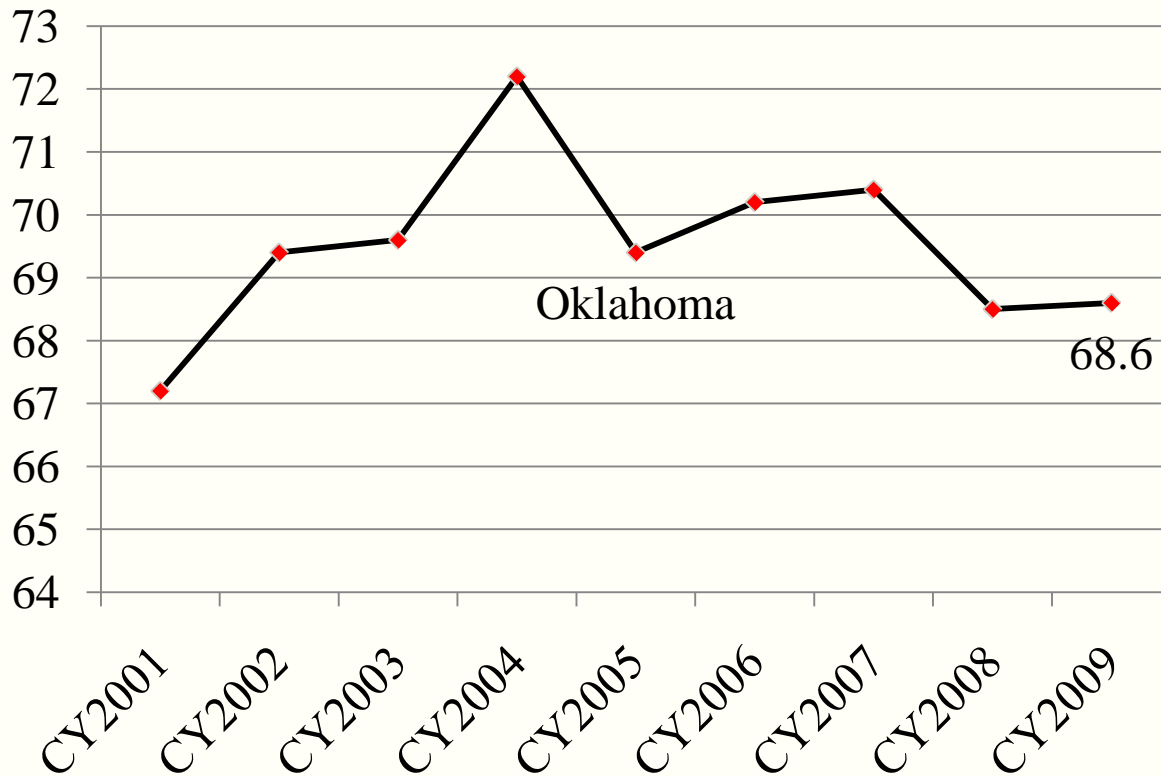


TOBACCO FAST FACTS

- The annual costs incurred in Oklahoma from smoking:
 - ✓ \$1,162,000,000 in medical costs
 - ✓ \$218,000,000 in Medicaid
 - ✓ \$1,556,000,000 in lost productivity
- A 5% point reduction in tobacco use could save Oklahoma as much as \$54,571,573
- Secondhand smoke causes an estimated 3,400 lung cancer deaths among U.S. nonsmokers each year.



PHYSICAL INACTIVITY

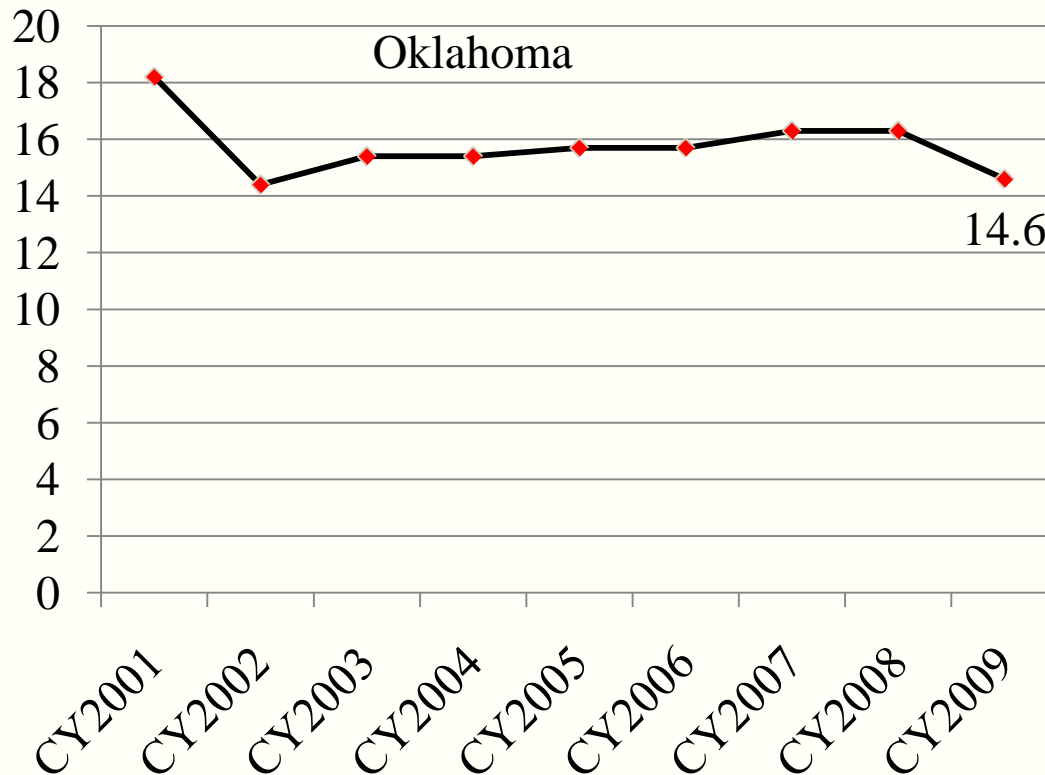


FAST FACTS

- Physically active people save at least \$787 in direct medical cost every year.
- Only 31.4% of high school students have daily physical education.
- 29% of Oklahoma High School Students watch three or more hours of TV daily.



FRUIT & VEGETABLE CONSUMPTION



FAST FACTS

- Only 14.8% of youth eat fruits and vegetables 5 times per day
- Multiple studies indicate that school-based programs aimed at better nutrition, health education & physical activity improve test scores.



Summary of Health Status in Oklahoma

- Health behaviors are the largest contributing factor to overall health.
- OK ranks poorly nationally in most health outcomes and risk factors for disease.
- The majority of excess mortality in Oklahoma is in Cardiovascular Disease, Chronic Obstructive Pulmonary Disease, Lung Cancer & Stroke.
- Oklahoma's high infant mortality rate means that babies are more likely to survive to their first birthday in almost any other state.
- There is a strong relationship between the burden of disease & premature death in Oklahoma and rates tobacco use, poor nutrition & limited exercise.

