



CHRONIC DISEASE IN WYOMING

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1



Disclosures to Participants

Notice of Requirements for Successful Completion:
Learners must participate in the full activity and complete the evaluation in order to claim continuing education credit/hours.

Presenter has No - Conflicts of Interest/Financial Relationships Disclosures:
Joe Grandpre

Disclosure of Relevant Financial Relationships and Mechanism to Identify and Mitigate Conflicts of Interest: No conflicts of interest

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2

Learning Objectives/ Program Overview

- a. To discuss with learners as to the current incidence, prevalence, and mortality rates of chronic diseases in Wyoming residents.
- b. To discuss the risk factors associated with chronic diseases and the rates of those risk factors in Wyoming.

3

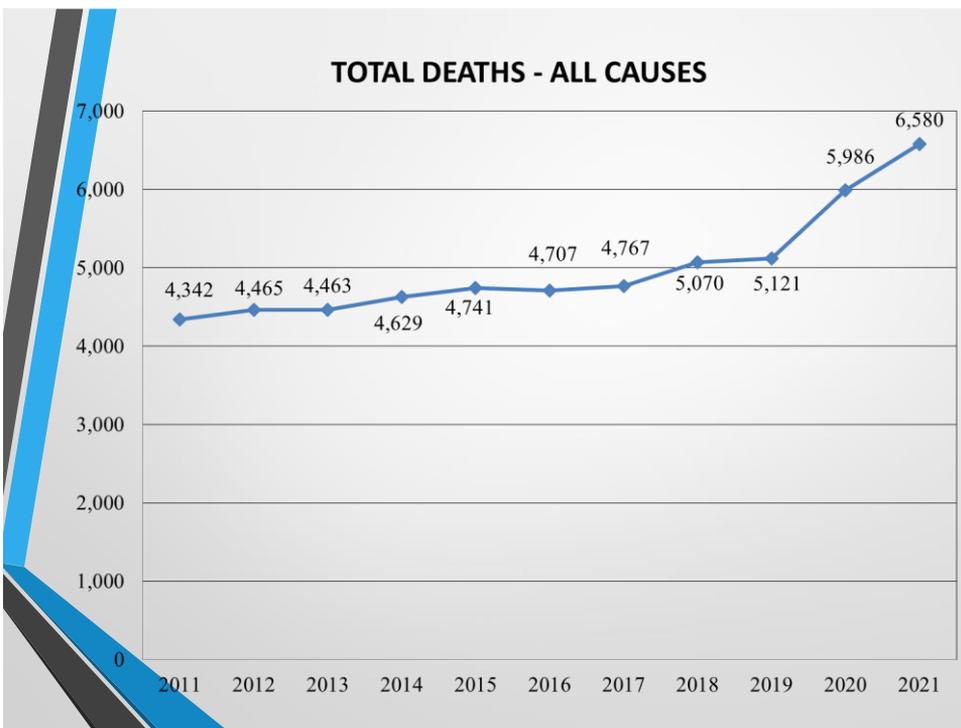
Leading Causes of Death in WY

	<u>2020</u>	<u>2021</u>
Heart Disease	1,173	1,115
Cancer	1,031	1,151
<i>COVID-19</i>	<i>463</i>	<i>1,026</i>
Chronic Resp.	401	355
<i>Accidents/Adverse</i>	<i>375</i>	<i>380</i>
Alzheimer's	227	208
Stroke	220	216
<i>Suicide</i>	<i>182</i>	<i>189</i>
Chronic Liver	174	177
Diabetes	148	172
	<i>54%</i>	<i>49%</i>

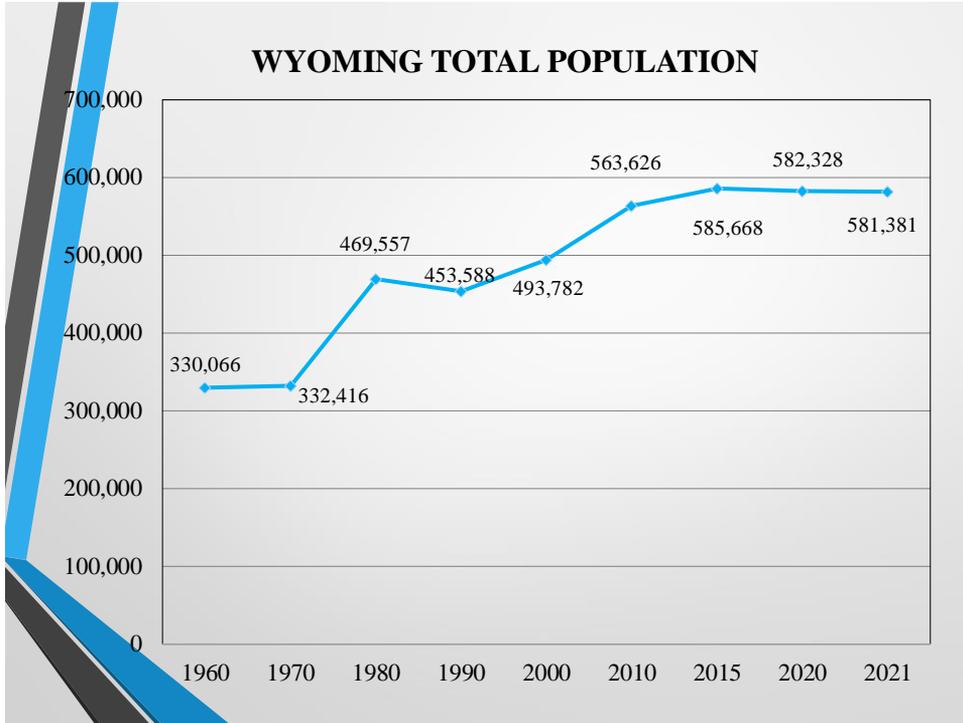
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Heart Disease & Stroke

- Between 2015-2018 - 126.9 Million Americans had some form of Cardiovascular disease (CVD) - (e.g., hypertension, CHD, stroke, etc...)
- CVD kills someone in the U.S. about once every 36.1 seconds. (2,396/day)



Heart Disease & Stroke Statistics-2022

8

Heart Disease & Stroke

- On average someone has a stroke in the U.S. every 40 seconds.
- Stroke kills someone in the U.S. about once every 3 minutes 33 seconds (411/day).
- 2015-2018 – 121.5 million or 47% of US adults have hypertension.

Heart Disease & Stroke Statistics-2022

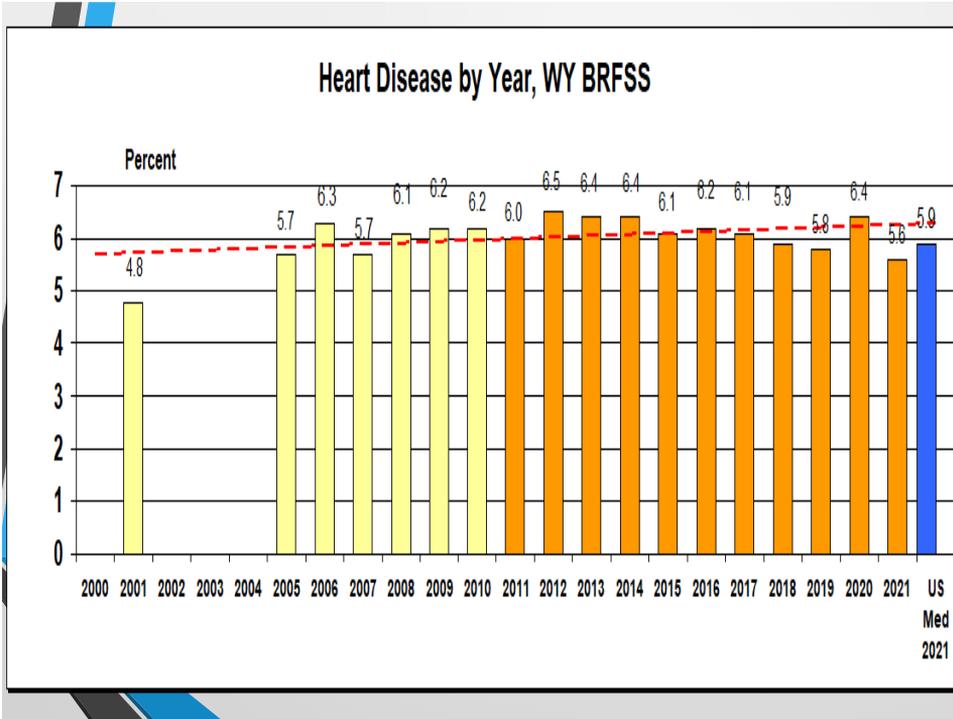
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Heart Disease & Stroke

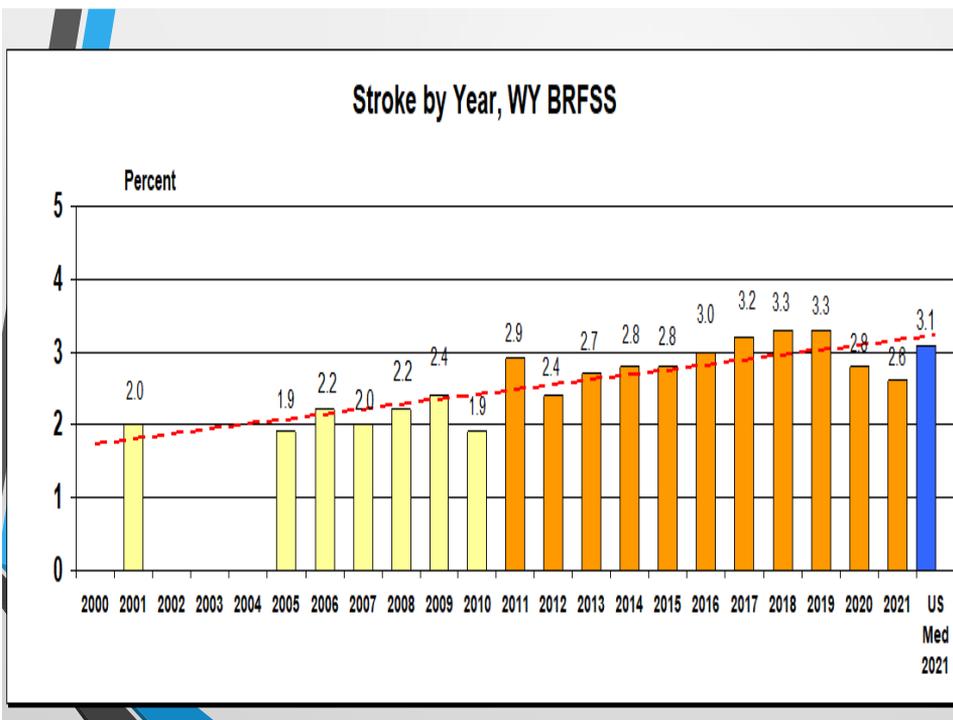
2021 WY BRFSS

- 80.1% of Wyoming adults don't lead a healthy lifestyle (BMI 25 or above, current smoker, no leisure time physical activity).
- 7.5% Wyoming Adults have been told they have had heart disease or stroke (2020 = 8.3)
- 2.6% Wyoming Adults have been told they have had a Stroke

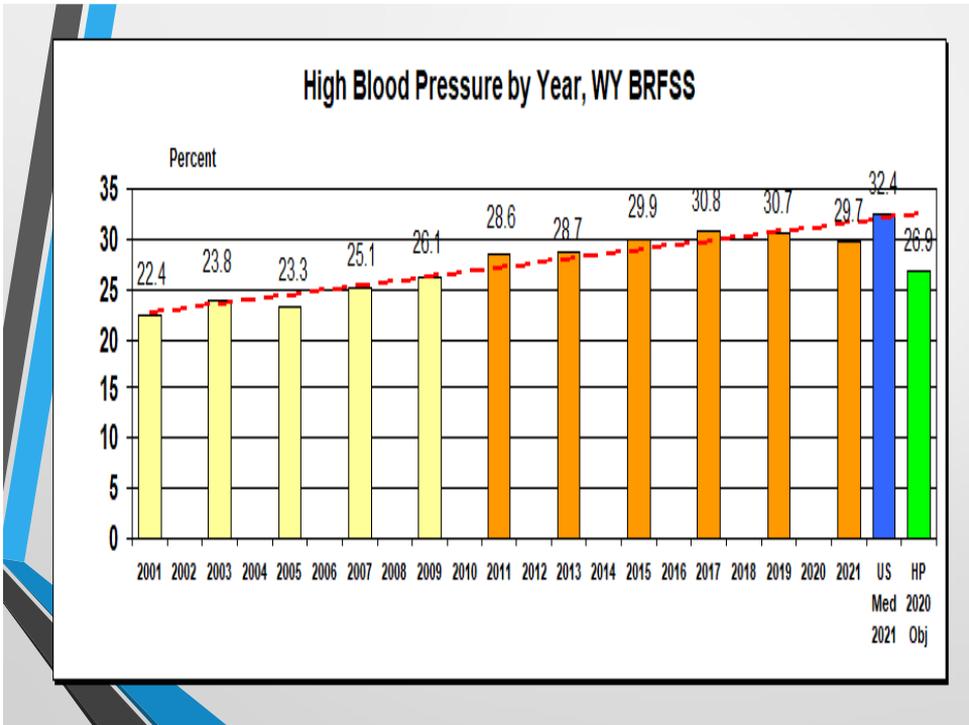
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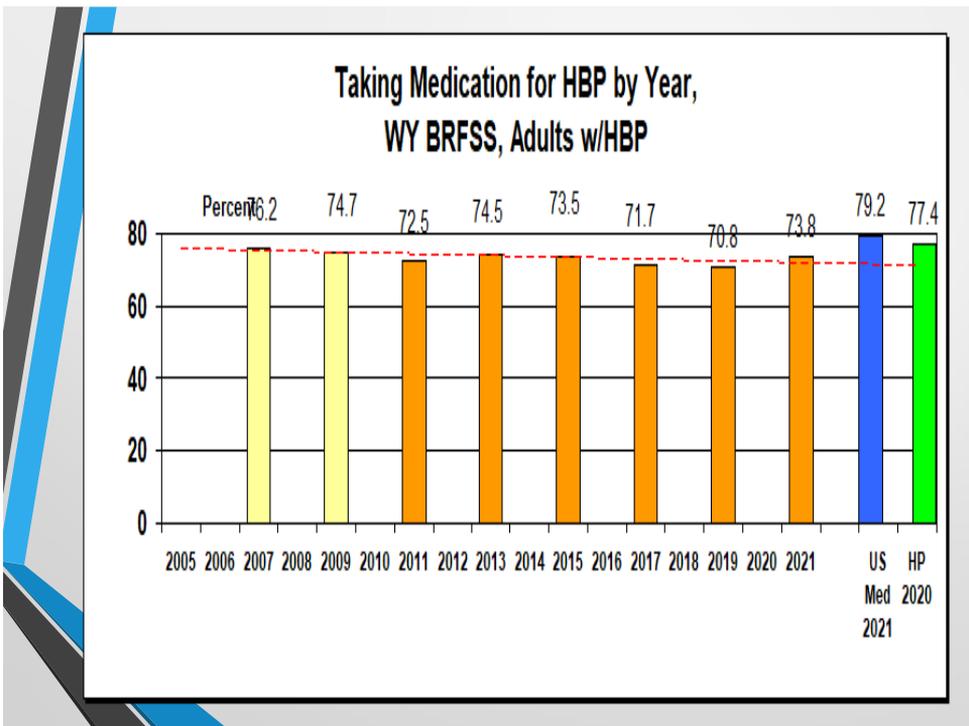
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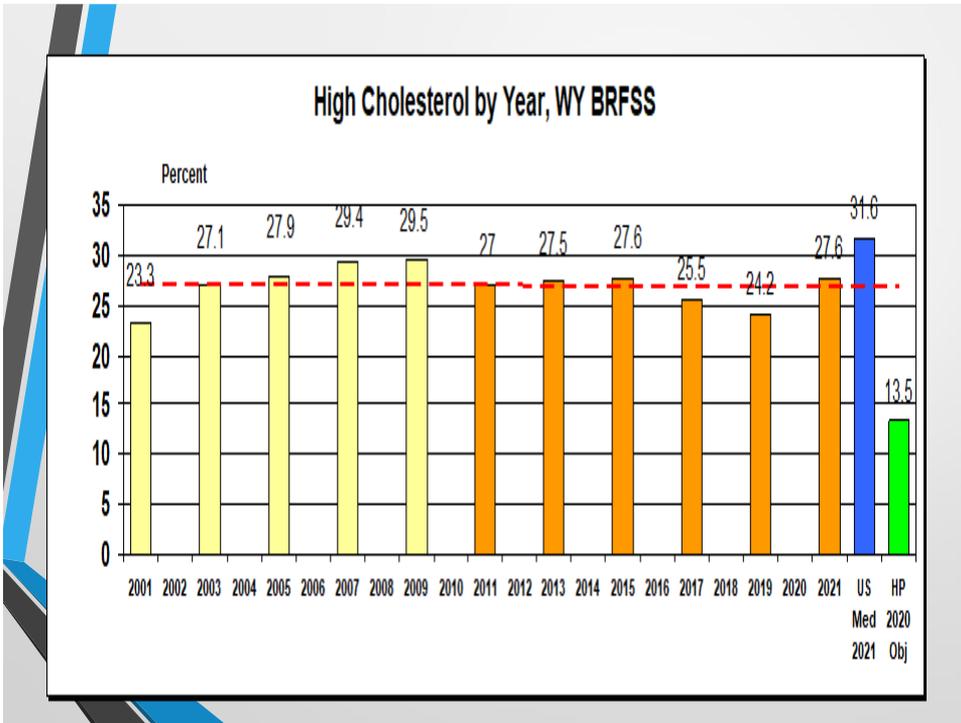
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WY 2020 Cancer Incidence:

Breast = 417 (407 Female, 10 Male)

Prostate = 401

Lung = 284

Colorectal = 233

Bladder w/InSitu = 173

Melanoma = 136

TOTAL = 2,810

17

WY 2020 Cancer Mortality:

Lung = 200

Colorectal = 105

Pancreas = 81

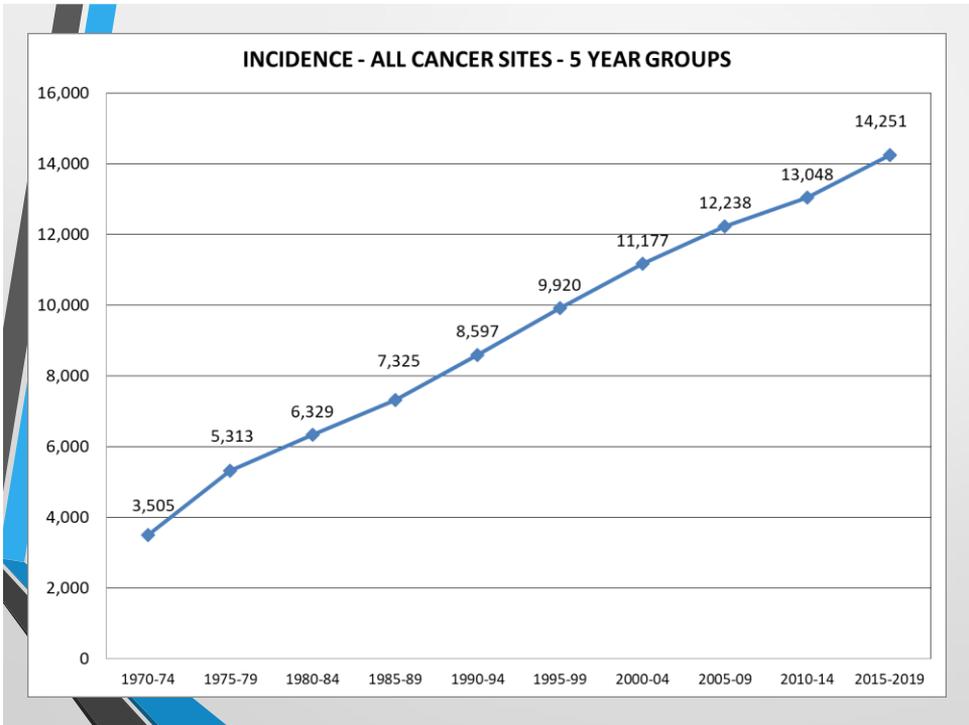
ILL-Defined = 78

Breast = 72

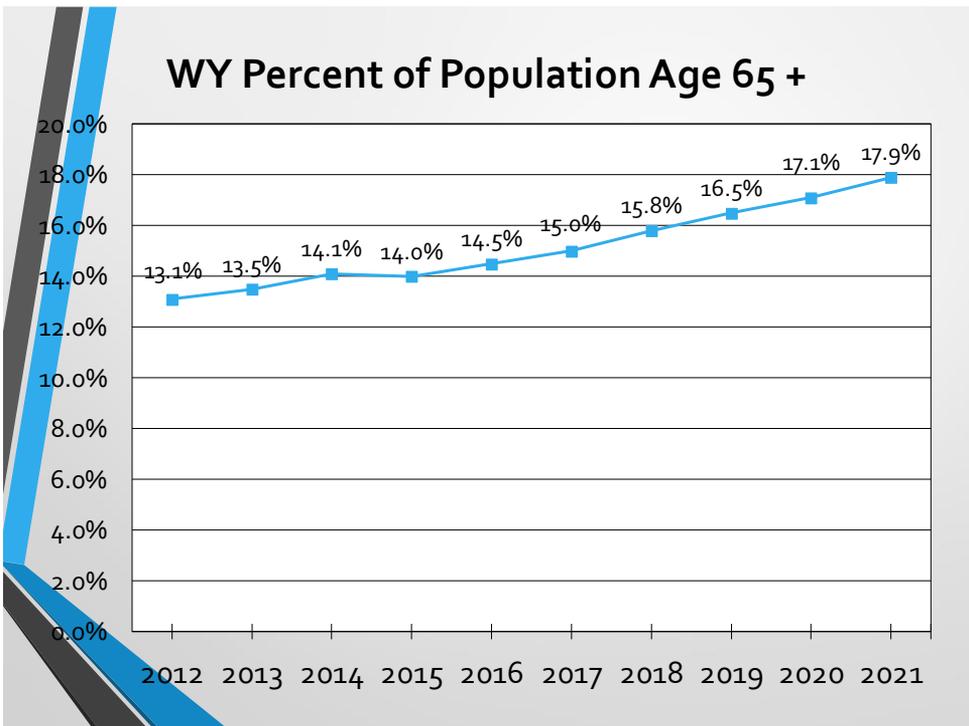
Prostate = 66

TOTAL = 1,031

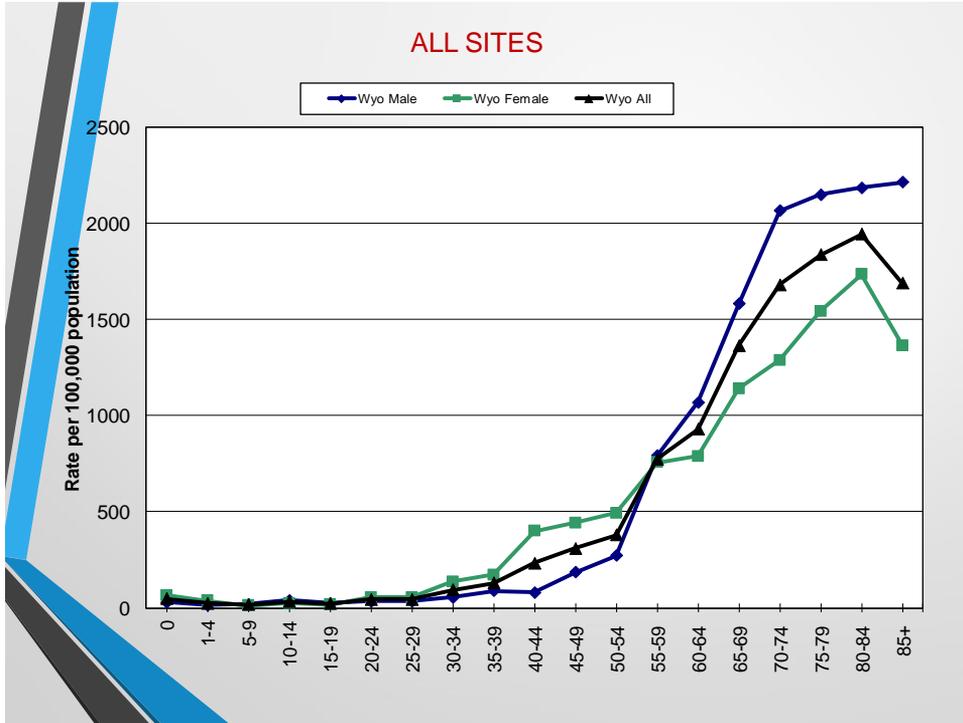
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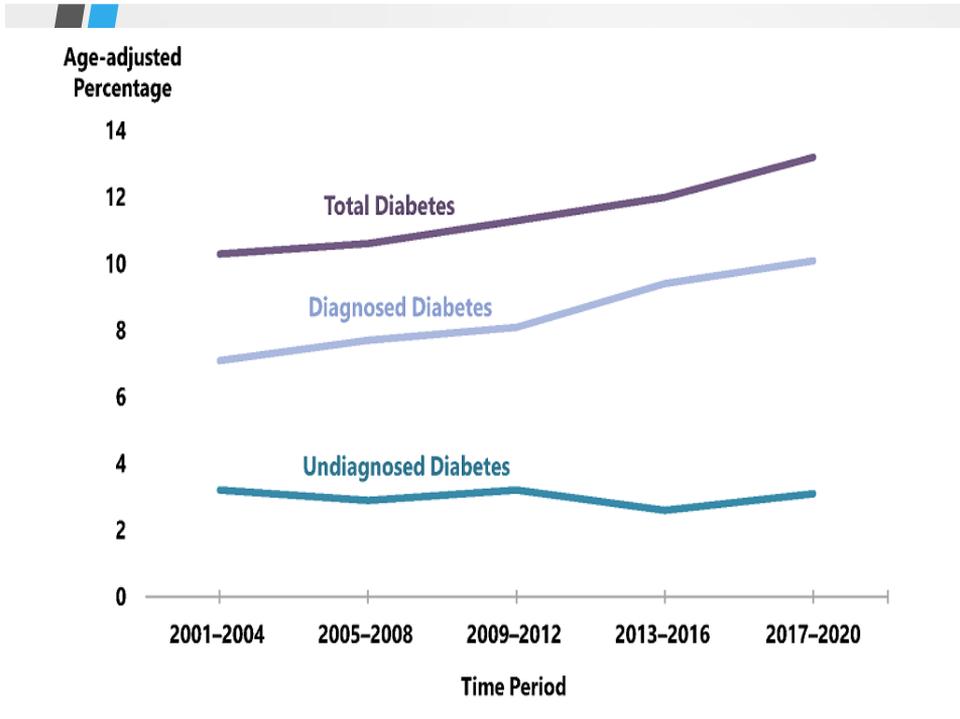
Diabetes



- As of 2019 – 37.3 Million have diabetes in USA
 - 28.7 Million diagnosed
 - 8.5 Million Undiagnosed (23%)
 - 96 Million age 18+ have Pre-Diabetes (38%)

CDC – National Diabetes Statistics Report

22



23

Diabetes

2021 WY BRFSS

- 8.8% of Wyoming adults Dx Diabetes (39K)
- 8.6% have Pre-Diabetes (2020) (38.5K)
- THOSE WITH DIABETES
 - 46.2% diagnosed before age of 50
 - 62.3% check blood glucose at least daily
 - 67% had A1C measured at least twice in last year
 - 70.5% had professional foot exam in last year
 - 64.2% had dilated eye exam in last year

24

Diabetes

2021 BRFSS

Age (years)	Percent	95% CI
18-24	0.7	0.1-4.6
25-34	2.5	1.1-5.5
35-44	3.2	1.9-5.5
45-54	8.2	5.6-11.9
55-64	12.9	10.2-16.2
65+	18.7	16.4-21.4

Race/ethnicity	Percent	95% CI
White (non-Hispanic)	8.5	7.5-9.6
Hispanic	7.8	5.0-12.0
American Indian	28.5	15.4-46.6
Other	10.0	4.0-22.7

25



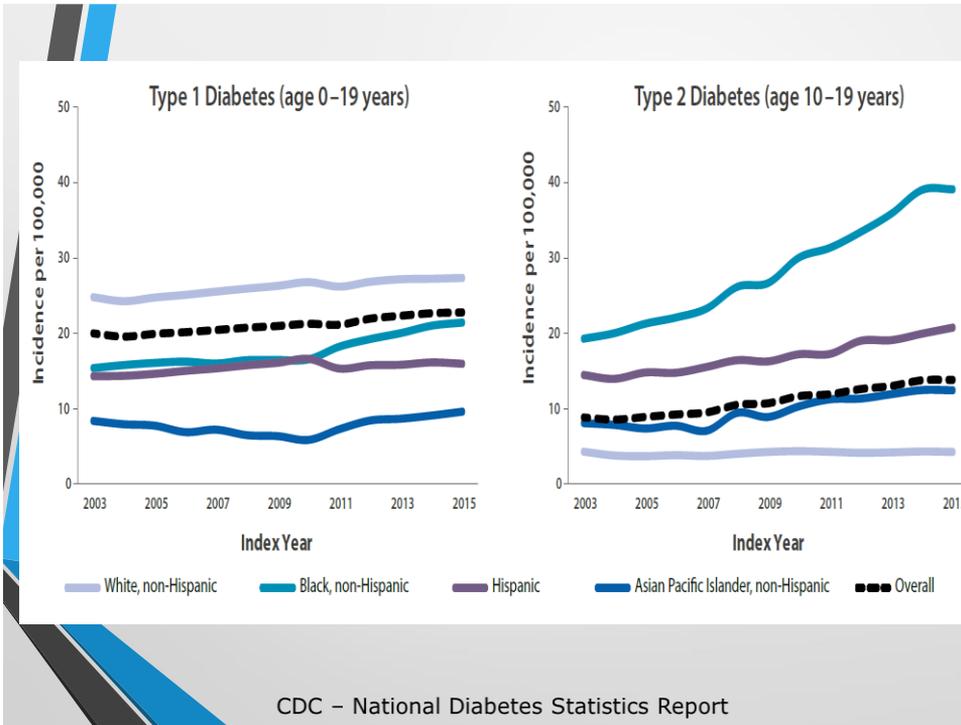
Diabetes



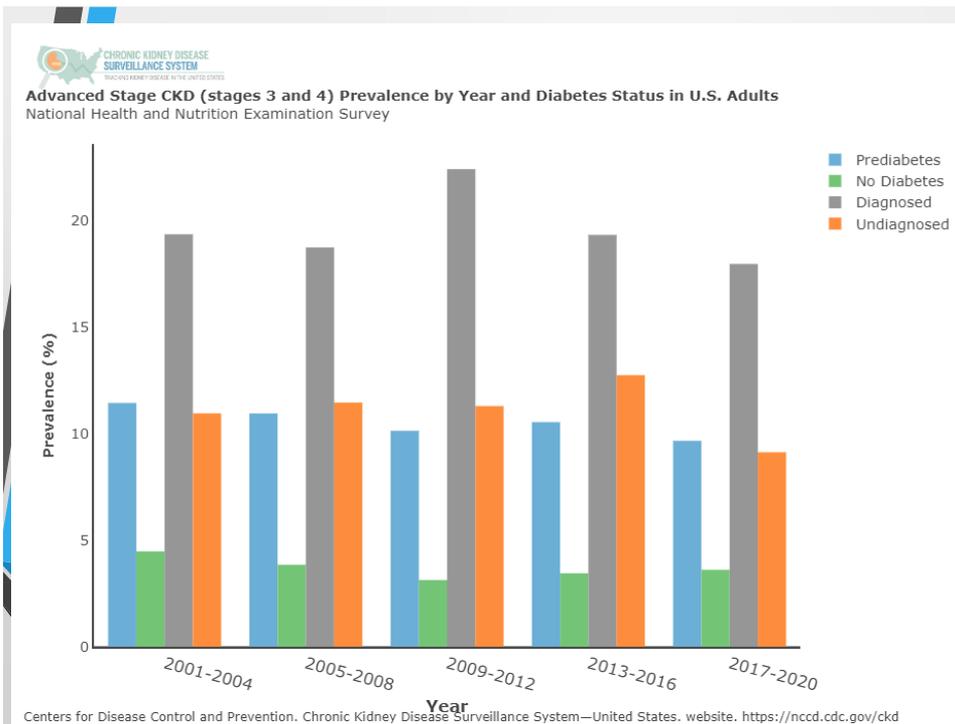
- About 193,000 people under 20 years of age have Diabetes
- 18,291 are diagnosed with Type 1 annually
- 5,758 are diagnosed with Type 2 annually

CDC – National Diabetes Statistics Report

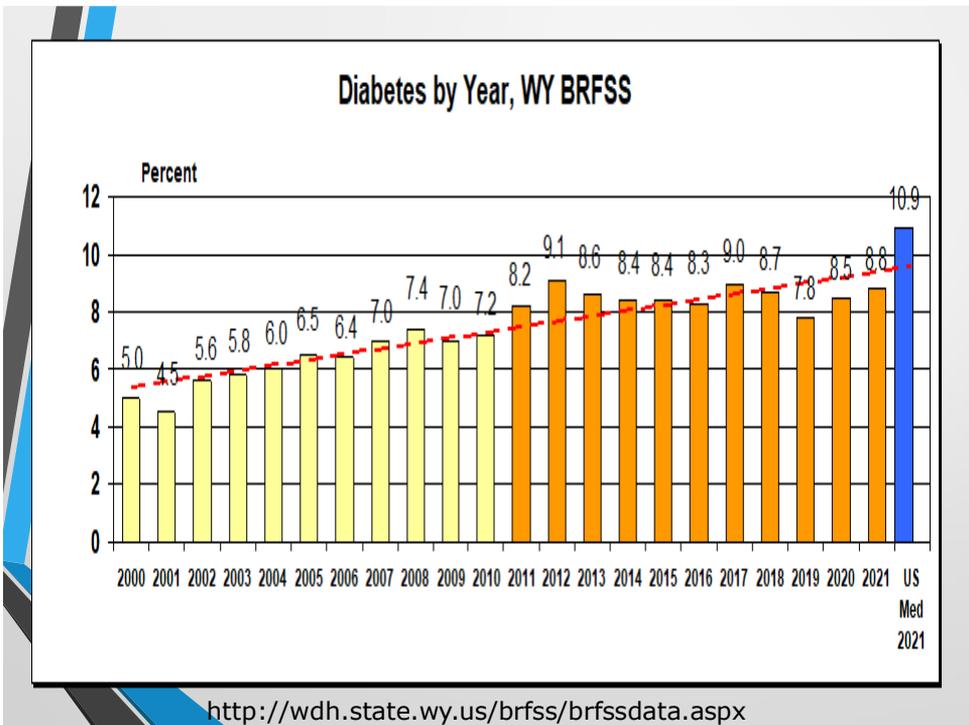
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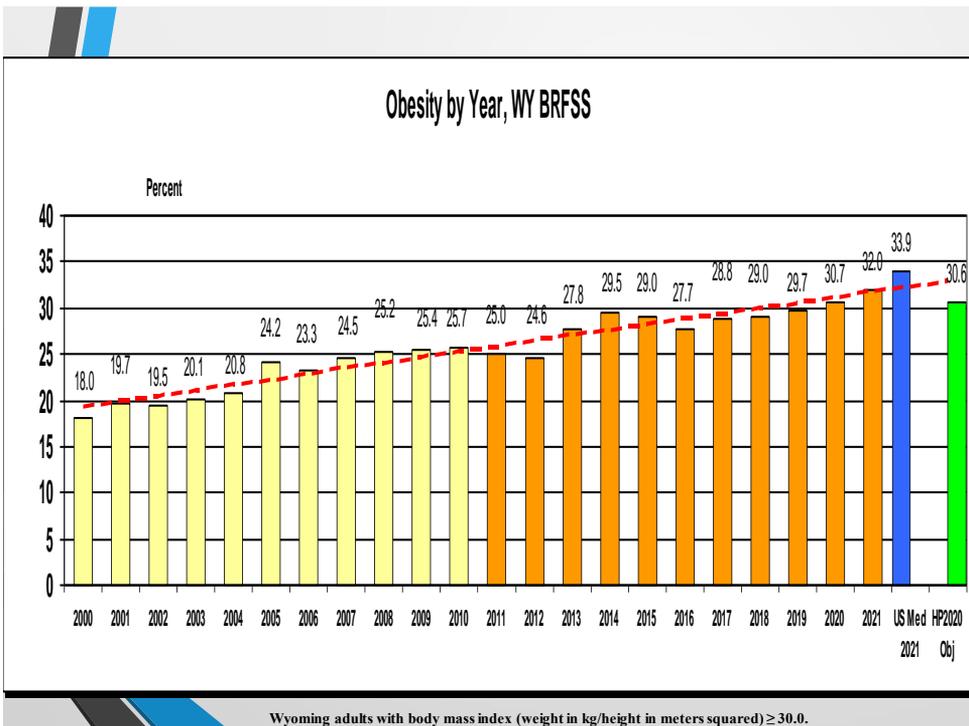
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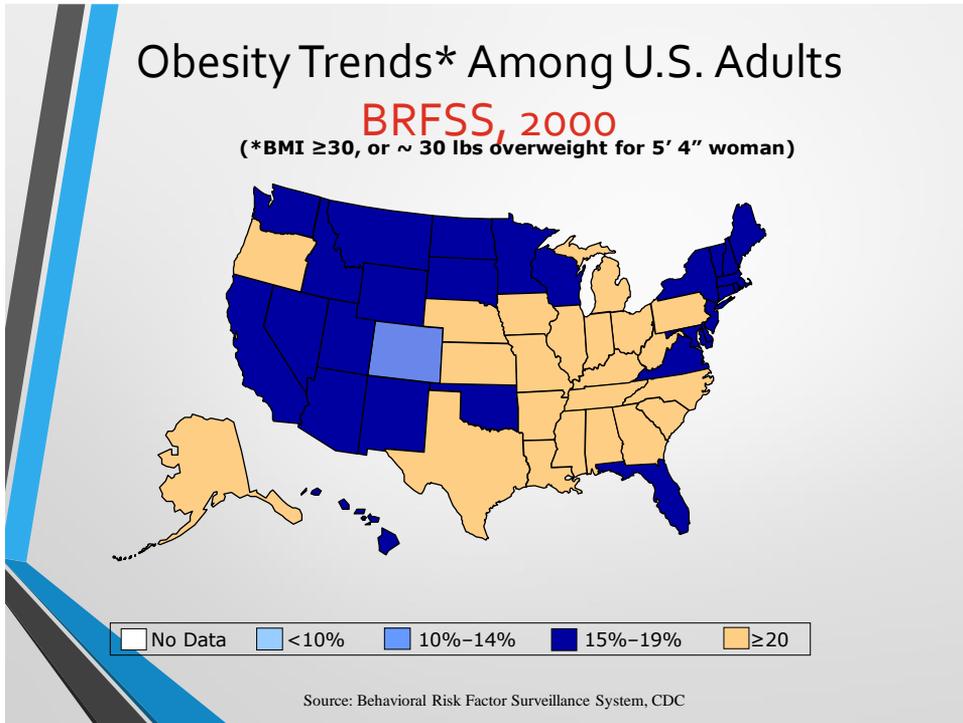
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Risk Factors

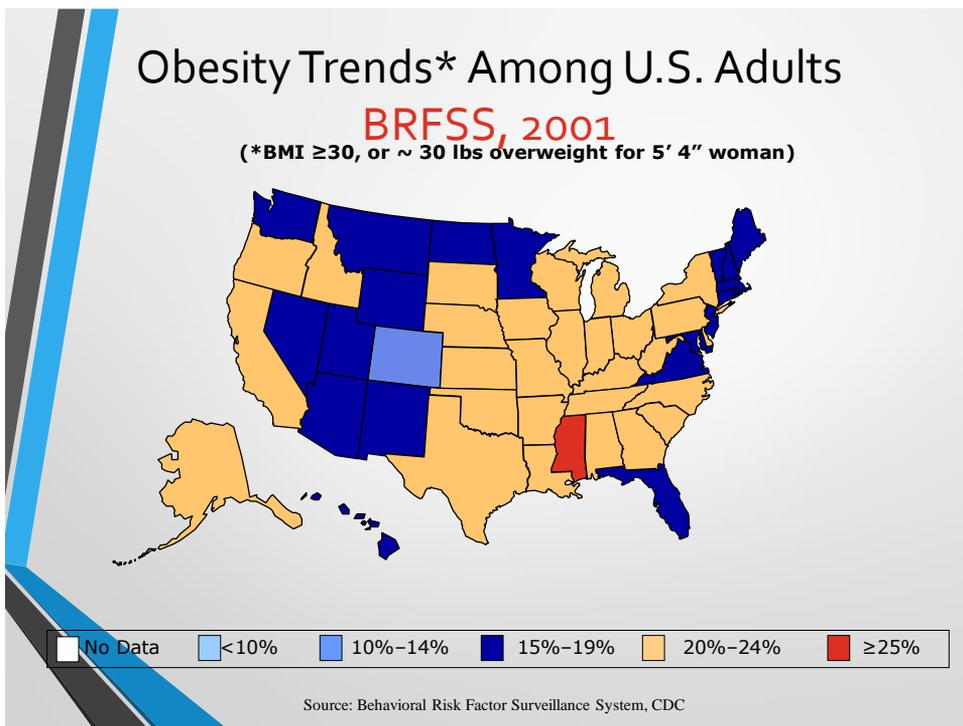
- Several risk factors associated with ALL CD's
 - **Physical Activity (too little)**
 - **Poor Nutrition**
 - **Tobacco (smoking, smokeless)**
 - **Age**



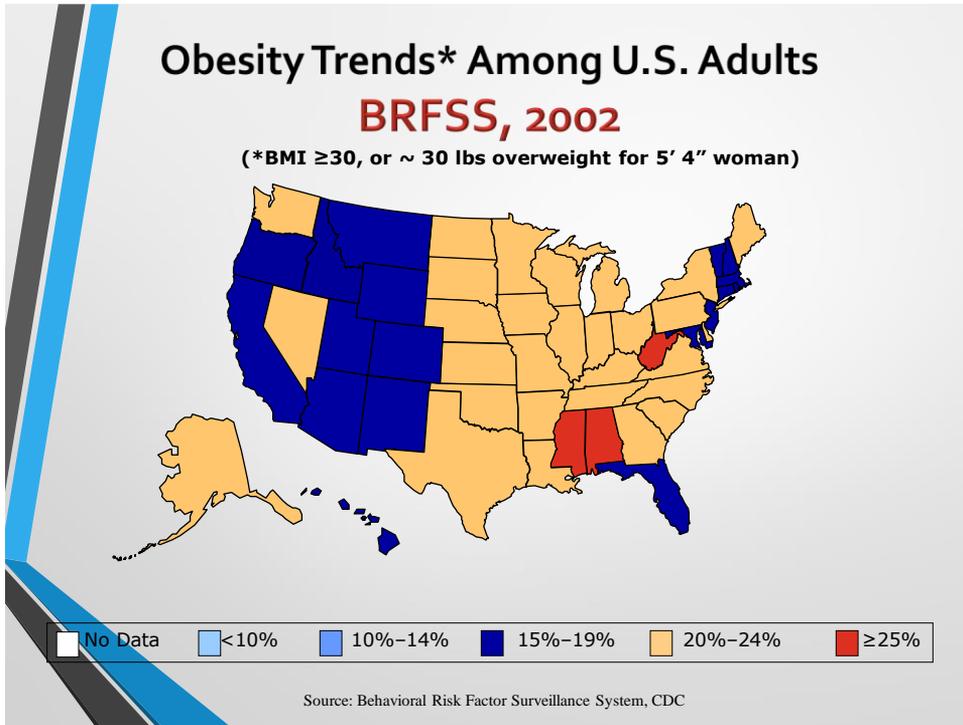

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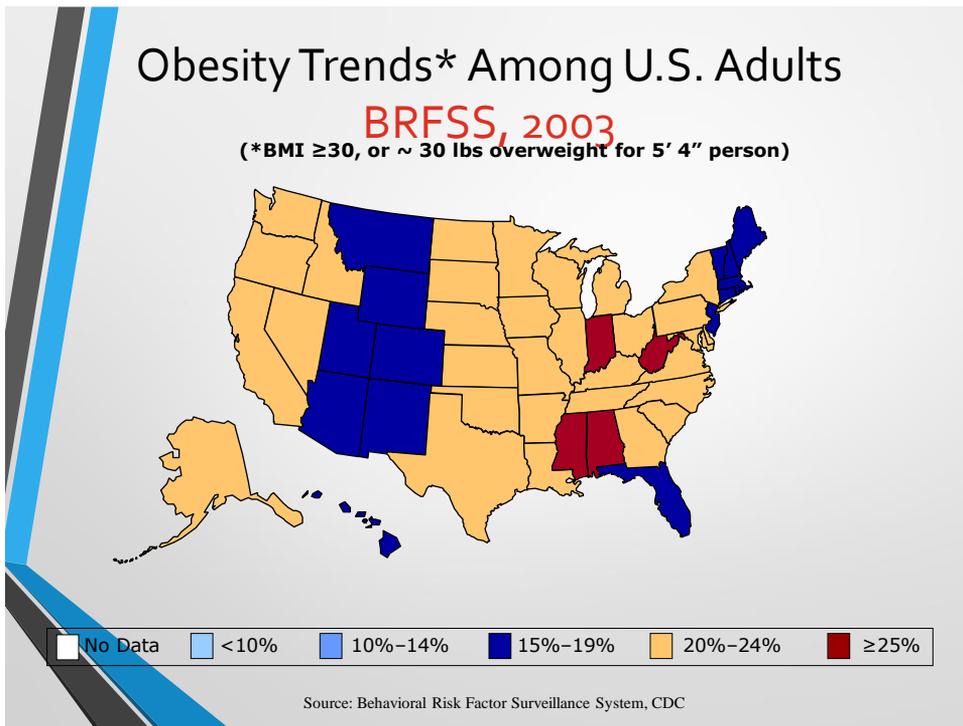
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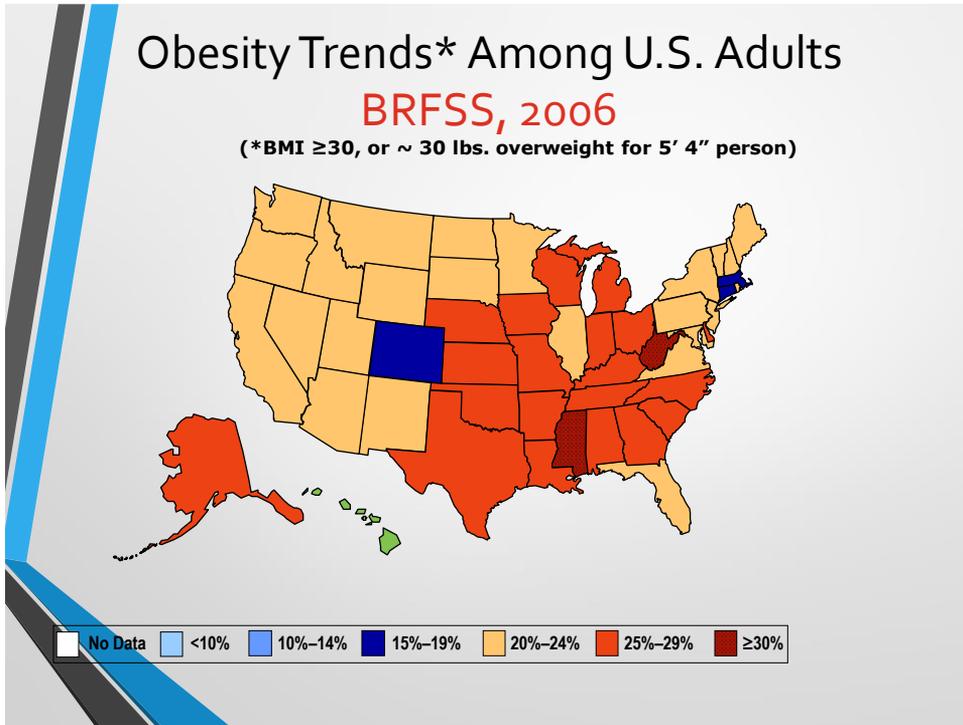
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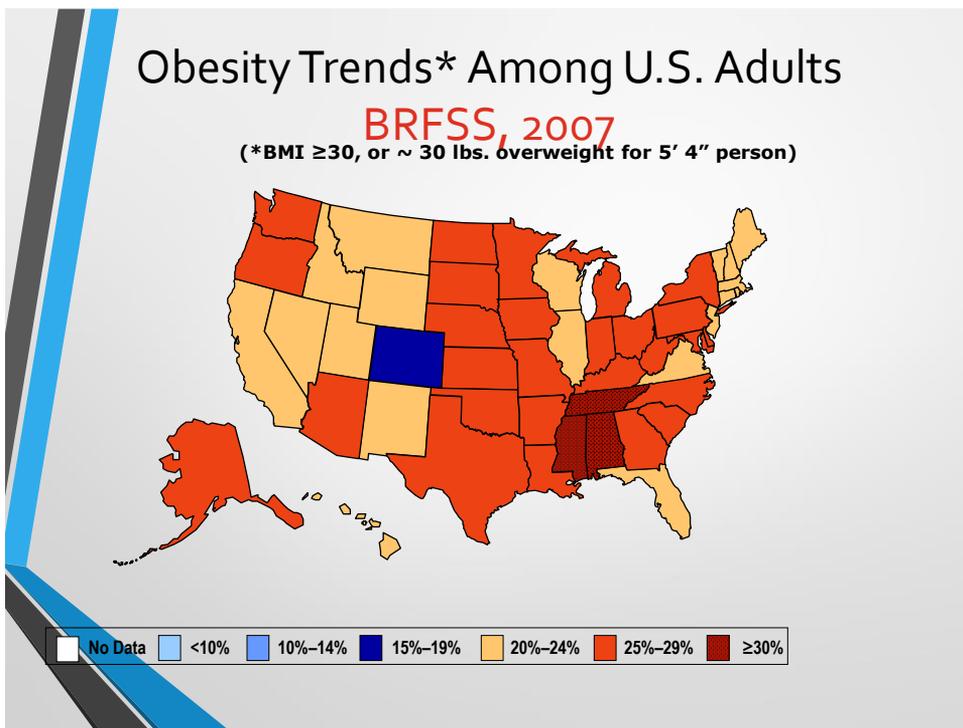
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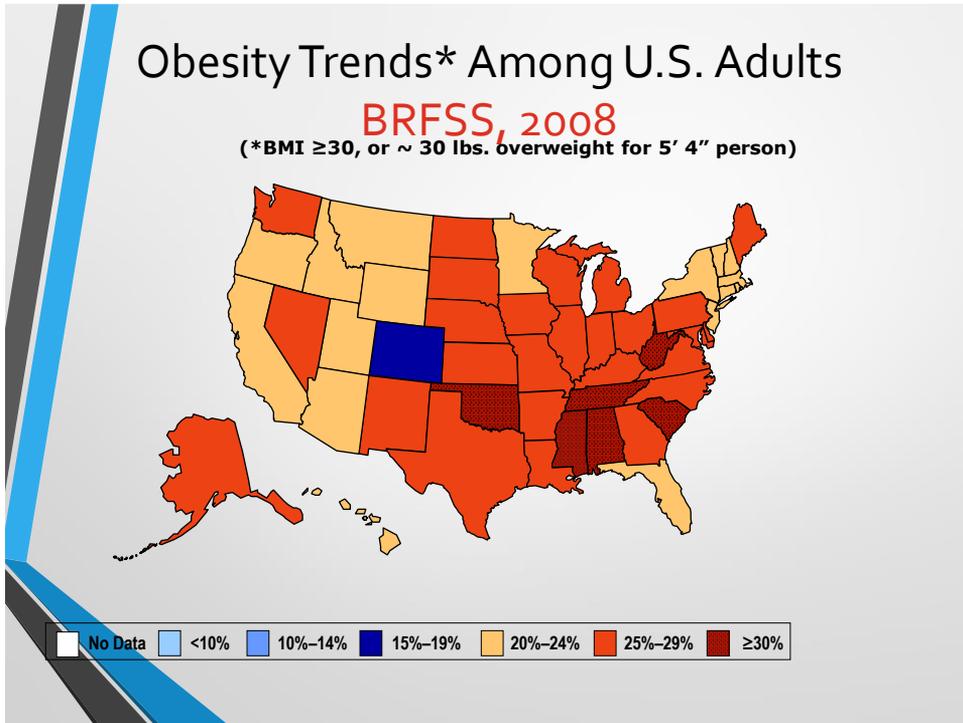
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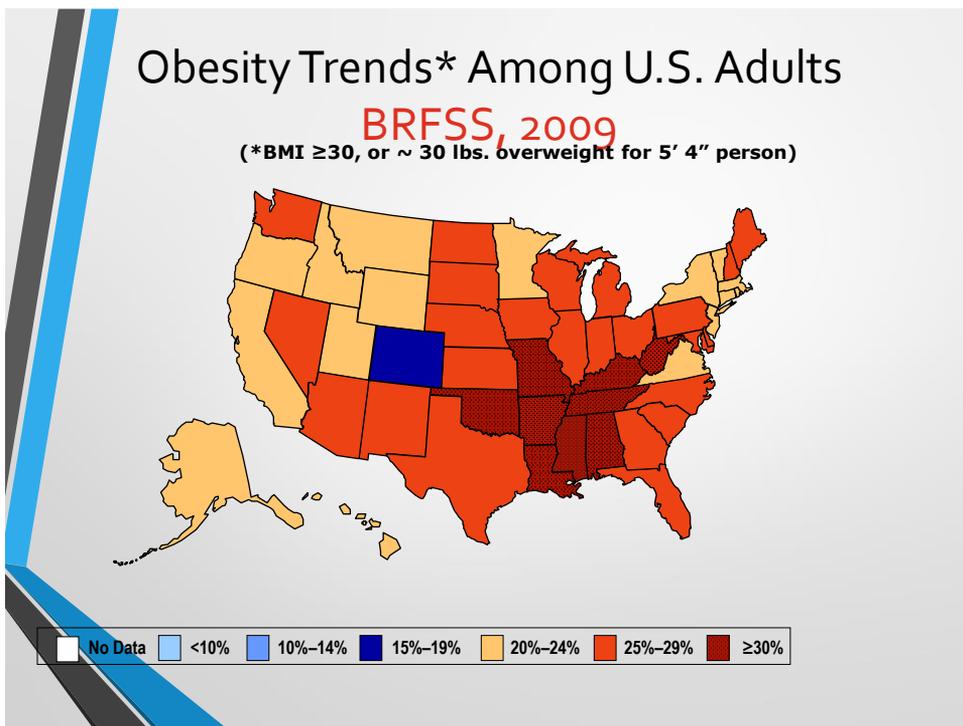
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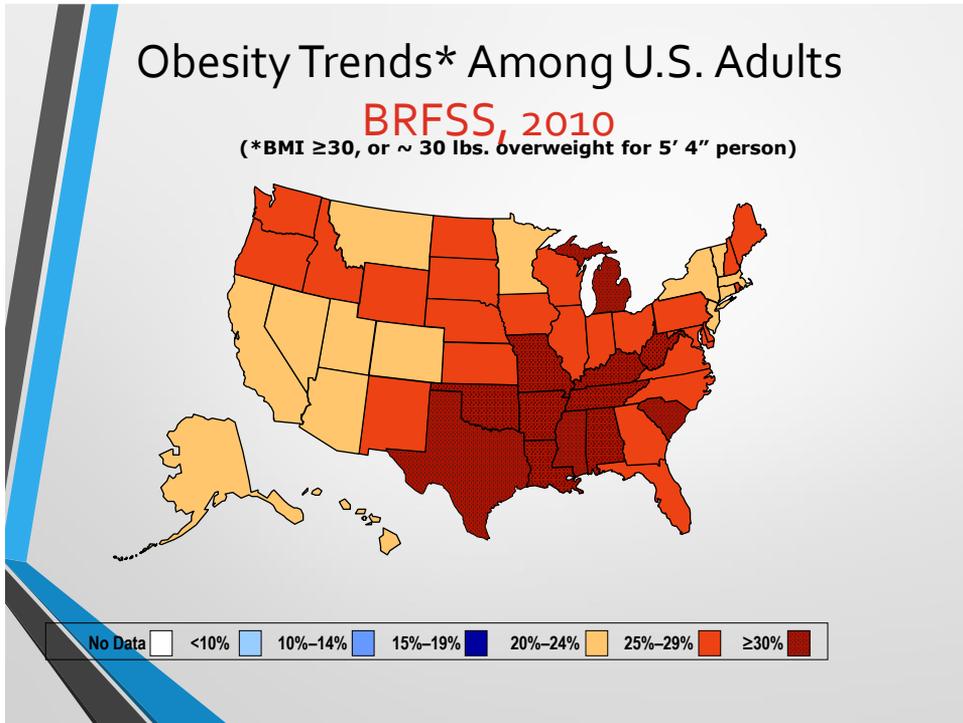
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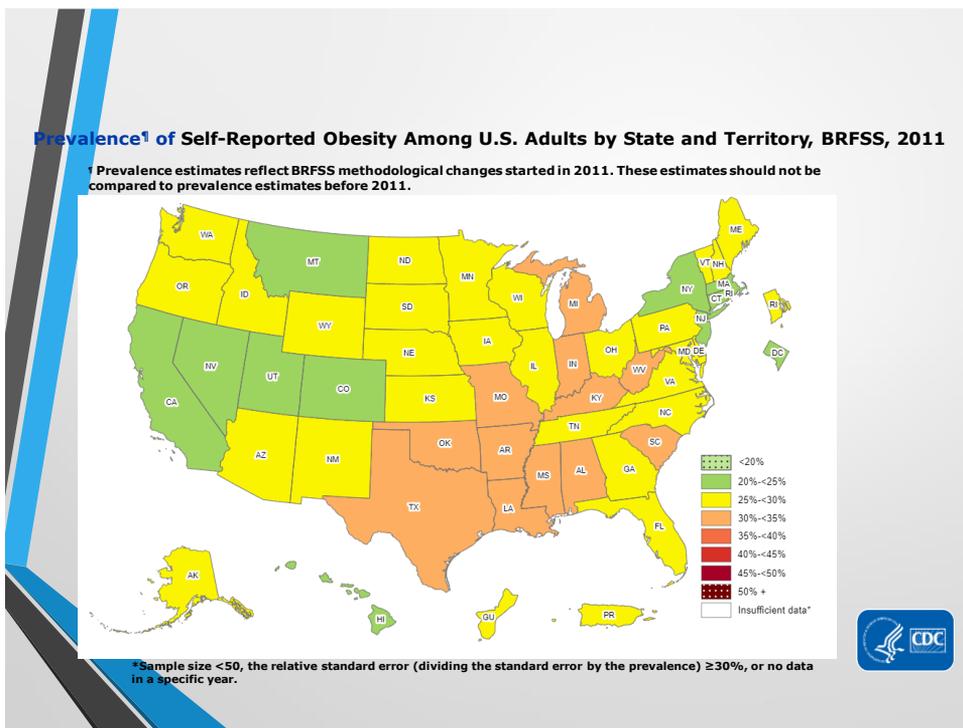
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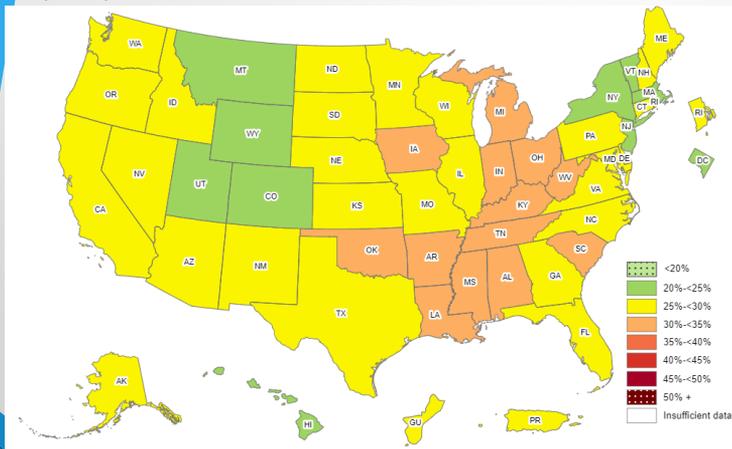
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44

Prevalence¹ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2012

¹ Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



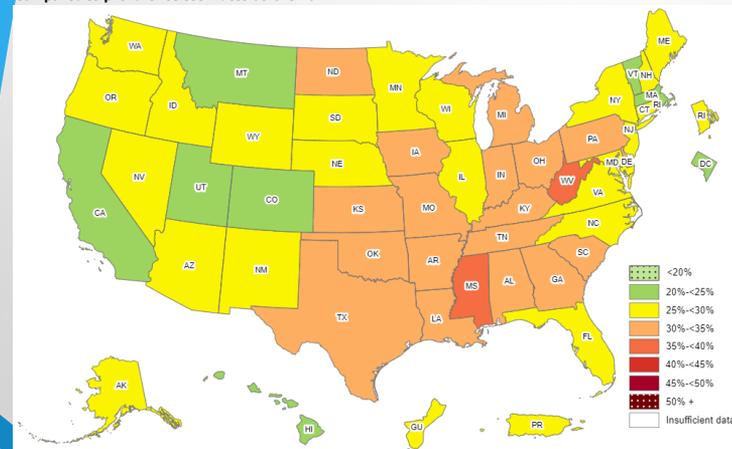
*Sample size <50, the relative standard error (dividing the standard error by the prevalence) ≥30%, or no data in a specific year.



45

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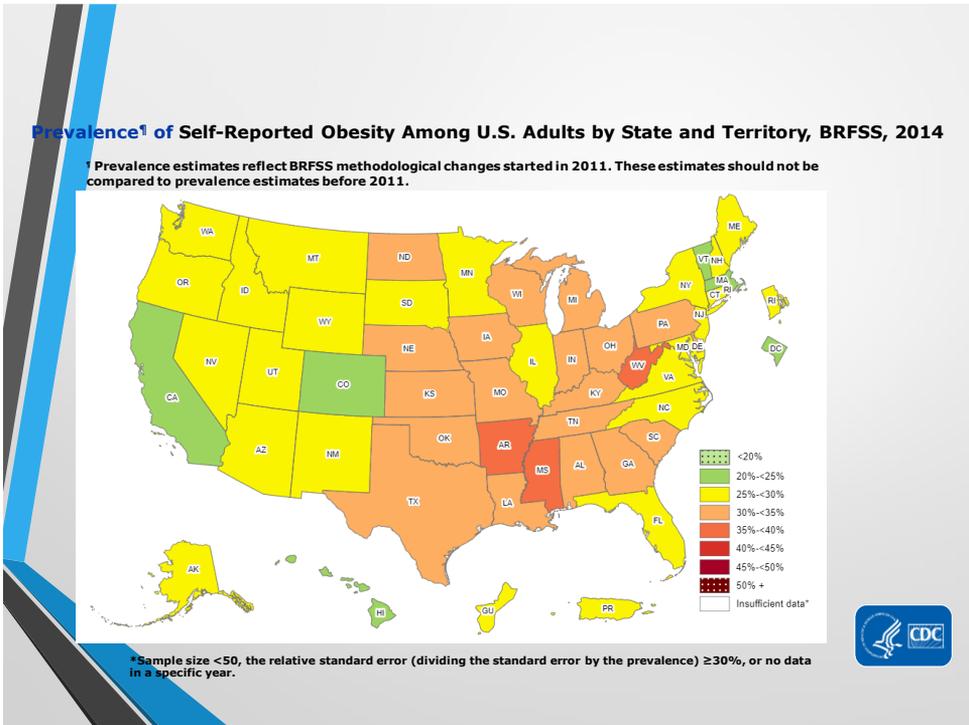
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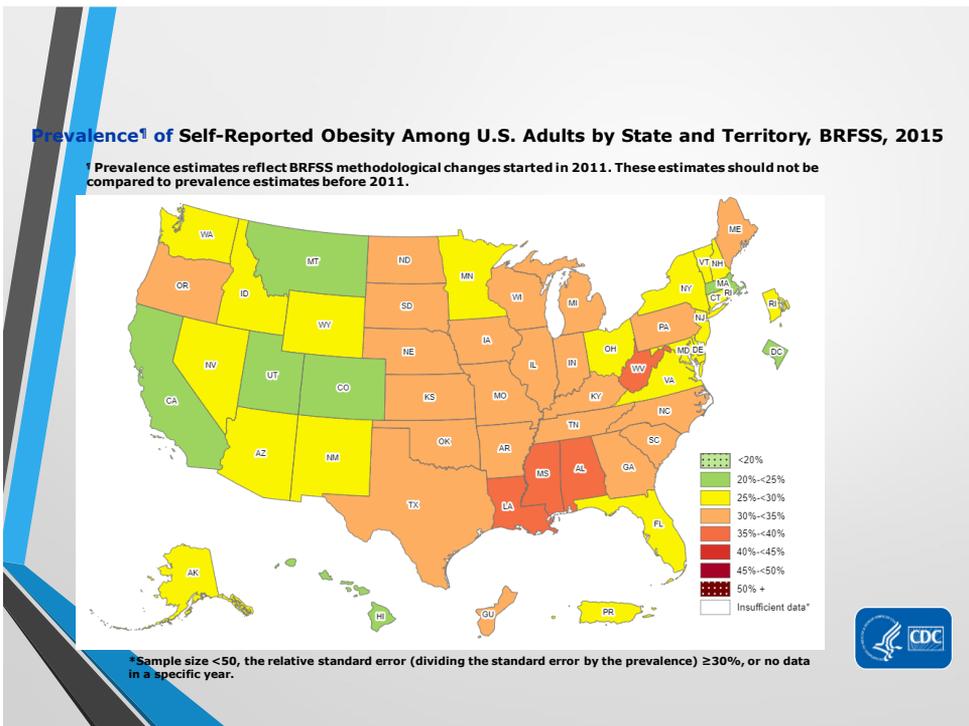
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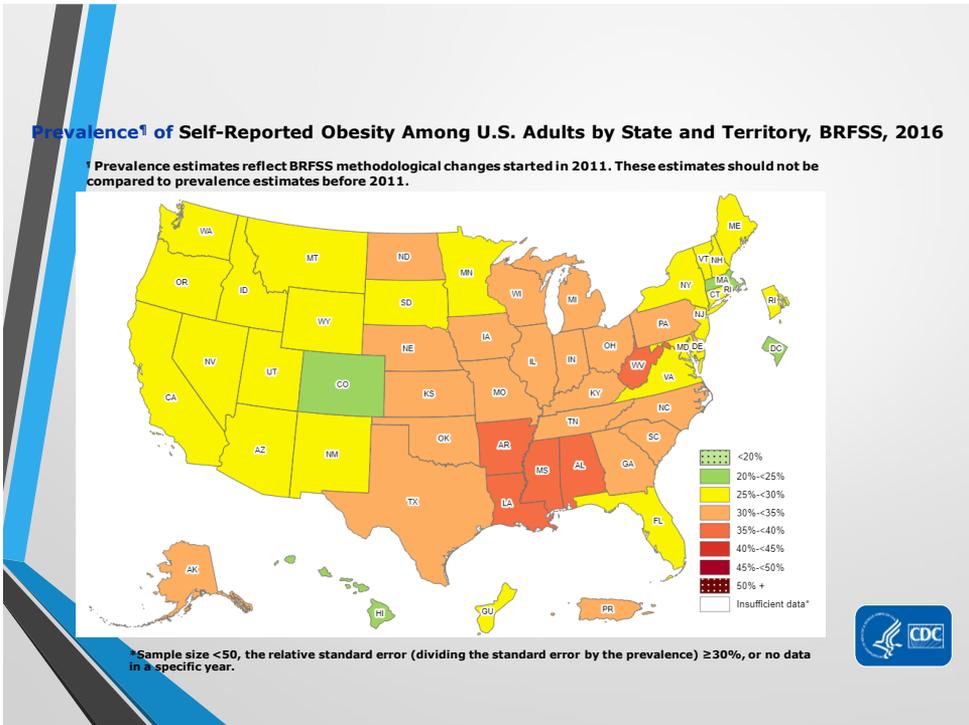
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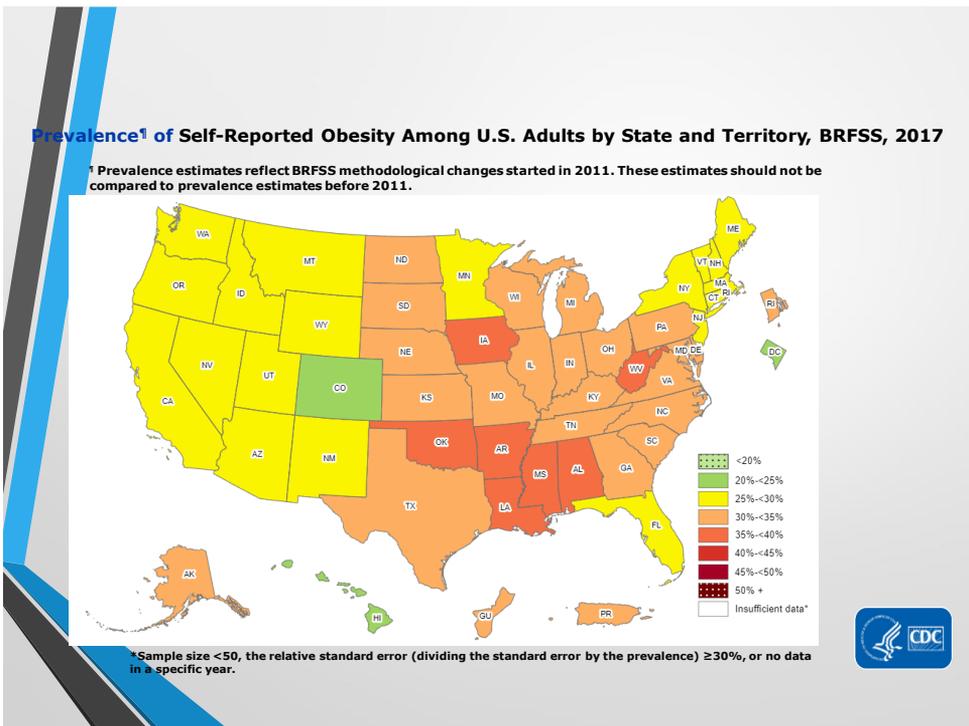
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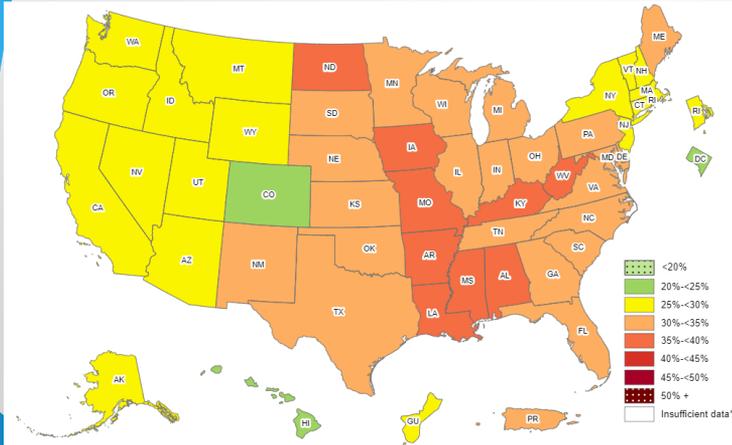
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Prevalence¹ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2018

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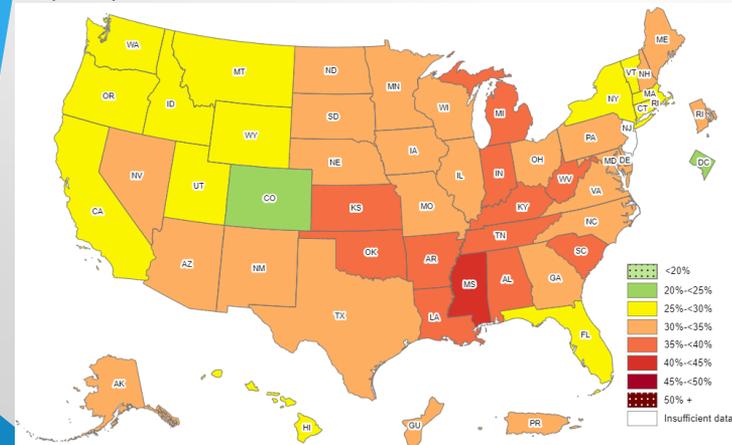
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51

Prevalence¹ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2019

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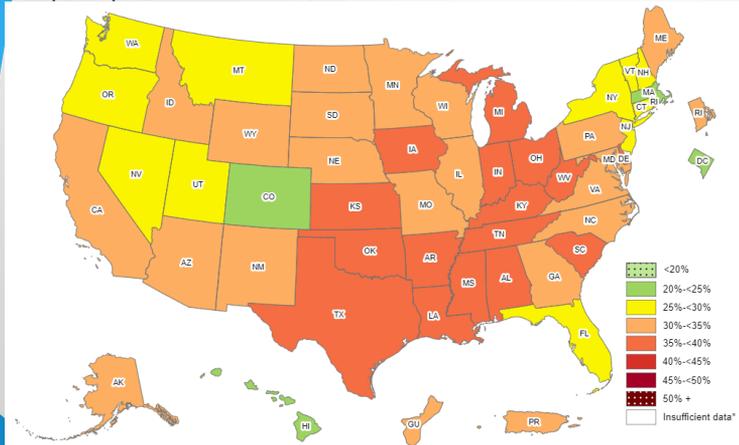
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52

Prevalence¹ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2020

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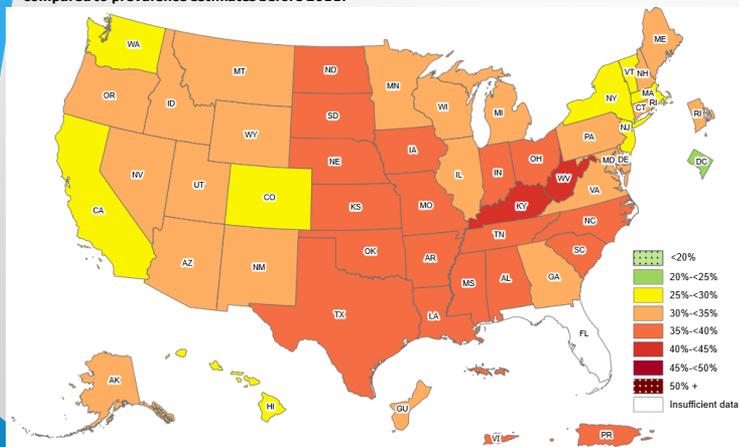
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53

Prevalence¹ of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2021

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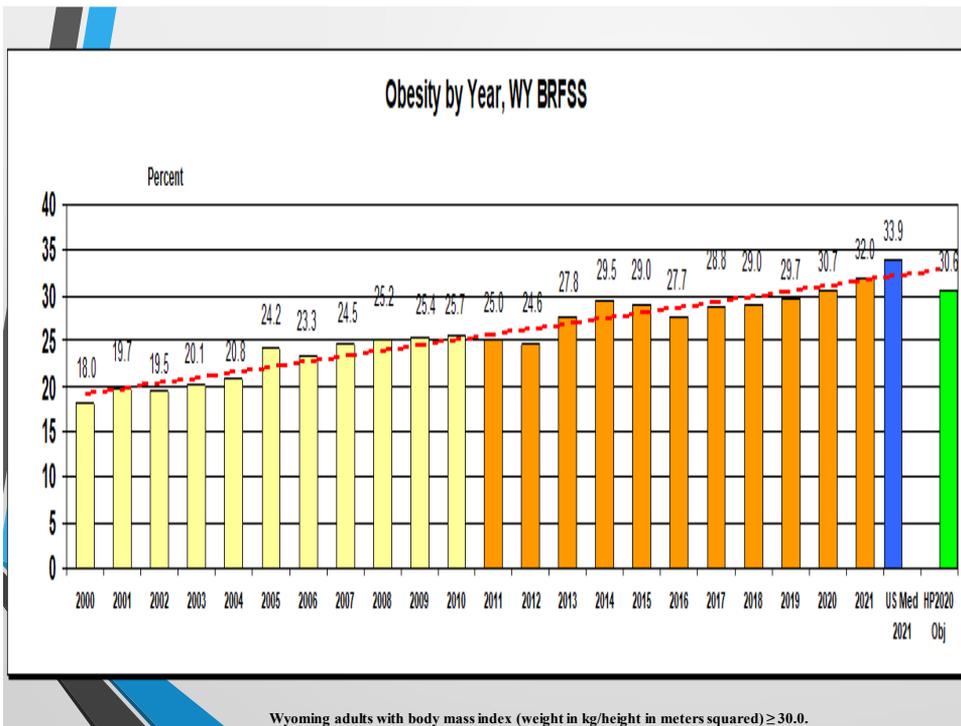
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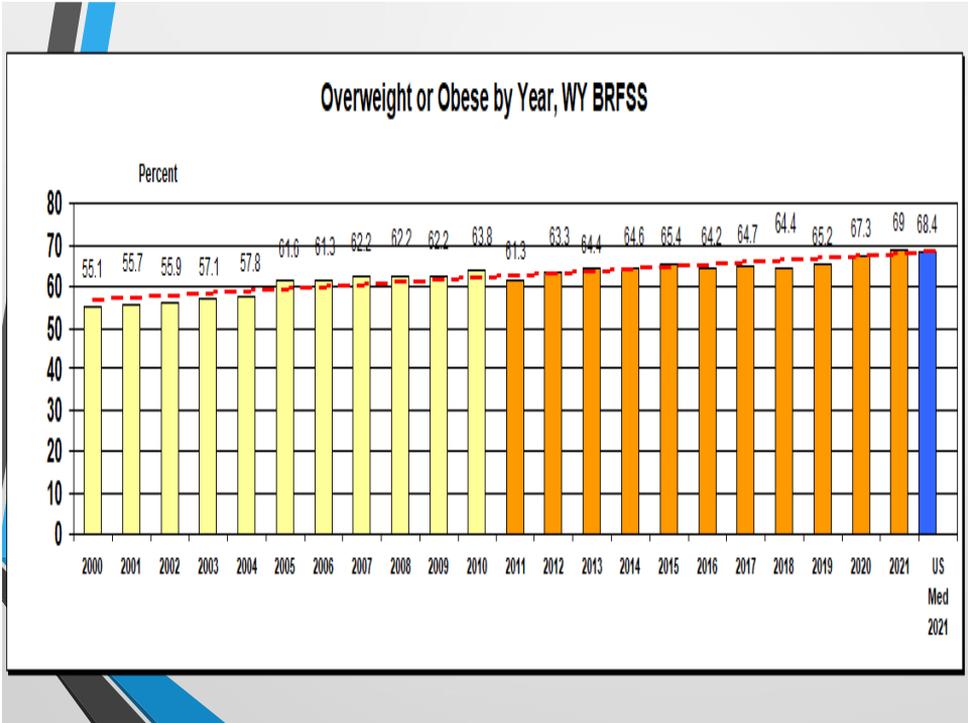
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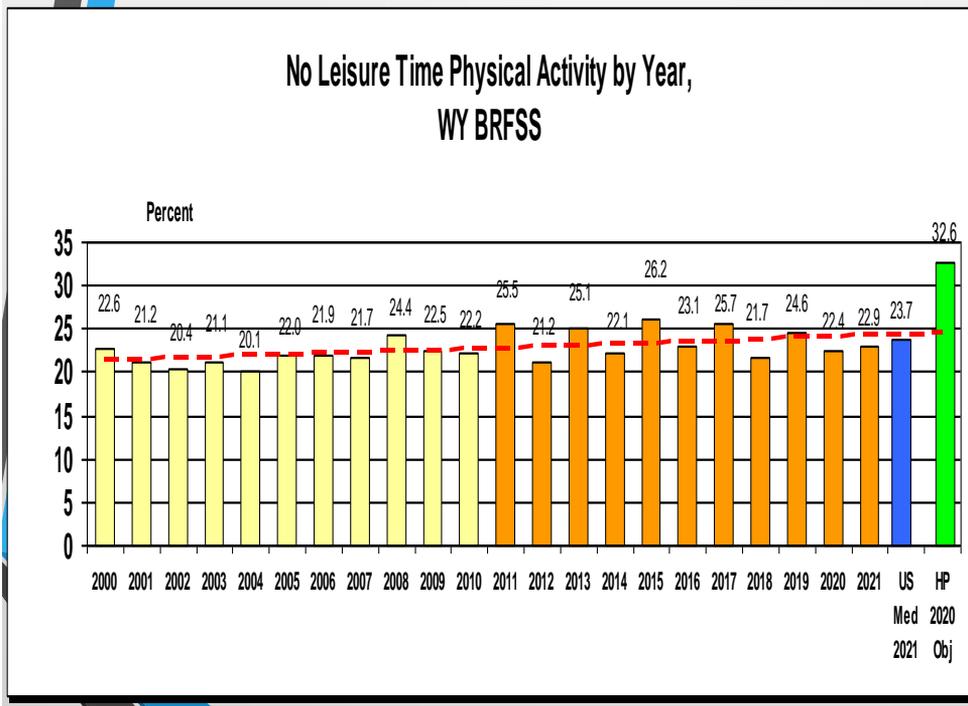
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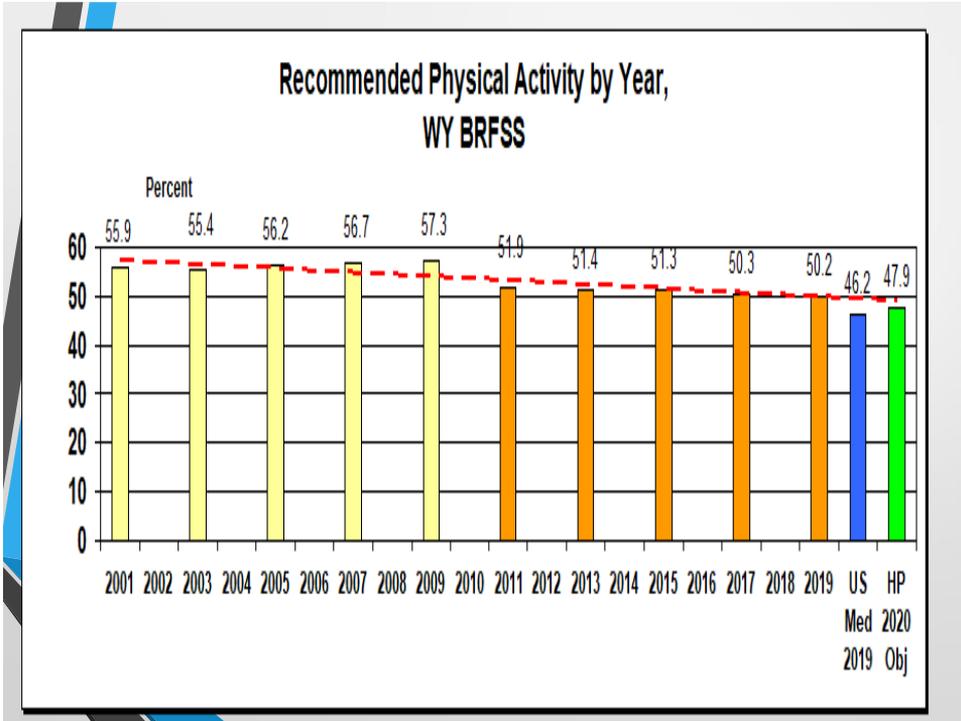
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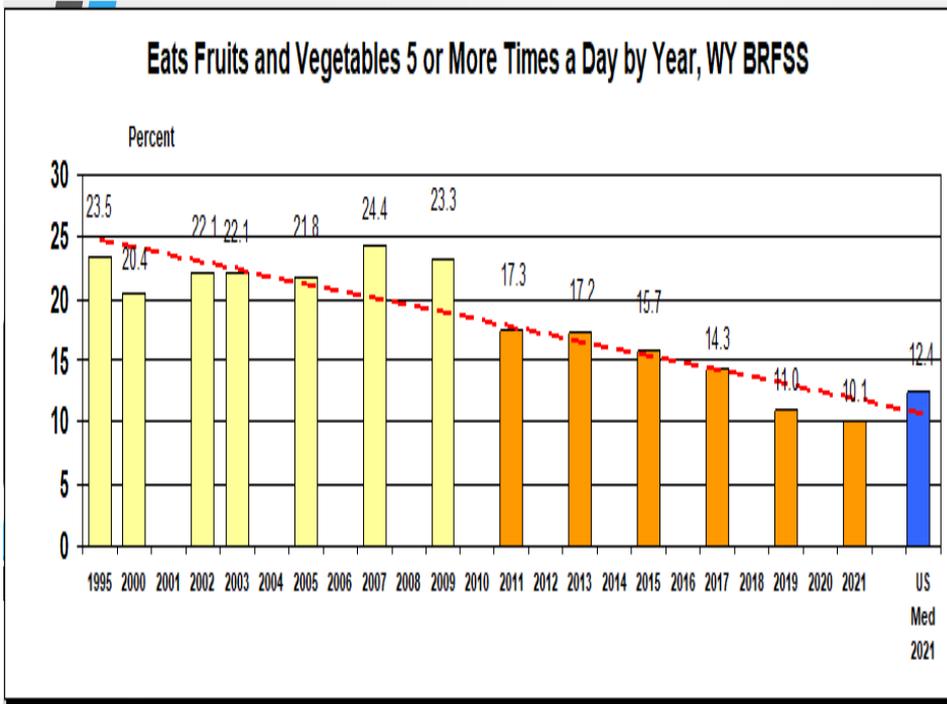
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58



59



60

Portion Distortion

20 YEARS AGO	TODAY	DIFFERENCE	20 YEARS AGO	TODAY	DIFFERENCE
 333 Calories Lifting weights for 1 HOUR AND 30 MINUTES burns approximately 257 calories* <i>*Based on 130-pound person</i>	 590 Calories	257 MORE CALORIES	 45 Calories Walking 1 HOUR AND 20 MINUTES burns approximately 305 calories* <i>*Based on 130-pound person</i>	 350 Calories	305 MORE CALORIES
 500 Calories Playing golf (while walking and carrying your clubs) for 1 HOUR burns approximately 350 calories* <i>*Based on 160-pound person</i>	 850 Calories	350 MORE CALORIES	 210 Calories Vacuuming for 1 HOUR AND 30 MINUTES burns approximately 290 calories* <i>*Based on 130-pound person</i>	 500 Calories	290 MORE CALORIES
 500 Calories Housecleaning for 2 HOURS AND 35 MINUTES burns approximately 525 calories* <i>*Based on 130-pound person</i>	 1,025 Calories	525 MORE CALORIES	 55 Calories Washing a car for 1 HOUR AND 15 MINUTES burns approximately 220 calories* <i>*Based on 130-pound person</i>	 275 Calories	220 MORE CALORIES

61

PORTION SIZE

The History of Dinner Plate Sizes Corresponds to the Increase in Obesity

 8.5-inch 1960's. Dinner Plate size = 8.5-9-inch. Holds about 800 calories	 10-inch 1980's. Dinner Plate size = 10-inch. Holds about 1000 calories (20% kcal increase)
 11-inch 2000's. Dinner Plate size = 11-inch. Holds about 1600 calories (35% kcal increase)	 12-inch 2009. Dinner Plate size = 12-inch. Holds about 1900 calories (15% kcal increase)

Dietitians-Online©

62

The Portion Size Illusion

Which plate contains the most food?



Think about it before looking at the answer below

There is exactly the same amount of food on each plate

The image shows three white plates of varying diameters, each containing an identical portion of a colorful vegetable and fruit salad. The largest plate is on the left, the medium plate is in the center, and the smallest plate is on the right. The text above asks which plate contains the most food, and the text below reveals that all three plates contain exactly the same amount of food.

63

United States – GA – 1947 Family of Four



© TIME & LIFE Images

The photograph shows a woman in a light-colored, short-sleeved dress sitting on a dark floor. She is surrounded by a large variety of food items, including several cans of soups and vegetables, boxes of instant noodle soup, bags of sugar, and other packaged goods. The items are arranged in a circular pattern around her, illustrating the food supply for a family of four in 1947.

64

UNITED STATES



65

GERMANY



66

MEXICO



67

FRANCE



68

EGYPT



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CHINA



70

JAPAN



71

BHUTAN

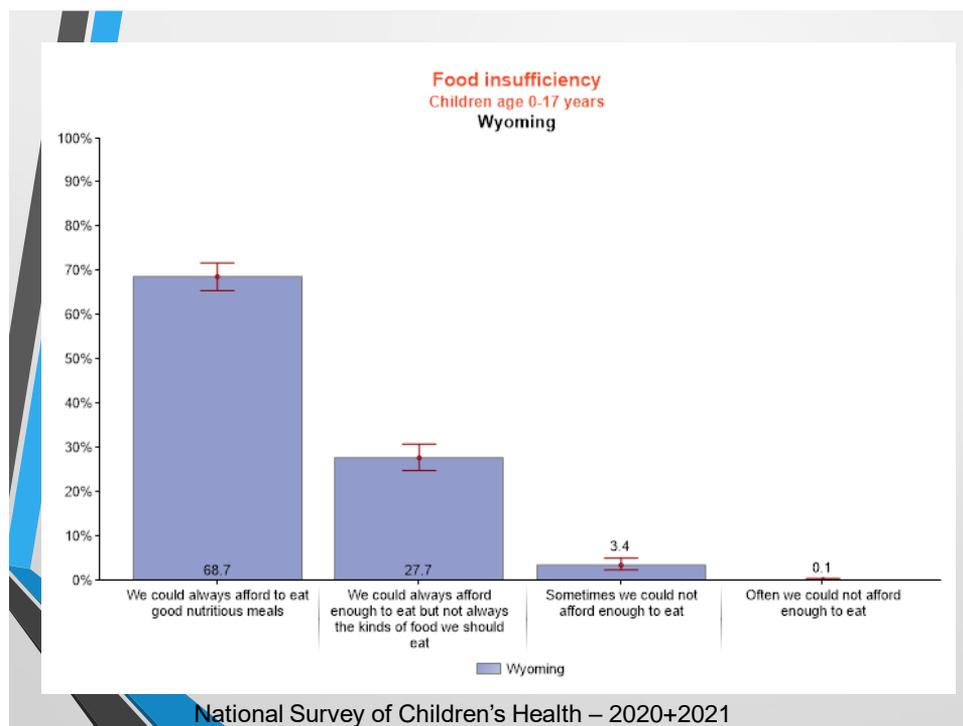


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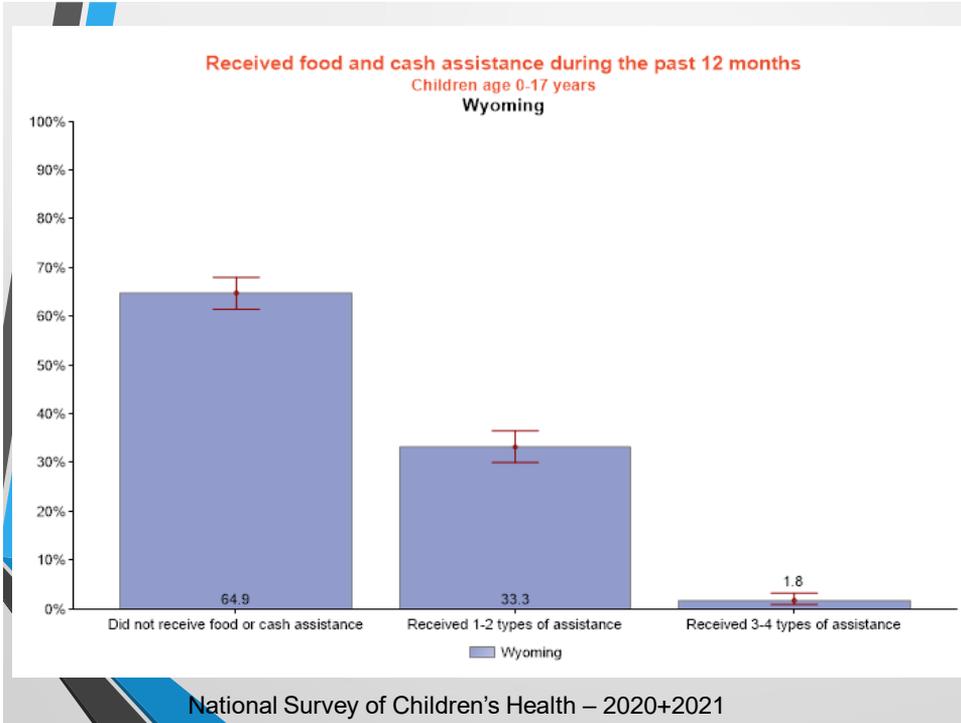
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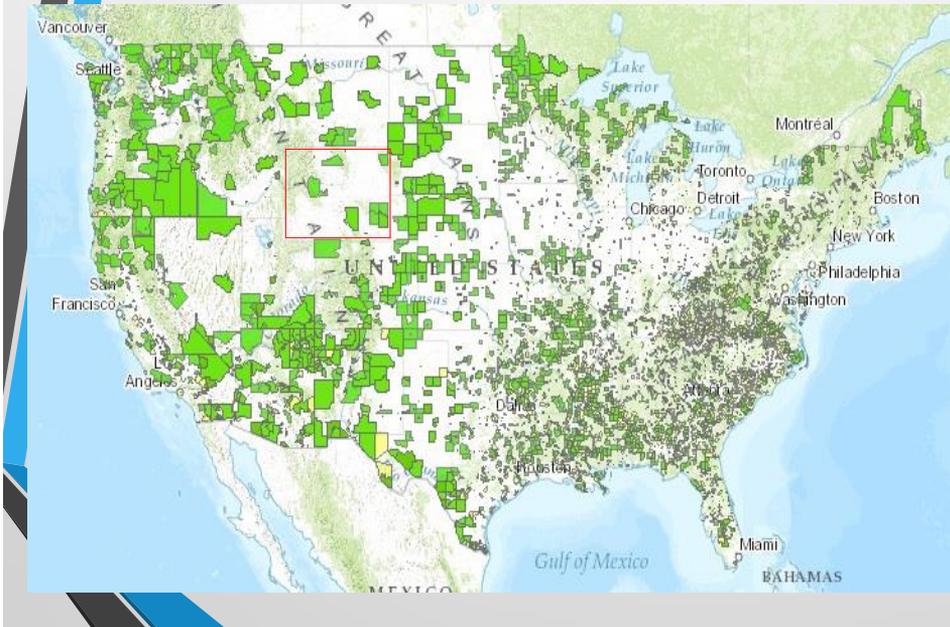
FOOD DESERT

- Definition: A tract in which at least 100 households are located more than one-half mile from the nearest supermarket and have no vehicle access; or at least 500 people, or 33 percent of the population, live more than 20 miles from the nearest supermarket, regardless of vehicle availability. *Oct 20, 2022 - USDA*

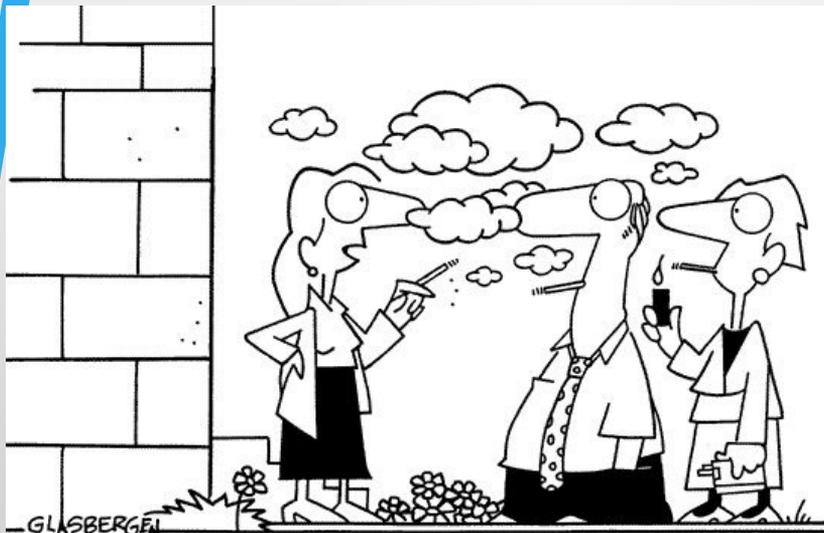



76

USDA FOOD DESERT MAP 2022

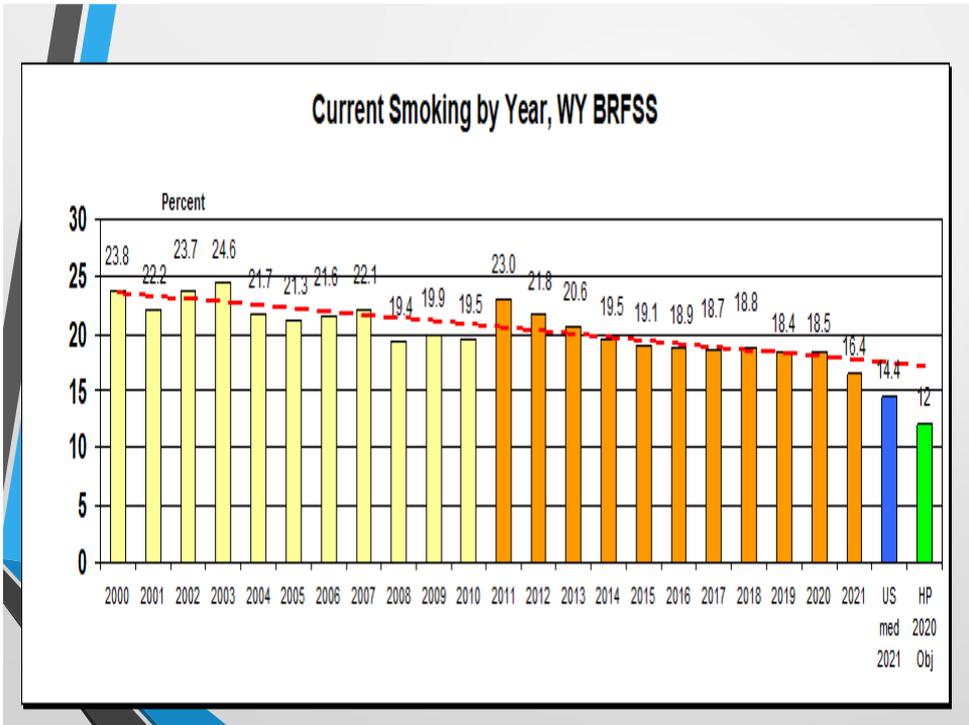


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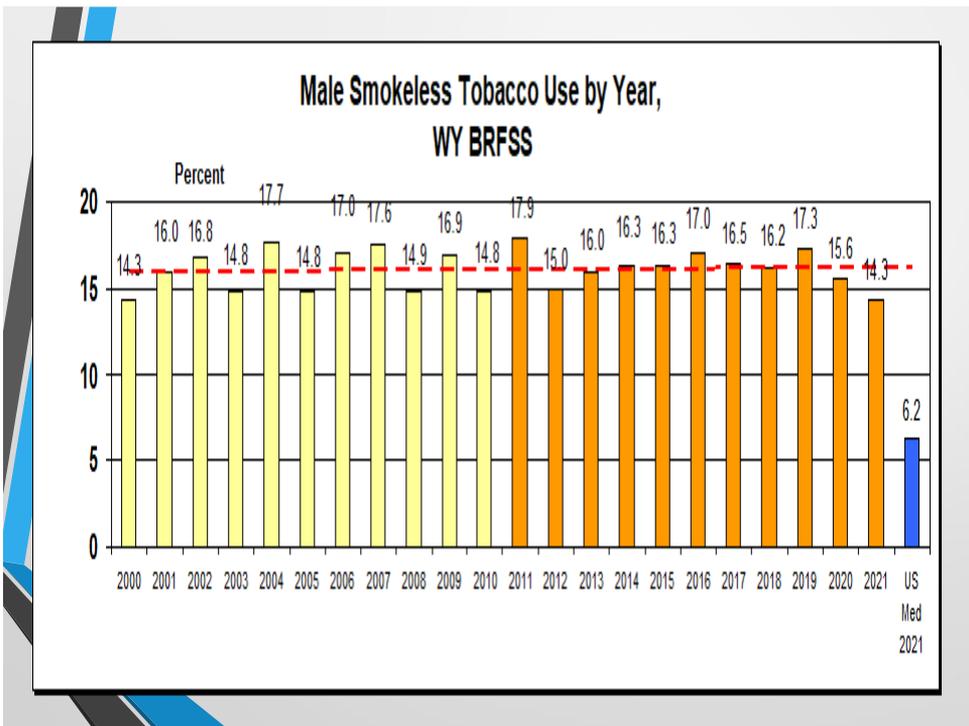


“That’s what I like best about smoking—it gets me out in the fresh air a couple times a day.”

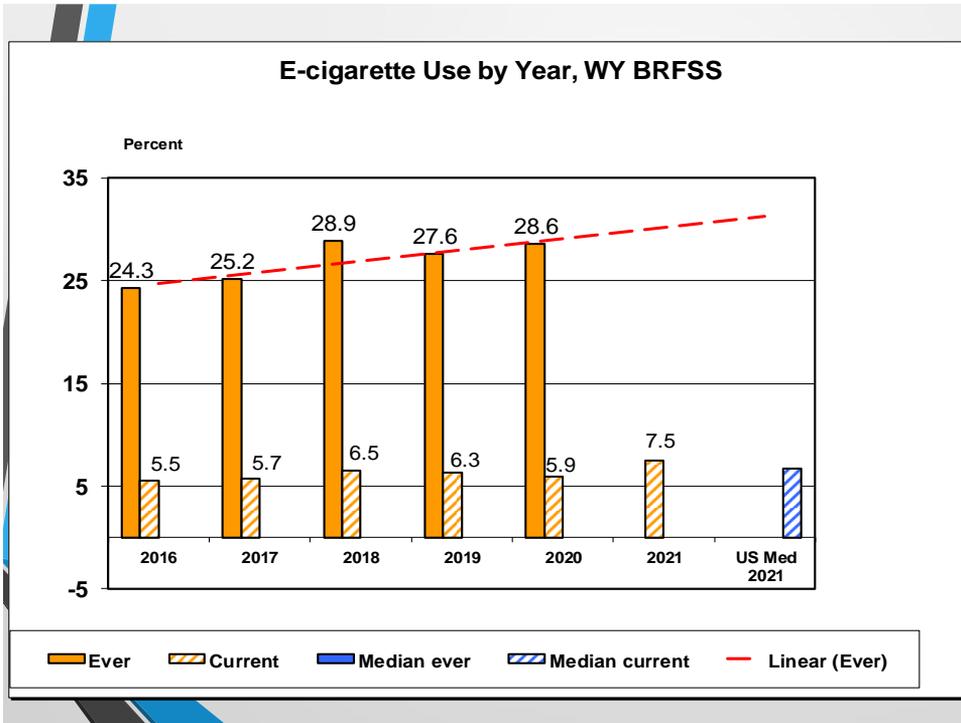
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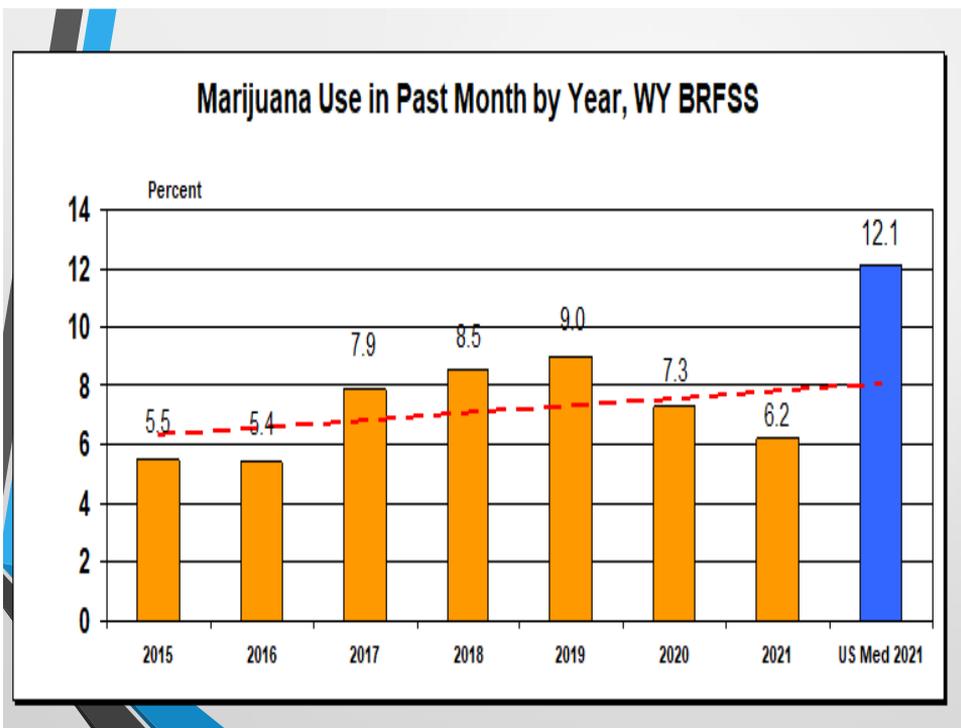
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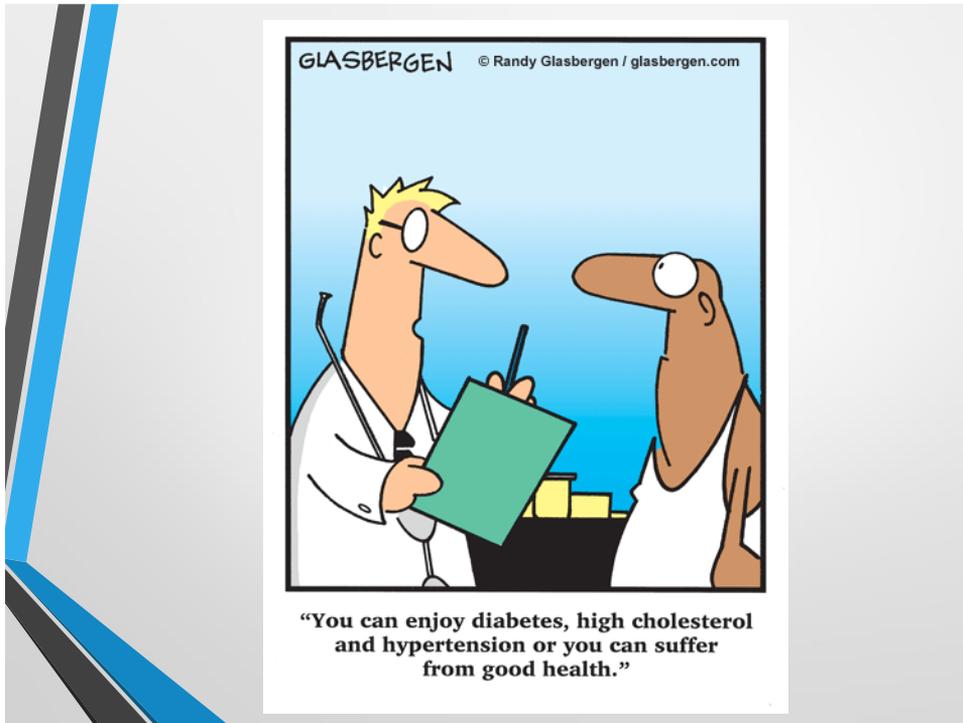
FY2022 Hospital Discharge

	INPATIENT		ER or URGENT	
	# Discharges	Charges	# Discharges	Charges
HEART DISEASE	10,770	\$600,907,655.47	3,547	\$35,593,594.53
CANCER	1,912	\$94,757,397.37	1,377	\$10,268,851.99
COPD	6,398	\$308,069,164.19	6,427	\$40,431,213.73
DIABETES	7,021	\$370,946,078.41	7,689	\$53,966,817.45
STROKE	1,351	\$75,566,023.77	898	\$10,309,703.40
TOTAL	27,452	\$1,450,246,319.21	19,938	\$150,570,181.10

83

QUESTIONS?

84



85