

Definition of Health

The World Health Organization's definition of health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

A state of complete physical, mental, social and spiritual well-being Deb McMahan, MD

Social Determinants of Health

- Health does not occur in a vacuum
- Social Determinant of Health are the conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes.

Social Determinants of Health

- Social determinants of health are "the structural determinants and conditions in which people are born, grow, live, work and age.
- These include:
 - social environment
 - physical environment
 - health services
 - structural and societal factors
 - genes



The Importance of Health

The health of the people is really the foundation upon which all their happiness and all their powers as a state depend.

Benjamin Disraeli







Health and Productivity

The overall

productivity and

prosperity of a

community is a function

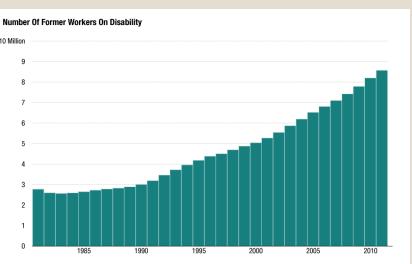
of the underlying

health of it's people

No. of Former Workers Currently on Disability

Male Labor Participation Rate

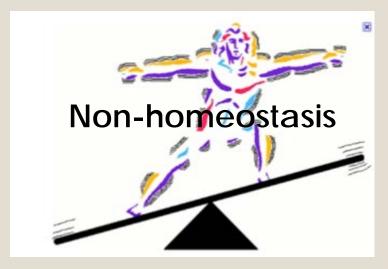




You and I are trying to maintaining or reestablish balance (homeostasis)



Productivity



Hypertension

Addiction

Diabetes

Heart Disease

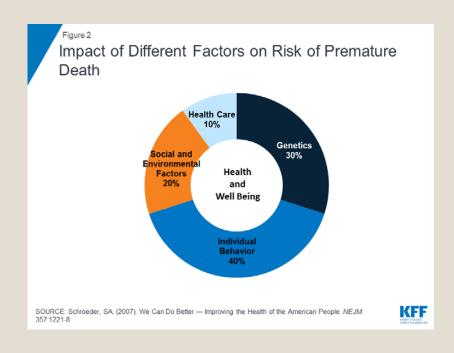
Depression

Cancer

Obesity

Parental Health and Children

- Research has demonstrated a strong, positive association between parent health and child health.
- Happens thru genetic, environmental and social pathways



Parental Health and Children

- For example: Parental depression is a well-established risk factor for children's health and well-being thru both social-transactional and bio-genetic pathways.
 - In a 30-year study that examined the risk of major depression in families over three generations; compared to children with nondepressed parents, biological children of depressed parents had twice the risk for major depressive disorder (MDD) and other mental health issues, and that children with both a depressed parent and grandparent were at highest risk for MDD.

Why Belabor This?

- We don't have a lot of indicators for family or children's health but we can look at parental health as a predictor or risk factor for children's health
- •The interconnectedness of parent and child health offers the potential for children to benefit from interventions that improve the health of parents.

How are We Doing?

Social Determinants

State Health Rankings

Dentists45th

Mental Health Providers 42nd

Clinical care41st

State Health Rankings

Children in poverty

∘ Violent crime 30th

29th

Air pollution44th

Housing in Allen County

- Owner-occupied housing unit rate
- Median value of owner occupied
- Median gross rent

68.3%

\$119,400

\$719

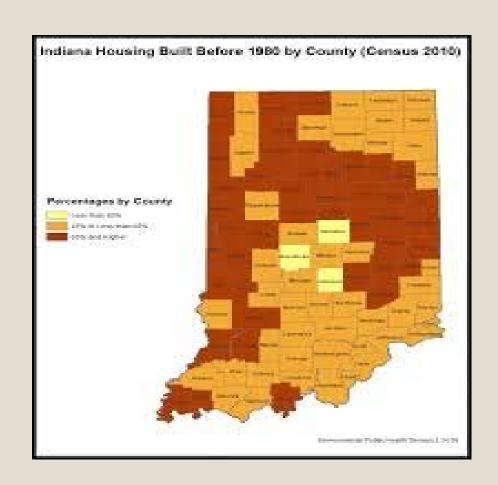
Housing

Top Evicting Large Cities in the United States Ranked by Eviction Rate

FORT WAYNE IS RANKED 13TH WITH A RATE OF 7.39%

Lead and Safe Housing

- Houses built before 1978 are at risk for being contaminated with lead paint.
- Between 45% and 65% of Allen
 County housing built before
 1980
- Lead is a neurotoxin for children less than 6 years of age

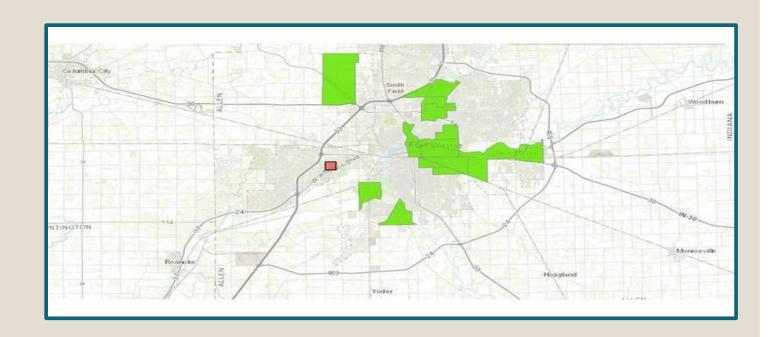


Food Insecurity in Allen County

- Food insecurity: the disruption of food intake or eating patterns because of lack of money and other resources.
- 19.5% of children in Allen County have food insecurity

Food Deserts in Allen County

- Food desert: parts of the country vapid of fresh fruit, vegetables, and other healthful whole foods, usually found in impoverished areas.
- This is largely due to a lack of grocery stores, farmers' markets, and healthy food providers.



Health Outcomes

Trust for America's Health

 Indiana's public health outcomes generally lag those of the United States, and it has not taken several steps that would strengthen its preparedness for public health emergencies. Deaths owed to drug misuse, alcohol, or suicide outpace the country as a whole. Its rates of obesity and related conditions indicate an area of concern, with the percentage of adults with obesity higher than the U.S. median, as rates of diabetes and hypertension rank high. Finally, the state achieved a score of three out of a possible 10 measures of public health preparedness for diseases, disasters, and bioterrorism.

State Health Rankings

 Adult smoking 	44 th
, terent errient	• •

- Obesity39th
- Physical inactivity
 39th
- Diabetes40th

Lifestyle -- Allen County

- Adults with a BMI that is 25.0 to <30, it falls within the overweight range.
- Adults with a BMI of 30 or greater are obese.
- In children and adolescents, obesity is defined as having a BMI in the 95th percentile or greater for children and adolescents of the same age and sex

Lifestyle -- Allen County

- •Indiana has the 12th highest rate of obesity among adults and the 11th highest rate of obesity among children and teenagers in the U.S.
- •More than 13% of Indiana's young children from lowincome families are obese before they reach kindergarten.
- Obesity and overweight combined affect more than two-thirds of Indiana adults (68.0%)

Figure 1. Overweight and Obesity in Indiana, 1995–2017

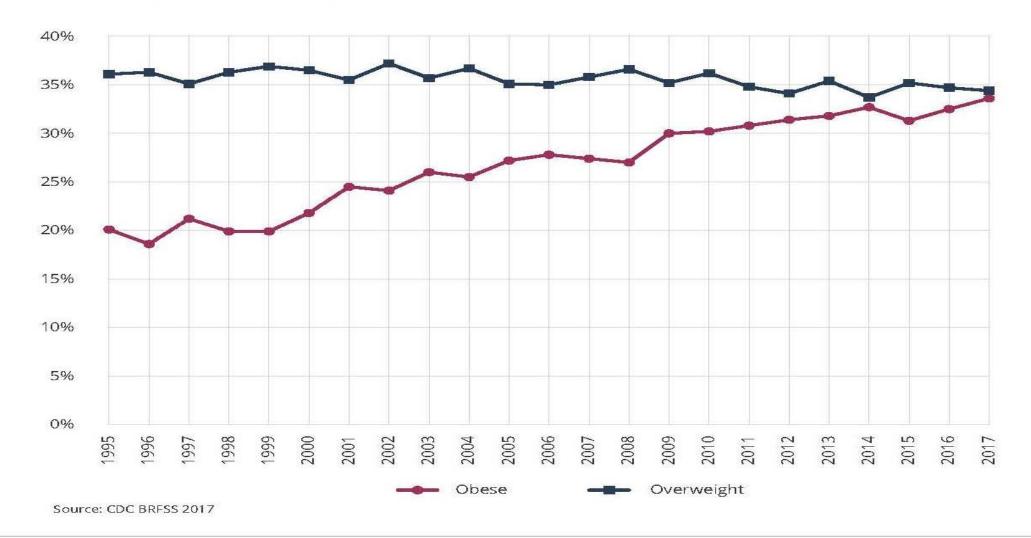
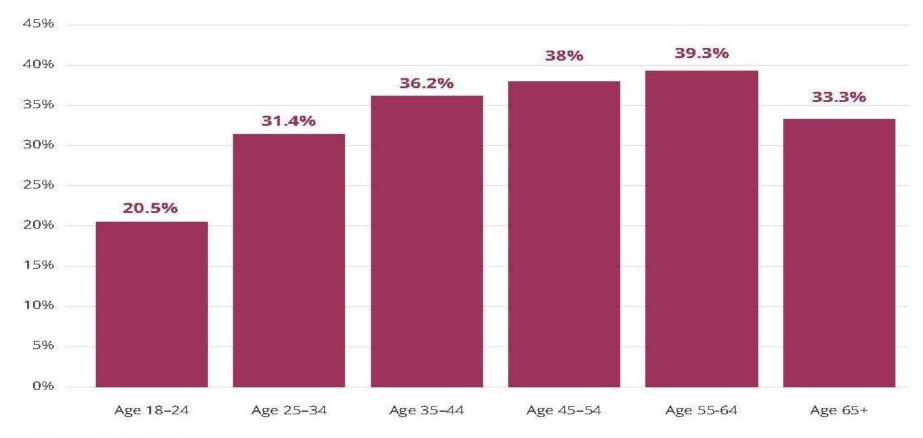


Figure 2. Indiana Obesity Prevalence by Age, 2017



Source: CDC BRFSS 2017

Figure 3. Indiana Obesity Prevalence, by Race/Ethnicity, 2017

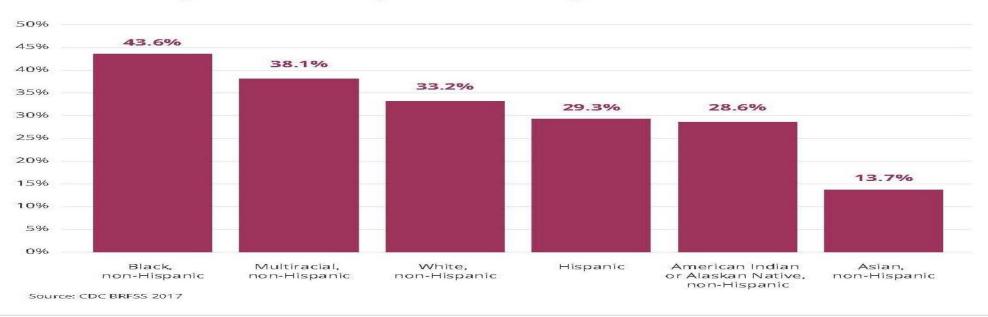
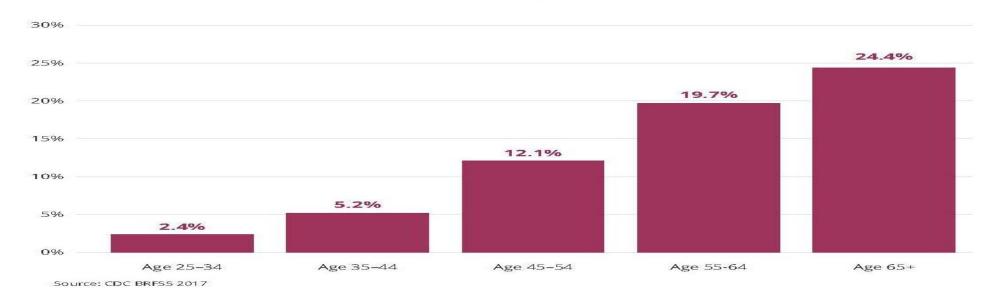
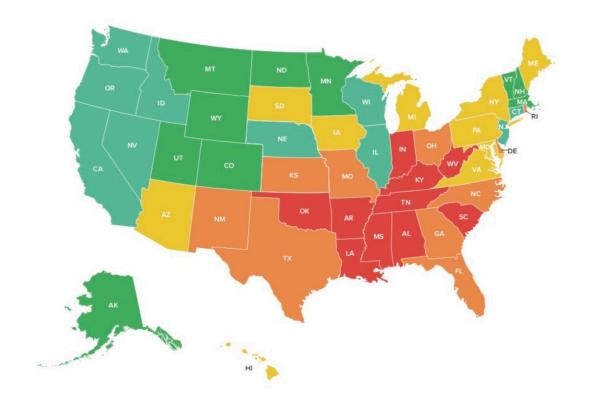


Figure 4. Indiana Type 2 Diabetes Prevalence, by Age, 2017



Prevalence of Diabetes



Top Quintile	2 nd Quintile	3 rd Quintile	4 th Quintile	5th Quintile
1 Alaska	11 Washington	21 Maryland	31 Texas	41 Indiana
2 Colorado	12 New Jersey	22 New York	32 New Mexico	42 Oklahoma
3 Montana	13 Idaho	23 Virginia	33 Kansas	43 Tennessee
4 New Hampshire	14 Oregon	24 Hawaii	34 Florida	44 Alabama
5 Utah	15 Connecticut	25 Iowa	35 Missouri	45 Arkansas
6 Vermont	16 Wisconsin	26 Pennsylvania	36 Georgia	46 Louisiana
7 Massachusetts	17 Nebraska	27 Michigan	37 Delaware	47 Kentucky
8 Minnesota	18 Illinois	28 Maine	38 Rhode Island	48 Mississippi
9 Wyoming	19 Nevada	29 South Dakota	39 Ohio	49 South Carolina
10 North Dakota	20 California	30 Arizona	40 North Carolina	50 West Virginia

Tobacco Use

Percent of adults in Allen County who are current

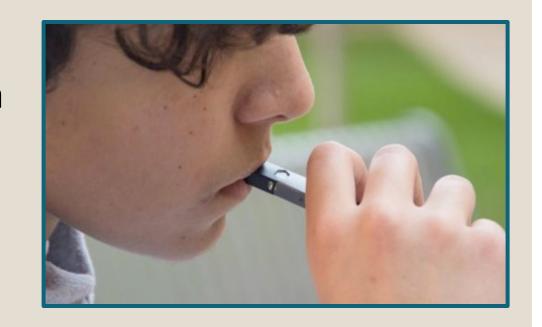
smokers: 22%

- Indiana is ranked 44th in the country for adult smoking prevalence
- Tobacco use costs Indiana \$7.6 billion annually in health care costs, lost productivity and premature loss of life-\$2.2 billion of which is attributed to the consequences of secondhand smoke.

https://www.cdc.gov/statesystem/cigaretteuseadult.html

E-Cigarettes

- E-cigarettes, such as JUUL and vape pens are now the most popular tobacco product among youth, with JUUL owning more than
 - 72 percent of the ecigarette market share.
- E-cigarettes are electronic devices that heat a liquid and produce an aerosol, or mix of small particles in the air.



Why Worry?

- Nearly 1 of every 20 middle school students (4.9%)
 reported in 2018 that they used electronic cigarettes
 in the past 30 days—an increase from 0.6% in 2011.
- Nearly 1 of every 5 high school students (20.8%)
 reported in 2018 that they used electronic cigarettes in the past 30 days—an increase from 1.5% in 2011.

Why Worry?

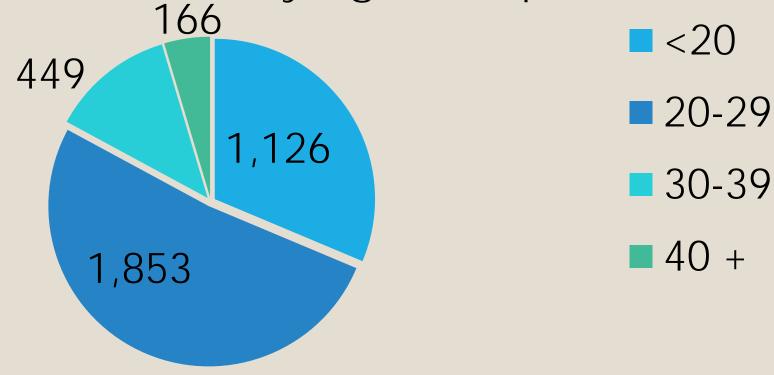
- Most e-cigarettes contain nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products.
- Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control.
- Using nicotine in adolescence may also increase risk for future addiction to other drugs.

Gonorrhea and Chlamydia Cases 2016, 2017,2018



2018 STI Age Group Breakdown, n=3,594

Number of STI Cases by Age Groups



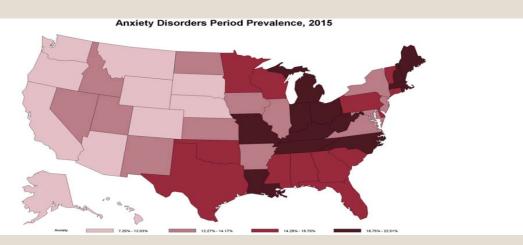
State Health Rankings

Drug death33rd

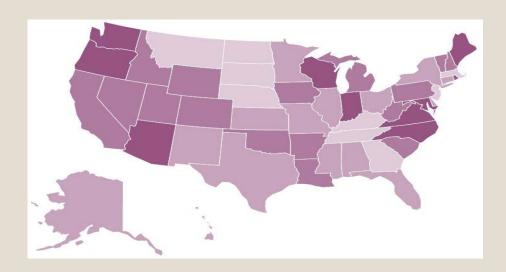
Frequent Mental Distress42nd

Infant Mortality43rd

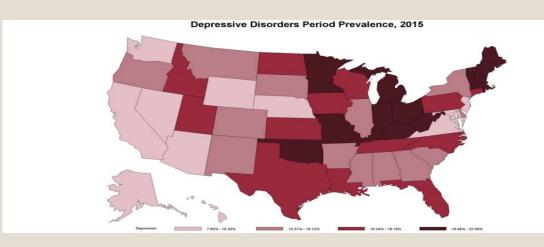
Prevalence of Mental Illness



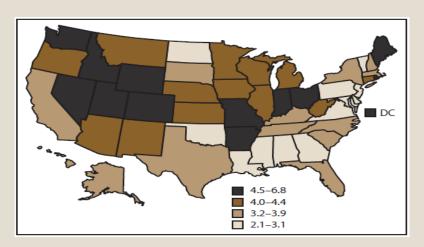
Prevalence of Anxiety in Medicare Pop.



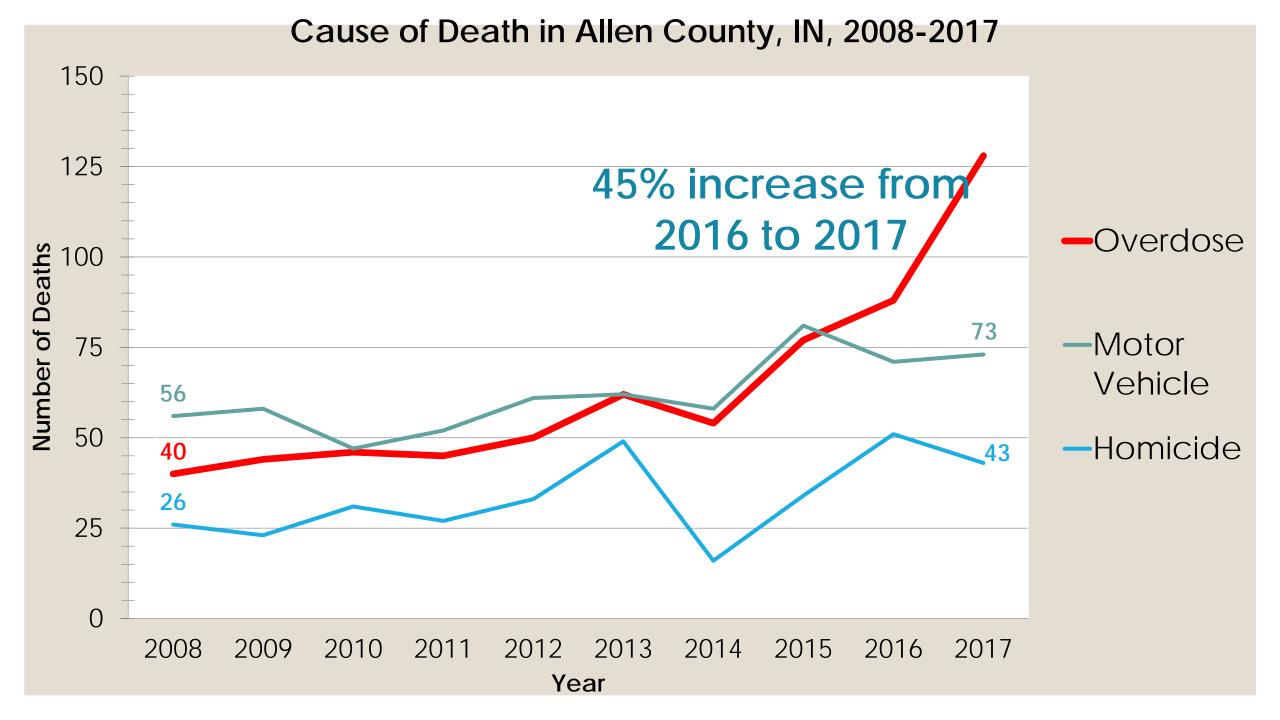
Youth with Severe Major Depressive Episode



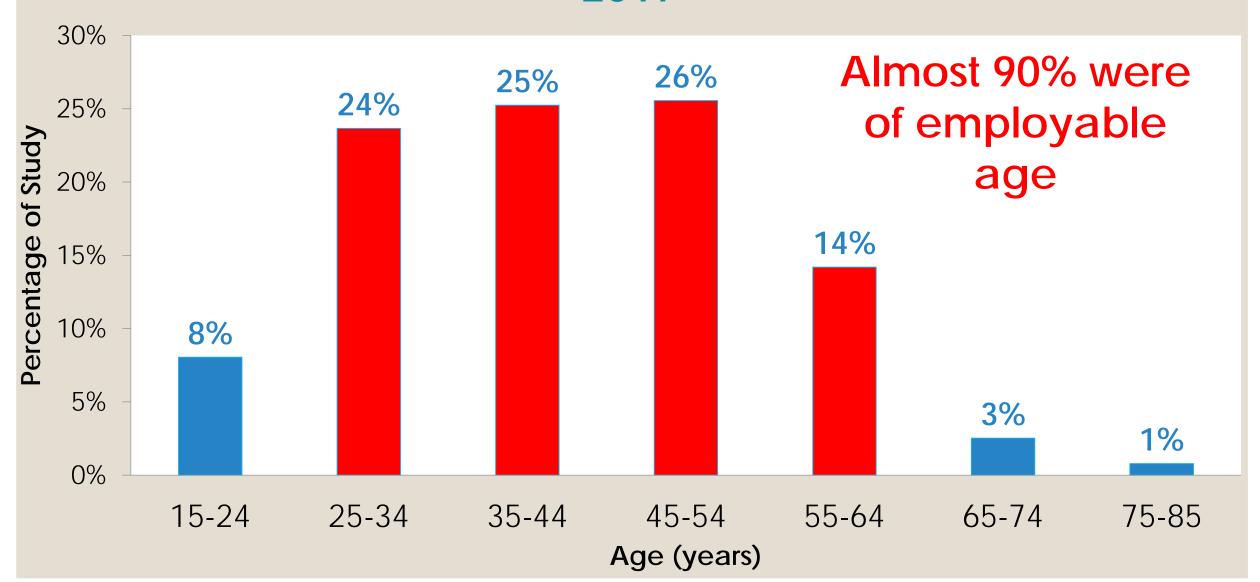
Prevalence of Depression in Medicare Pop.



Average annual prevalence of suicidal thoughts among adults aged ≥18 years



Percentage of Study Population by Age, 2008-2017



The Big Question ... Why?

Why?

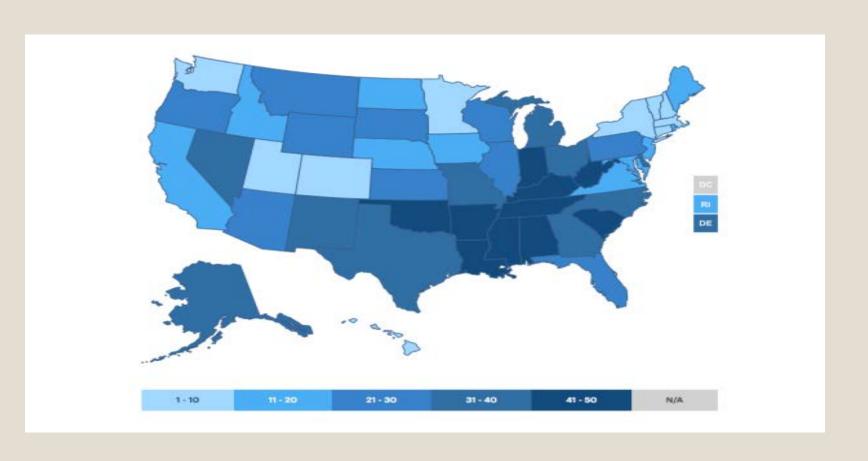
America's Health Rankings 2018

50.Louisiana

- 49. Mississippi
- 48. Alabama
- 47. Oklahoma
- 46. Arkansas
- 45. Kentucky
- 44. West Virginia
- 43. South Carolina
- 42. Tennessee

41. Indiana

40. Ohio



Summary

Summary

- We have a number of health outcomes that are not acceptable or economically sustainable in the long run.
- Our youth are developing behaviors that will negatively impact them and their community
- We are using a 20th century infrastructure to deal with 21st century issues.