

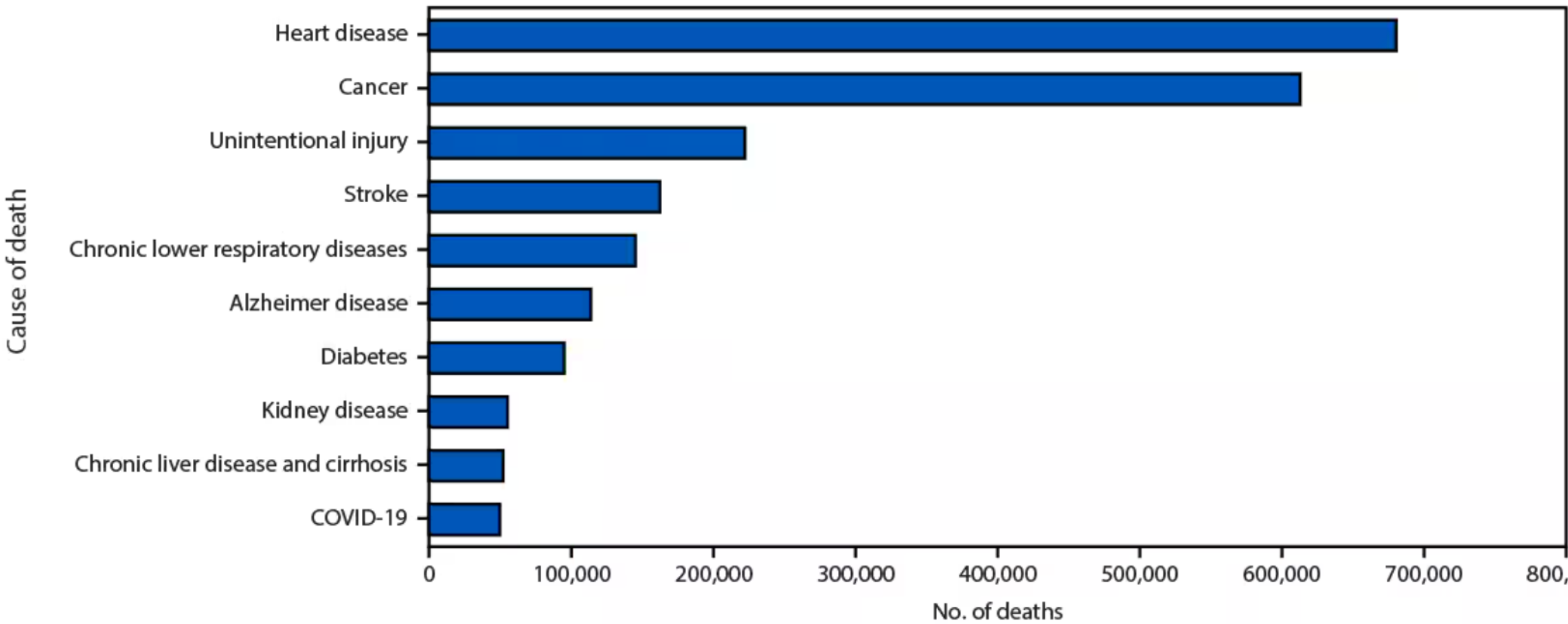
Transportation & Health

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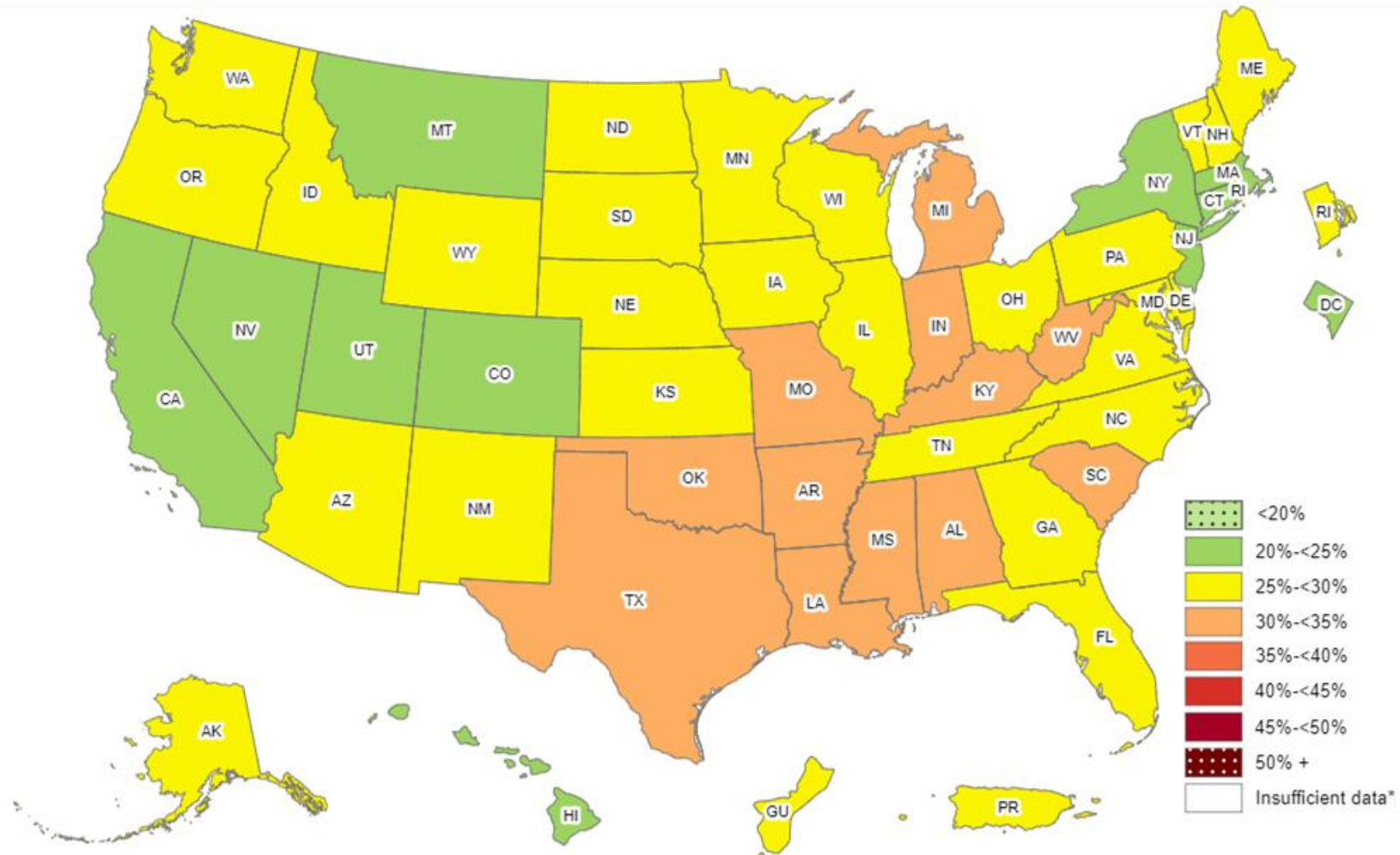
FIGURE 2. Leading underlying causes of death* — National Vital Statistics System, United States, 2023



* National Vital Statistics System provisional data for 2023 are incomplete. Data from December 2023 are less complete because of reporting lags. These data exclude deaths that occurred in the United States among residents of U.S. territories and foreign countries.

Prevalence[†] of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2011

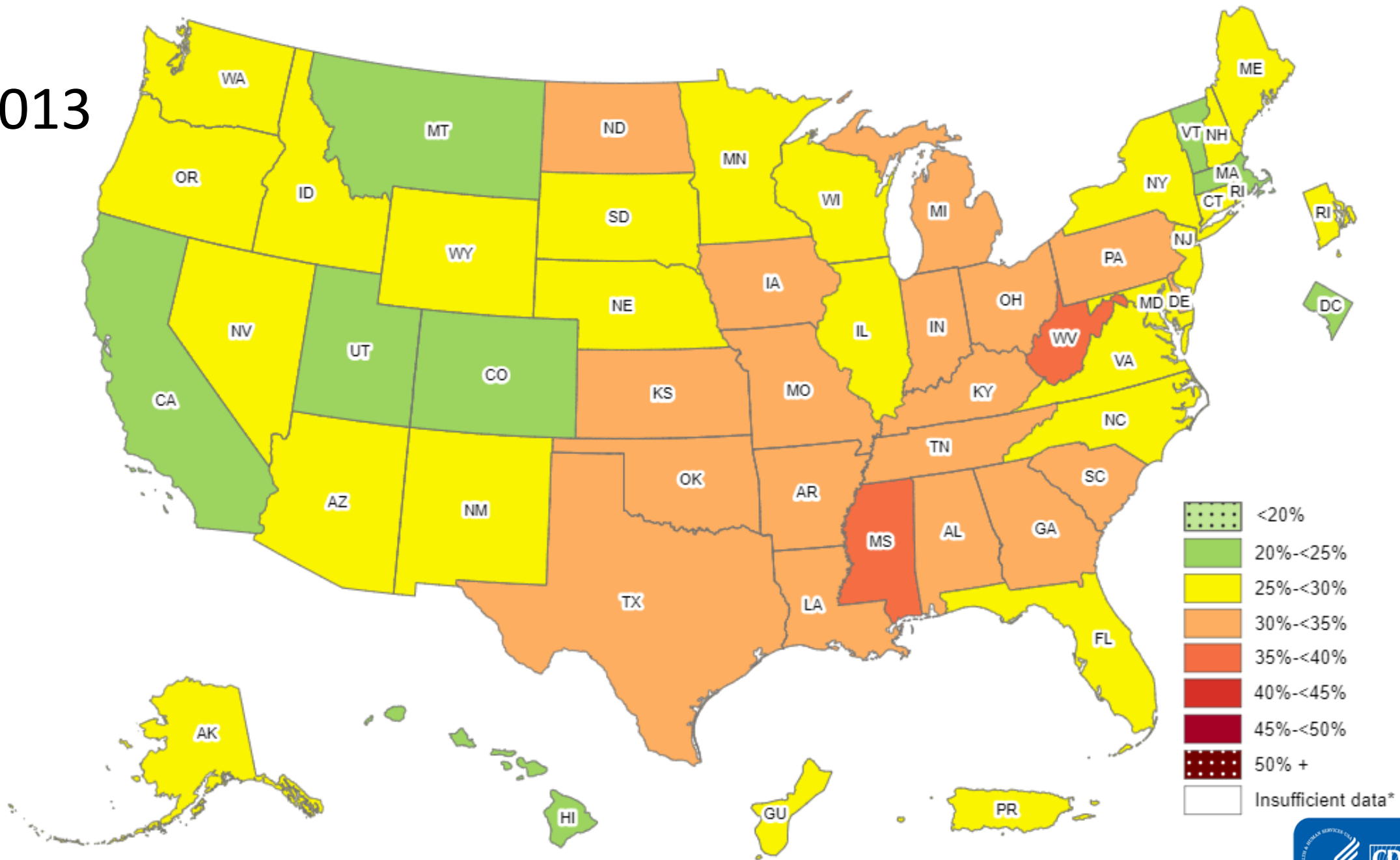
[†] Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



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



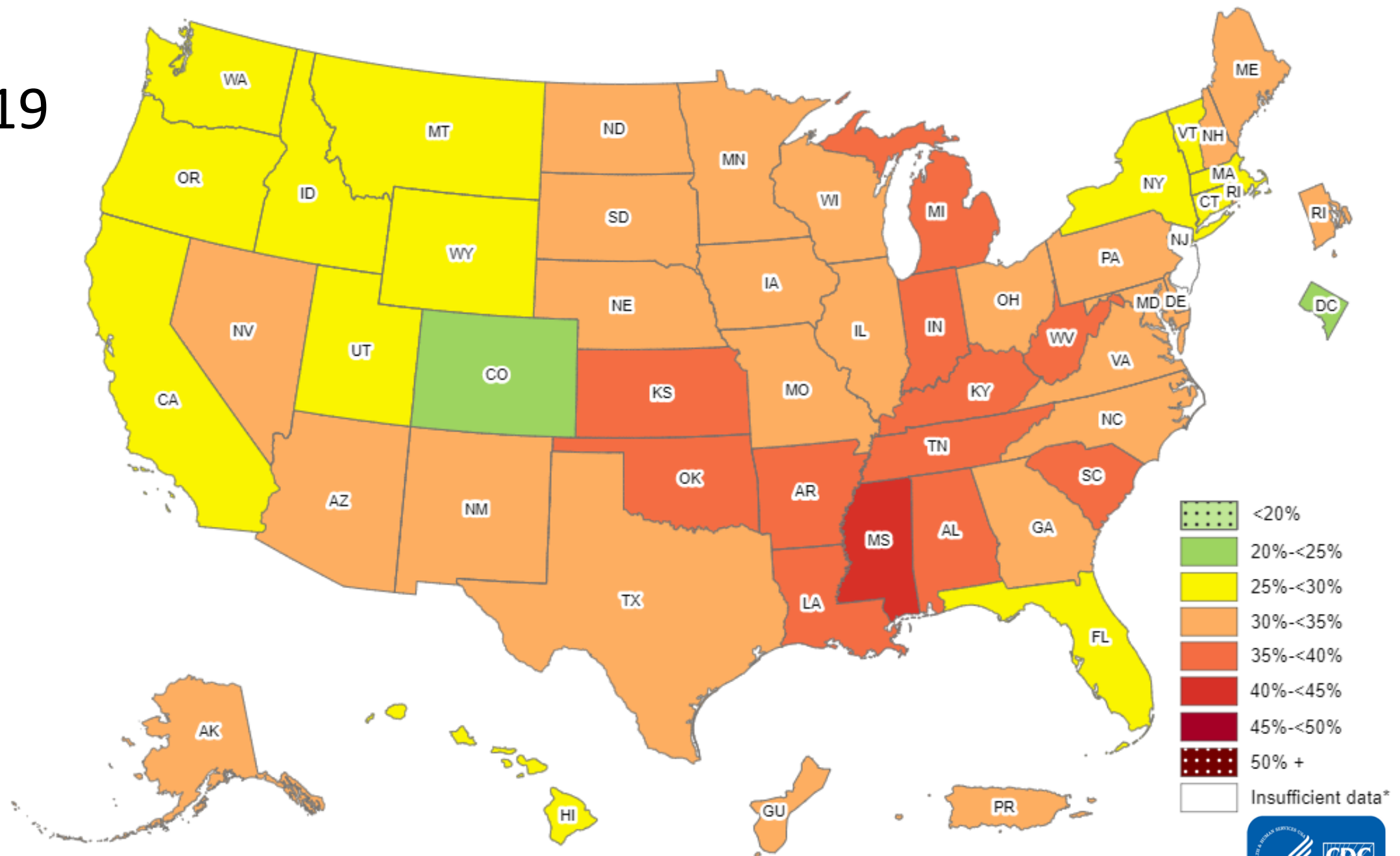
2013



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



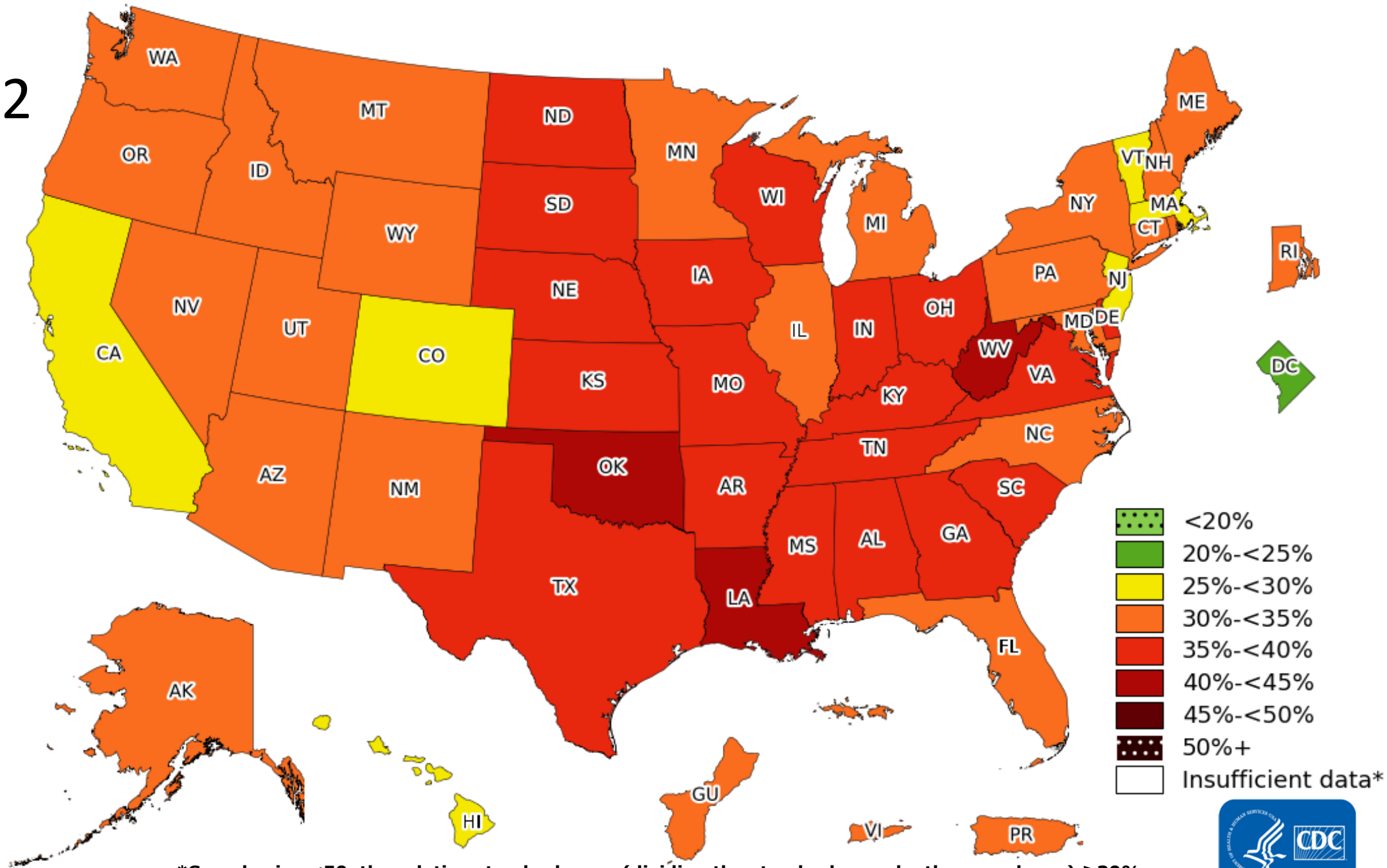
2019



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



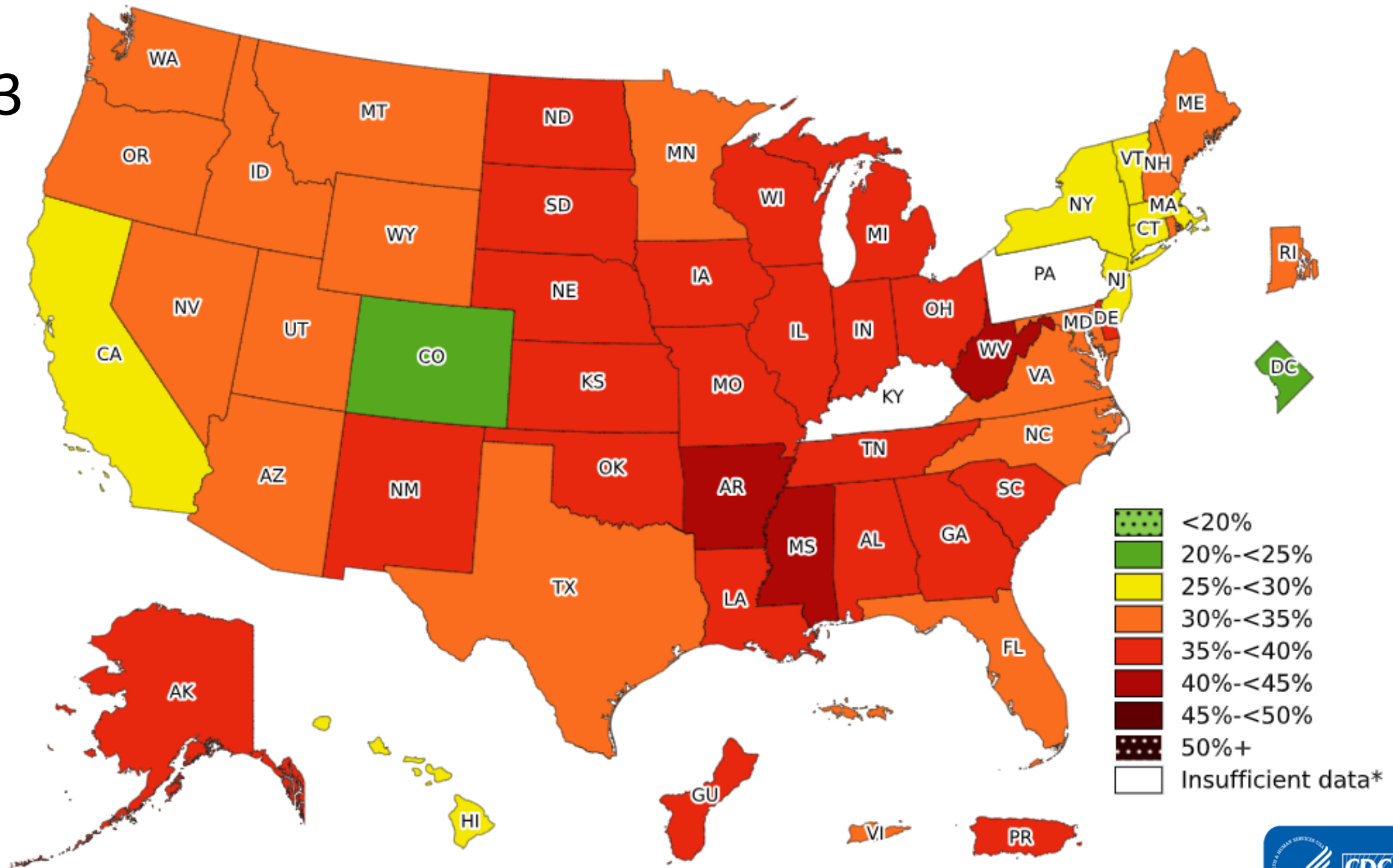
2022



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



2023



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








Chronic Disease: Risk factors & causes

- Age
- Family history
- Diet
- Exercise
- Smoking
- Alcohol
- Environmental factors
- Stress
- Sleep



Chronic Disease: Risk factors & causes

- ~~Age~~
- ~~Family history~~
- Diet 
- Exercise 
- Smoking 
- Alcohol 
- Environmental factors
- ~~Stress~~
- Sleep 





Risk factors & causes

- ~~Age~~
- ~~Family history~~
- Diet 
- Exercise 
- Smoking 
- Alcohol 
- Environmental factors 
- ~~Stress~~
- Sleep 

**How do we change our environment
to make the healthy choice the easy choice?**





“We’ve built America not for human beings, but for cars.”

Los Angeles Image: <http://www.examiner.com/women-s-health-in-los-angeles/ucla-unearths-new-freeway-health-hazard-asthma-flare-ups>

**THIS ONE
RUNS ON FAT
AND SAVES YOU MONEY**



**THIS ONE
RUNS ON MONEY
AND MAKES YOU FAT**



Photo: Carlton Reid via Flickr, Art: Peter Drew

<http://www.grist.org/article/2010-08-26-when-streets-tell-the-truth-about-people-riding-in-cars-bikes/>

Americans Drive a Lot

- Almost 14,500 miles per year (a 7% increase from 2021)
- 26.8 minutes commuting one-way to work (vs 26.4 minutes average in 2022)
- 4.5 million Americans travel 90 minutes to work – each way
 - vs 3.6 million in 2015
 - Equals more than a month each year just getting to the office.

* Data from American Community Survey (aka the Census)



Transportation & Health



Driving (injuries, air quality & respiratory health)



Physical activity (cardiopulmonary health)



Access to health care, jobs, education



Access to nature (physical & mental health)



Access to healthy food (nutrition, obesity)



Improved social capital (sense of well-being)



Motor Vehicle Crashes in US

- Unintentional injuries (which includes crashes) = leading cause of death in 1st three decades of Americans' lives
- ~ 42,000 people die each year
- ~ 2.4 million people are injured

<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813560#:~:text=Sources:%20FARS%201975%2D2021%20Final,22>



Air Pollution & Health



- Aggravates **asthma** symptoms (~600,000 Marylanders)
- Diminishes **lung function** (an additional 200k-400k people)
- Triggers **heart** attacks (~ 29,000 Marylanders each year)
- Causes adverse **birth outcomes** (~8,000 each year)
- Increases risk of **cancer** (~30,000 each year)
- Increases risk of **death** (~54,000 each year)

<https://www.niehs.nih.gov/health/topics/agents/air-pollution>



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Improved social
capital (sense of well-being)



“If you could package physical activity into a pill, it would be the most effective drug on the market”

-Dr. Ruth Petersen, former
Director of CDC’s Division of
Nutrition, Physical Activity, and
Obesity



% of children who walk or bike to school

- Percent of children 5 to 14 years of age who usually walked or bicycled to school
 - 1969: 48%
 - 2009: 13%
- Percent of children in grades K–8 lived within one mile of school
 - 1969: 41%
 - 2009: 31%







Physical Inactivity & Health

- Can contribute to **heart disease, type 2 diabetes, some cancers, & obesity**
- Associated with an estimated **\$117 billion in health care** costs each year
- Only **1 in 4 US adults**, and **1 in 5 high school students** meet the recommended guidelines
- **21% Maryland adults** report doing no physical activity in the past 30 days

*<https://www.cdc.gov/chronicdisease/resources/publications/factsheets/physical-activity.htm> and <https://www.americashealthrankings.org/explore/measures/Sedentary/MD>

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Johns Hopkins University data shows Red Line would significantly improve access to jobs in Baltimore

Data: 1 in 3 Baltimoreans do not have a car, 1 in 5 commute on public transit

Share



Updated: 6:13 PM EDT Jun 7, 2024

Infinite Scroll Enabled ☐

 **Lisa Robinson**   
Reporter





Maryland men's basketball upends No. 21 Northwestern, 75-59, to...



Editor's note: Comic strip Dilbert to be discontinued after creator's racist...



Ravens should say goodbye to both John Harbaugh and Lamar Jackson | READER...



MIAA A Conference boys basketball championship | PHOTOS



EDITORIAL

Baltimore kids need a more reliable way to get to school | COMMENTARY

By Baltimore Sun Editorial Board

Baltimore Sun • Jun 16, 2021 at 1:33 pm



Expand



An MTA bus is shown on Baltimore Street outside University of Maryland Medical Center. Baltimore City is the only public school system in the state that relies on mass transit to shuttle students (Karl Merton Ferron/Baltimore Sun Staff) (Karl Merton Ferron/The Baltimore Sun)

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She gets it.

30 Million Seniors Rely on Medicare Advantage for Vital Health Care

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With inflation already so high?

30 Million Seniors Rely on Medicare Advantage for Vital Health Care

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Health benefits of nature contact



REDUCED
STRESS



IMPROVED
SLEEP



REDUCED
DEPRESSION
AND
ANXIETY



GREATER
HAPPINESS



REDUCED
AGGRESSION



REDUCED
ADHD
SYMPTOMS



REDUCED
DIABETES



PROSOCIAL
BEHAVIOR



LOWER
BLOOD
PRESSURE



↓ ASTHMA
& ALLERGY



BETTER
GENERAL
HEALTH



SMOOTHER
POST-
SURGICAL
RECOVERY



BETTER
BIRTH
OUTCOMES



IMPROVED
PAIN
CONTROL



LESS
OBESITY



LONGER
LIFE
EXPECTANCY



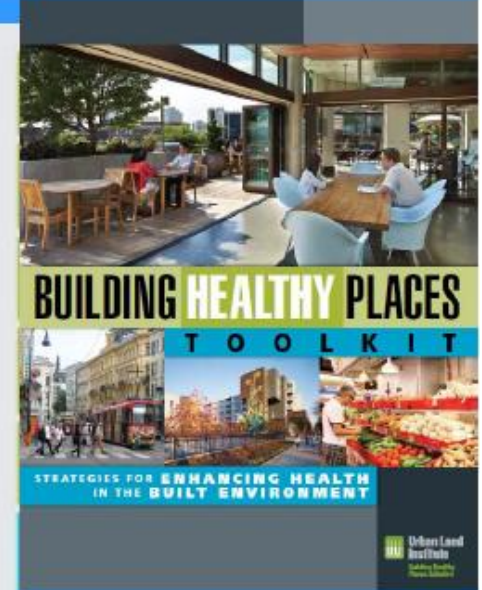


Healthy Community Design

- Links destinations that promote health via a transportation network that facilitates safe travel
- Makes the healthy choice the easy choice

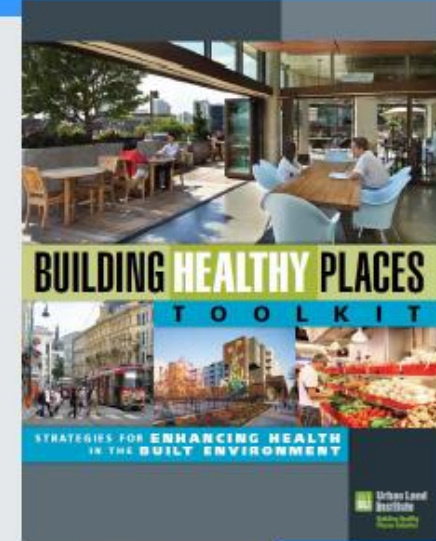
Evidence-Based Recommendations

- 1 Incorporate a mix of land uses
- 2 Design well-connected street networks at the human scale ★
- 3 Provide sidewalks and enticing, pedestrian-oriented streetscapes ★
- 4 Provide infrastructure to support biking ★
- 5 Design visible, enticing stairs to encourage everyday use
- 6 Install stair prompts and signage
- 7 Provide high-quality spaces for multigenerational play and recreation
- 8 Build play spaces for children



Evidence-Based Recommendations

- 9 Accommodate a grocery store
- 10 Host a farmers market
- 11 Promote healthy food retail
- 12 Support on-site gardening and farming
- 13 Enhance access to drinking water
- 14 Ban smoking
- 15 Use materials and products that support healthy indoor air quality
- 16 Facilitate proper ventilation and airflow
- 17 Maximize indoor lighting quality
- 18 Minimize noise pollution
- 19 Increase access to nature ★
- 20 Facilitate social engagement ★
- 21 Adopt pet-friendly policies



<http://www.uli.org/toolkit>

We need to make active transportation easier ...

- Decreases cars
 - Lowers injuries
 - Reduces air pollution
 - Also reduces greenhouse gases
- Increases physical activity
- Increases access to healthy food, nature, jobs and education
- Increases social capital

In order to improve physical & mental health!



Thank you!

Many thanks to Drs. Brian Schwartz, Dick Jackson & Howie Frumkin, for many of these slides were adapted from lectures given by them.

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