



Childhood Obesity Intervention
Cost Effectiveness Study

**Increasing Obesity in the
United States: Implications for
Disability, and Cost-Effective
Interventions to Prevent
Obesity and Improve Health
Equity**

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National Disability Forum

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HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH



CHOICES PROJECT

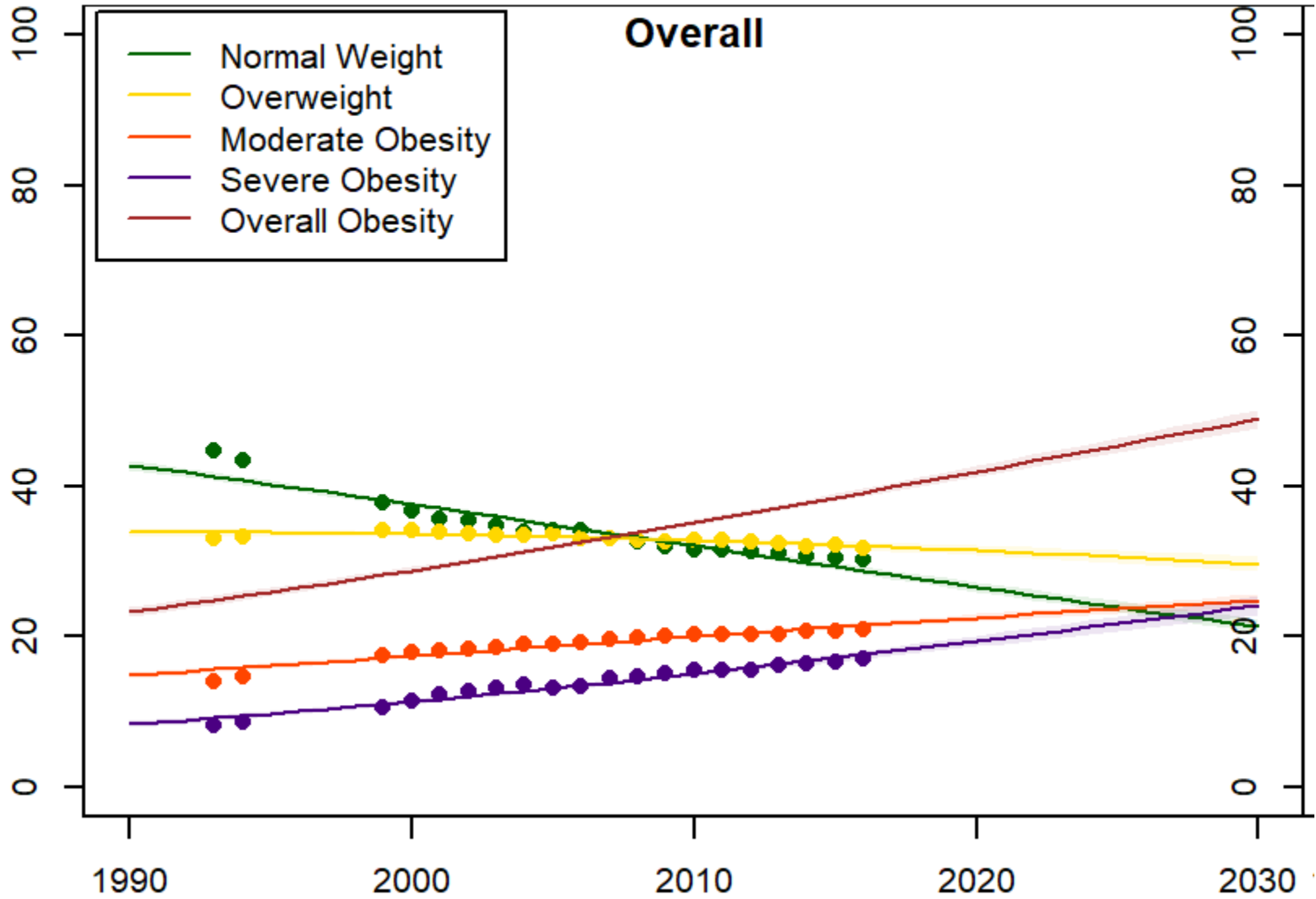
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Overview

- Our research predicts increasing obesity and severe obesity throughout the United States, and growing disparities by gender, race/ethnicity, and income.
- Because excess weight is driver of chronic disease (cancer, cardiovascular disease, diabetes) and disability¹, these trends indicate substantial disability in the future.
- We have identified a wide variety of feasible and cost-effective strategies that can prevent future excess weight gain and improve health equity.
- We need further implementation studies of how these strategies can work for all population groups and for those with disabilities.

¹Chang VW, Alley DE, Dowd JB. Trends in the Relationship Between Obesity and Disability, 1988-2012. Am J Epidemiol. 2017.

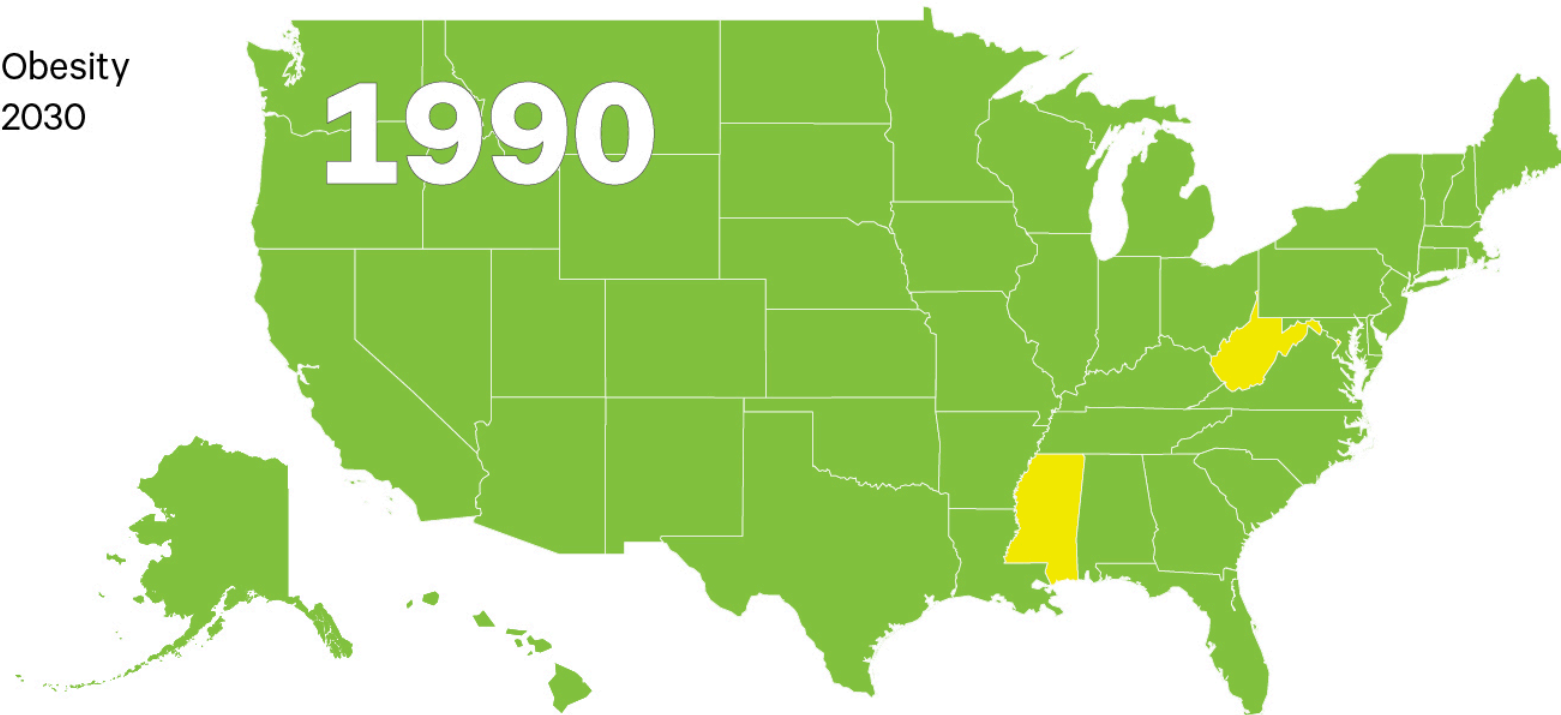
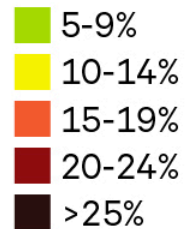
Estimated and Projected Prevalence of Adult Obesity and Severe Obesity in the US to 2030



The Future of Severe Obesity in the U.S.

Nearly a quarter of Americans will have severe obesity by 2030

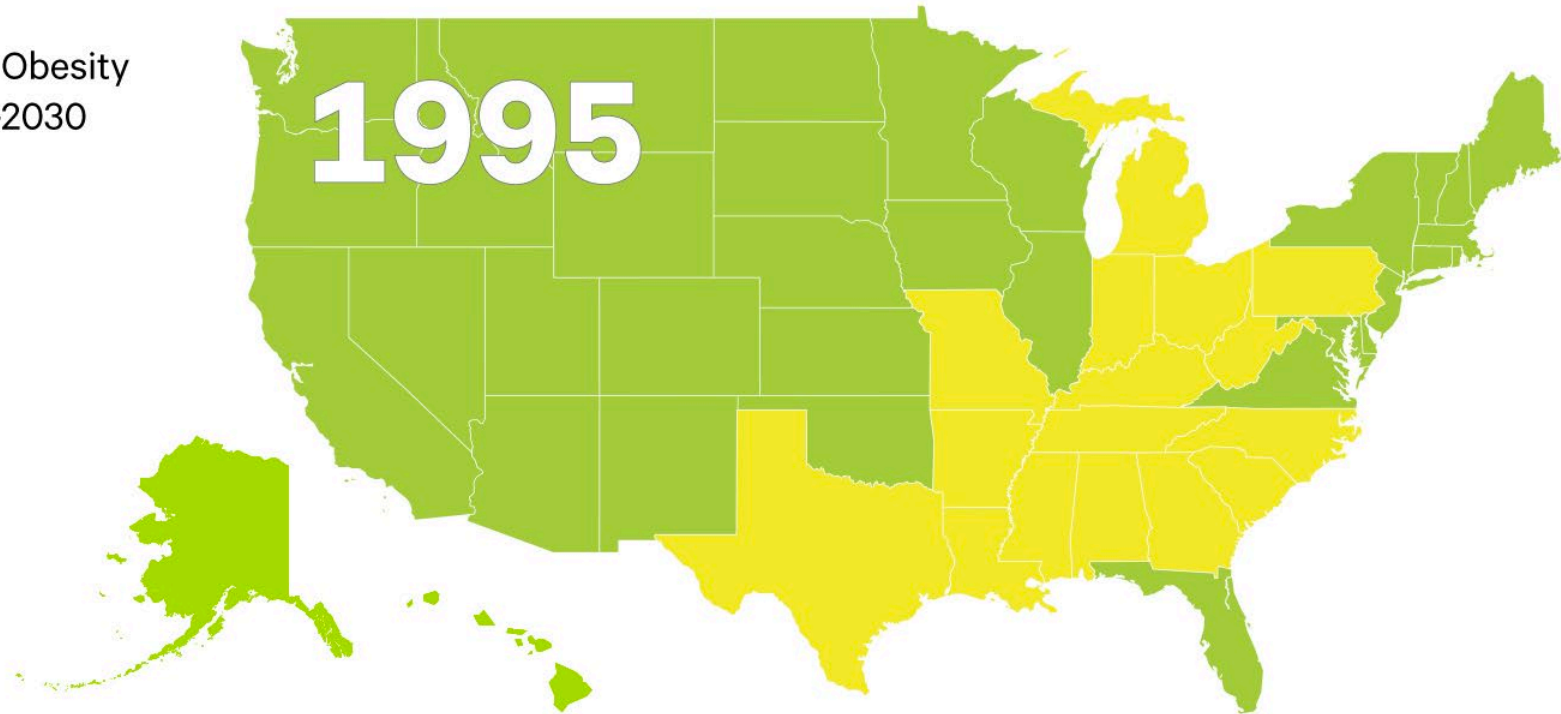
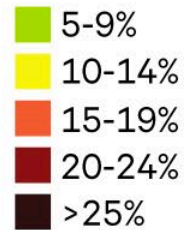
U.S. Severe Obesity
rates, 1990-2030



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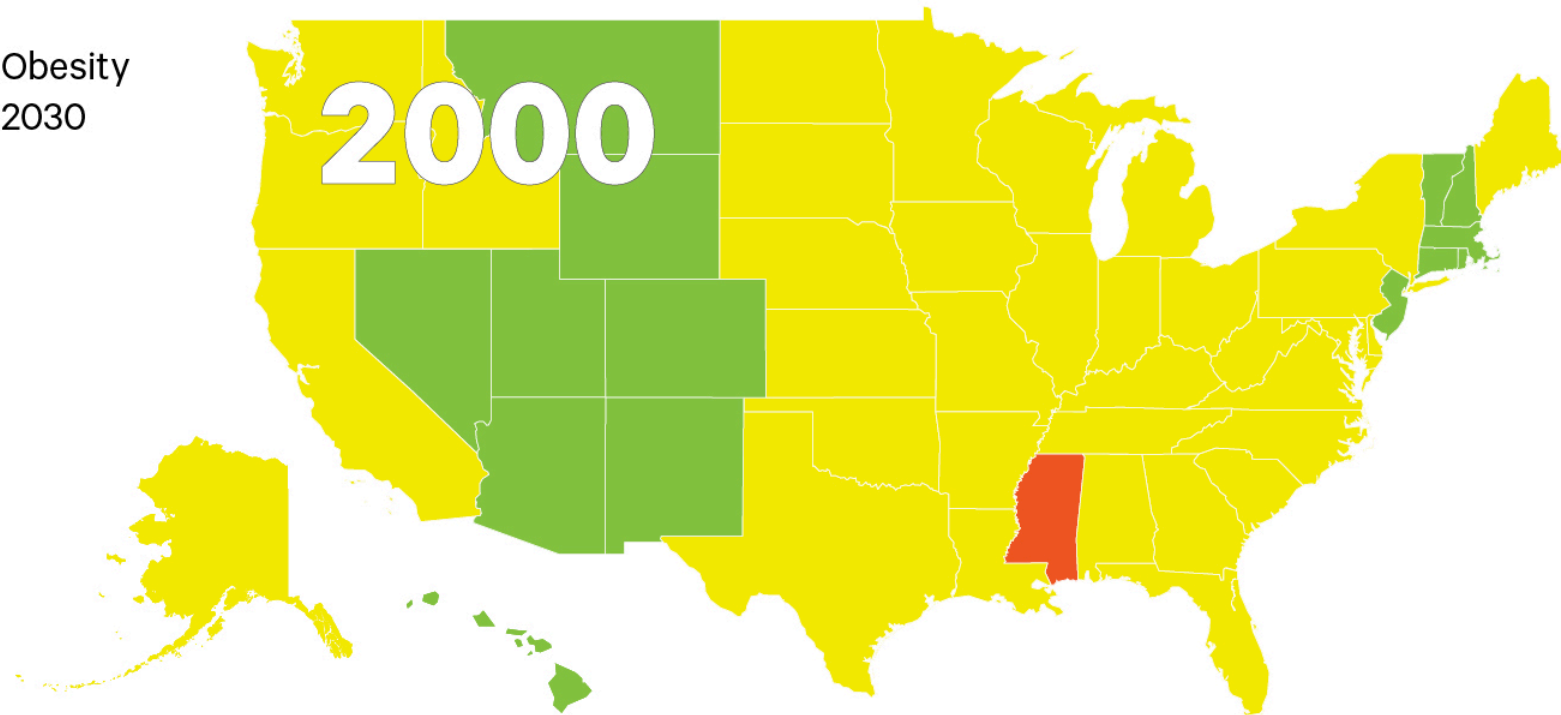
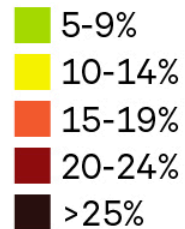
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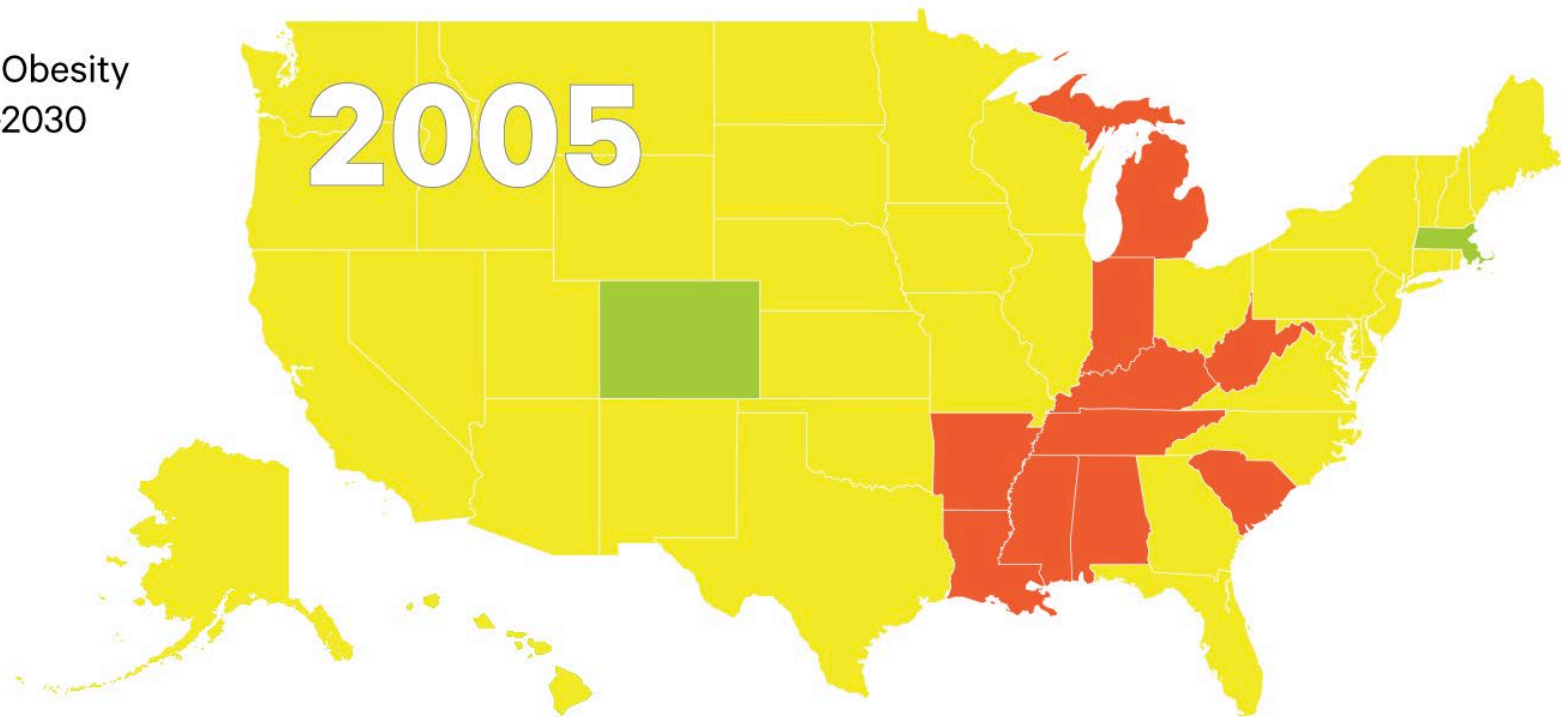
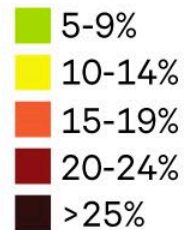
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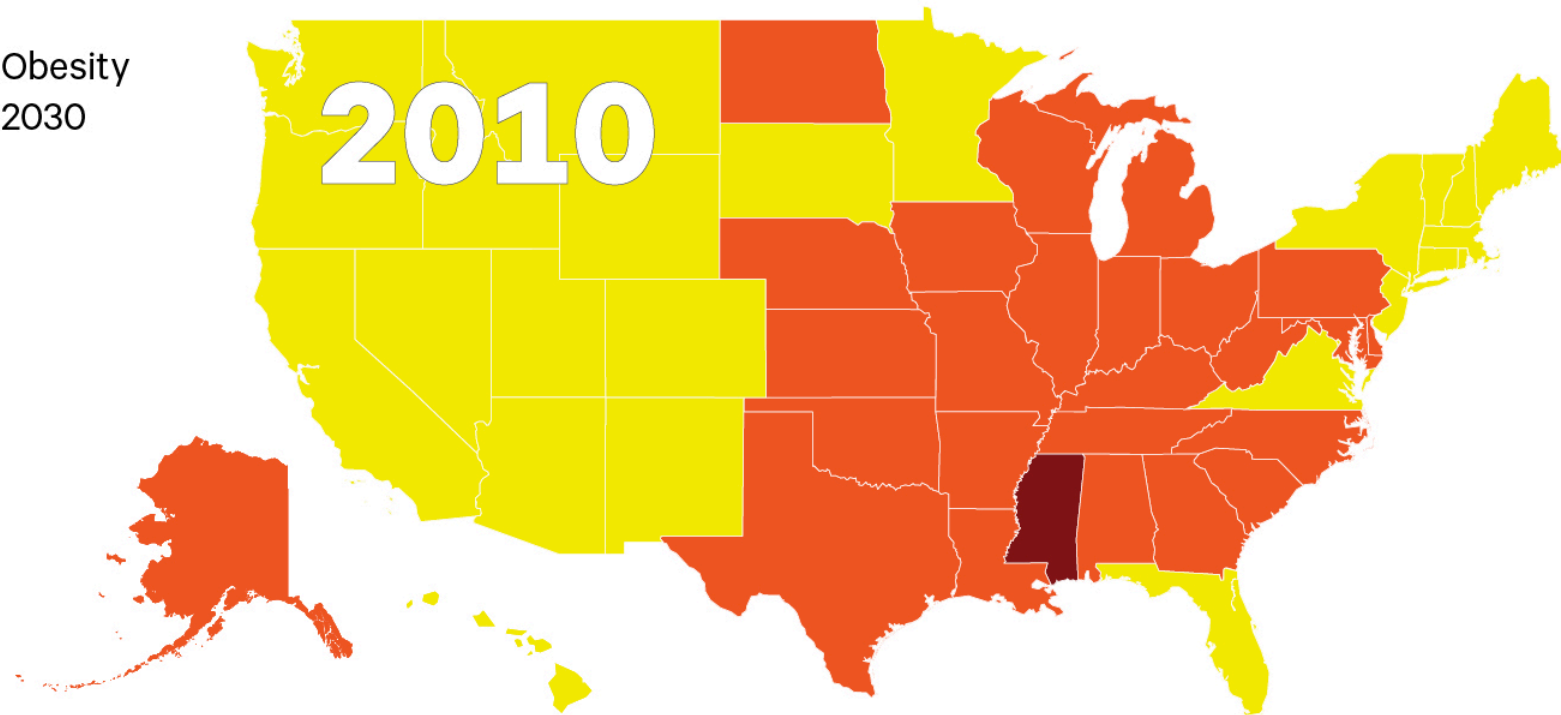
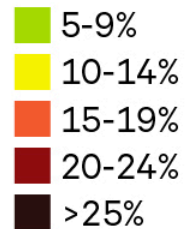
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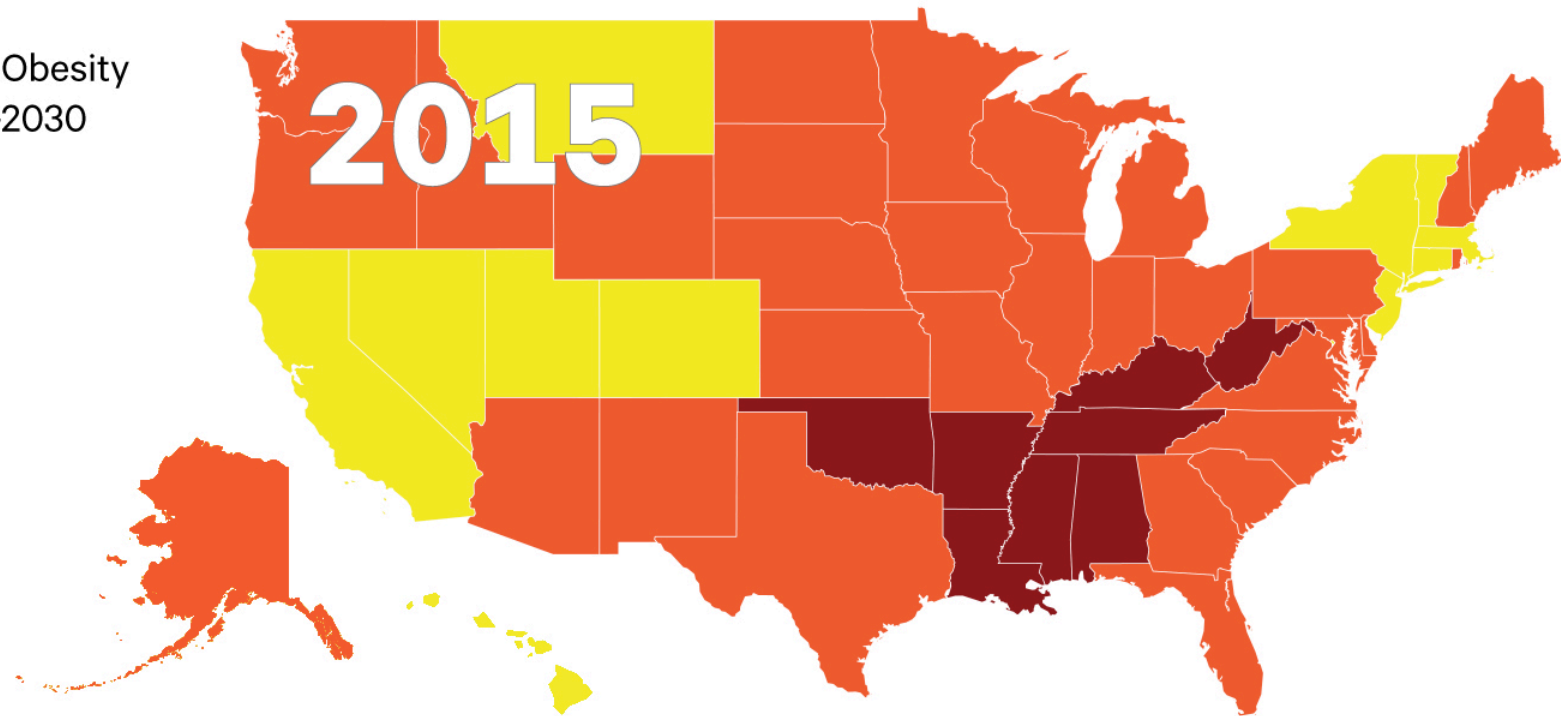
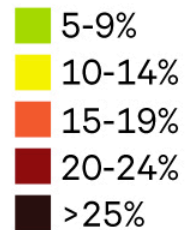
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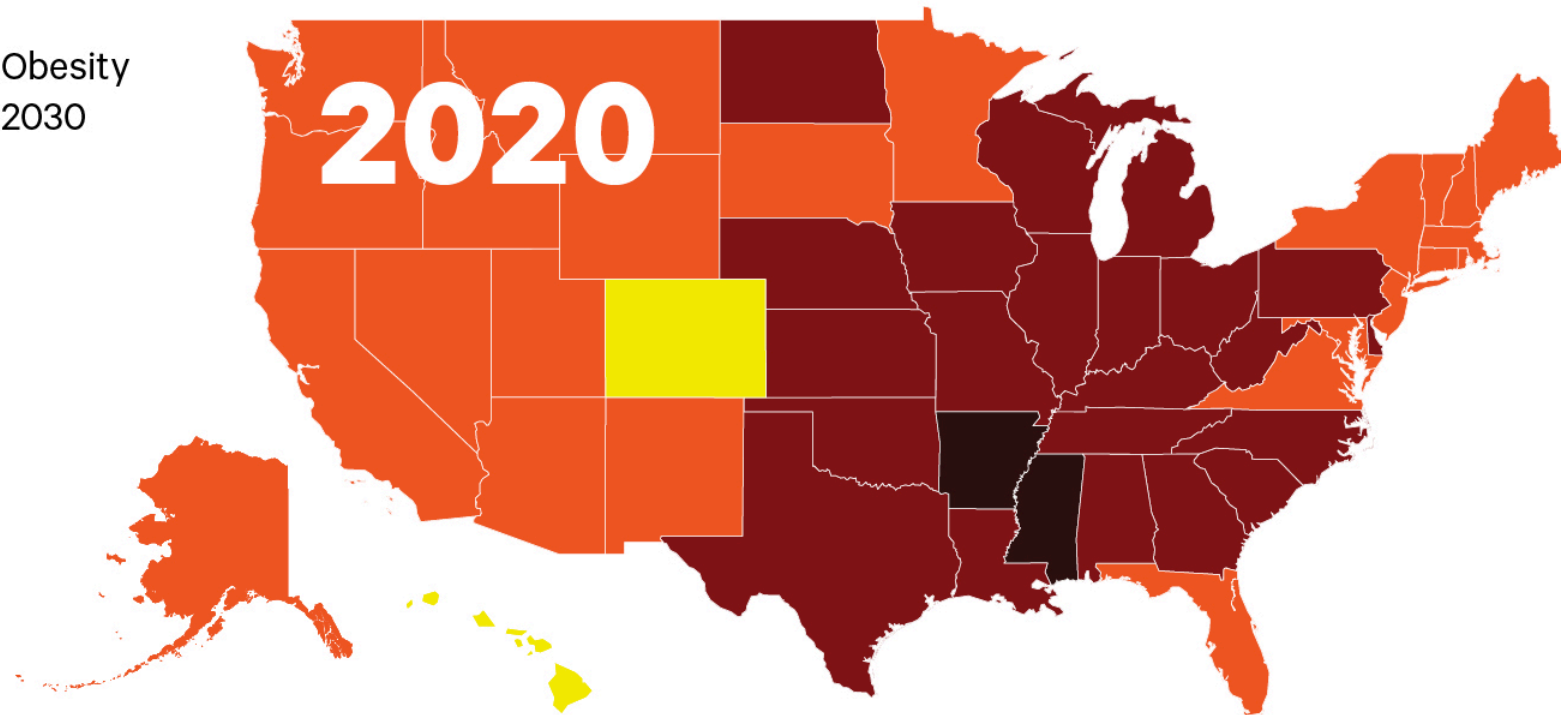
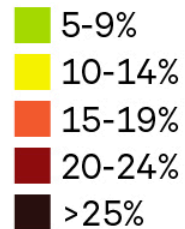
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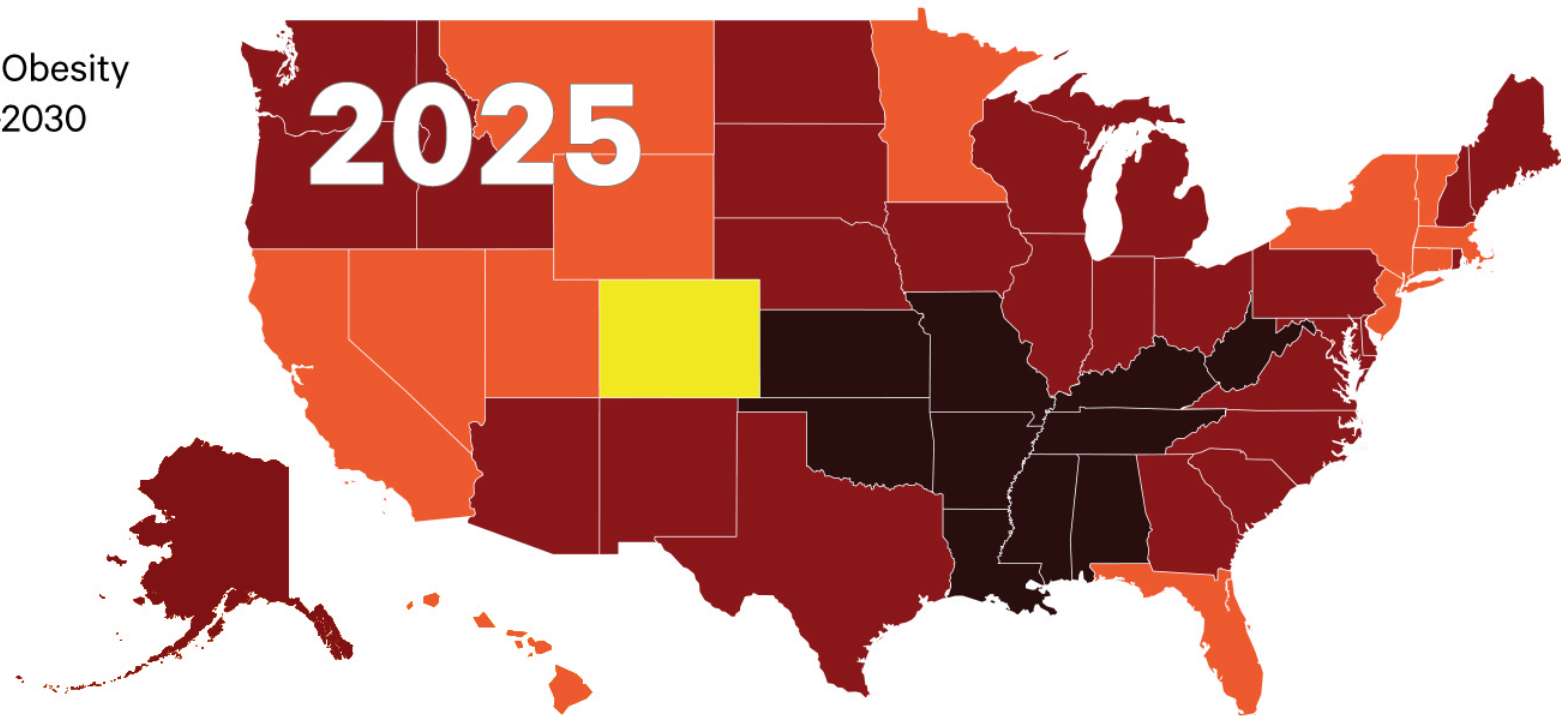
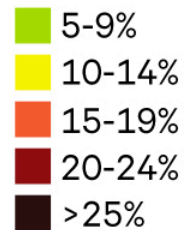
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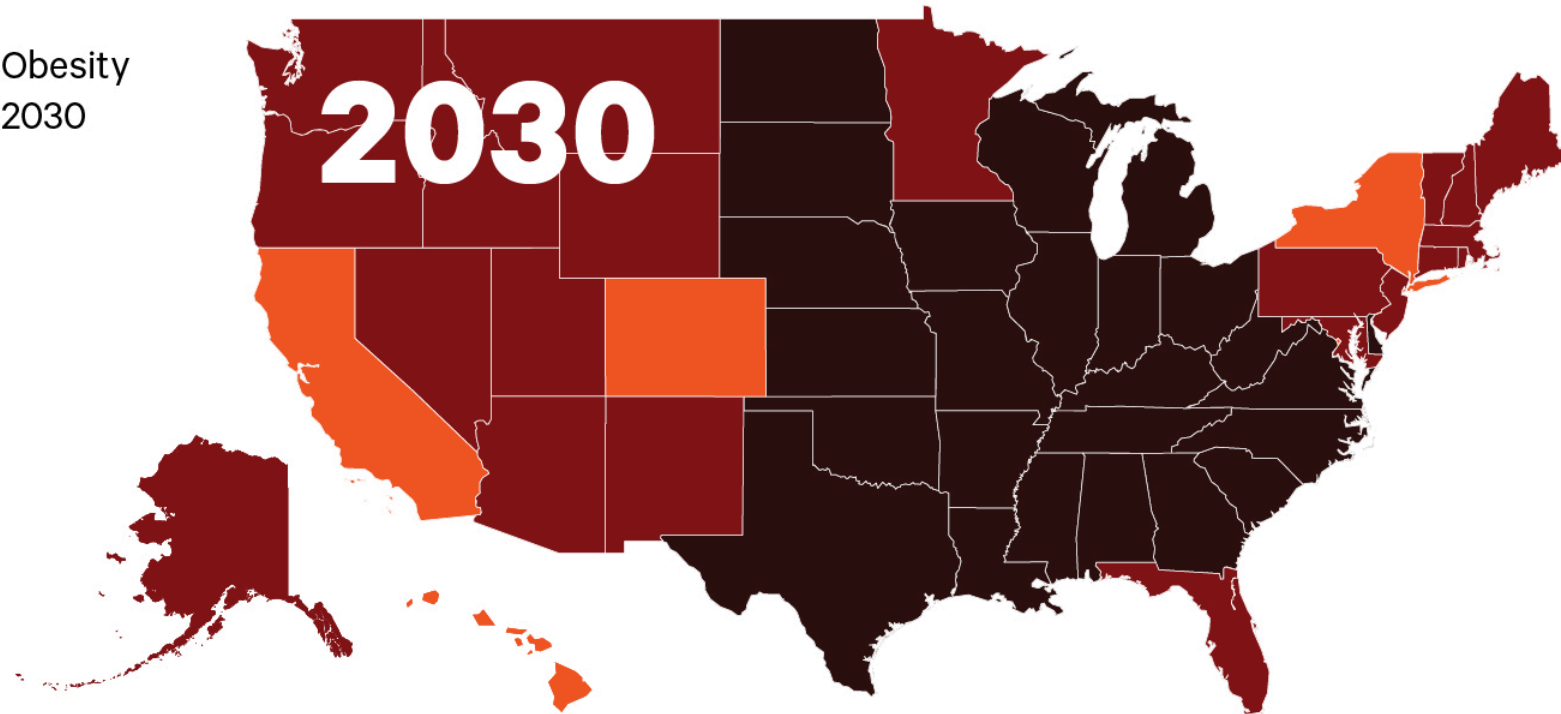
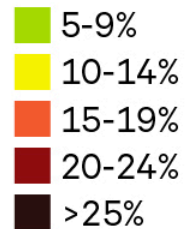
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Growing Disparities

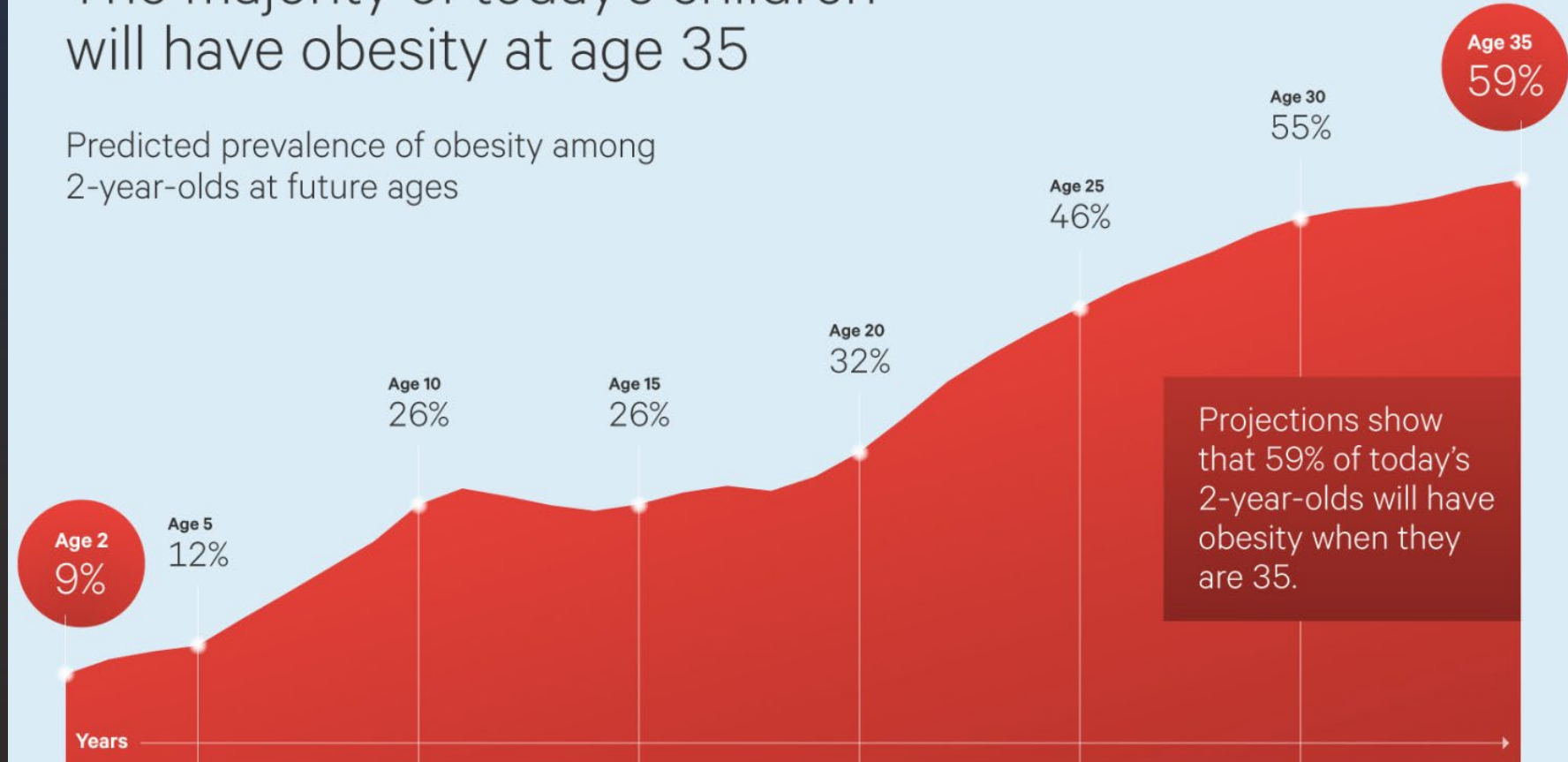
- » Nearly 1 in 4 adults is projected to have severe obesity by 2030 (24.2%)
 - In 25 states, the prevalence will be higher than 25%
- » Nationally, severe obesity is likely to become the most common BMI category among
 - Women (27.6%)
 - Non-Hispanic black adults (31.7%)
 - Low-income adults (31.7%)

With no intervention...

The majority of today's children will have obesity at age 35



Predicted prevalence of obesity among 2-year-olds at future ages



Cost-Effective & Feasible Interventions

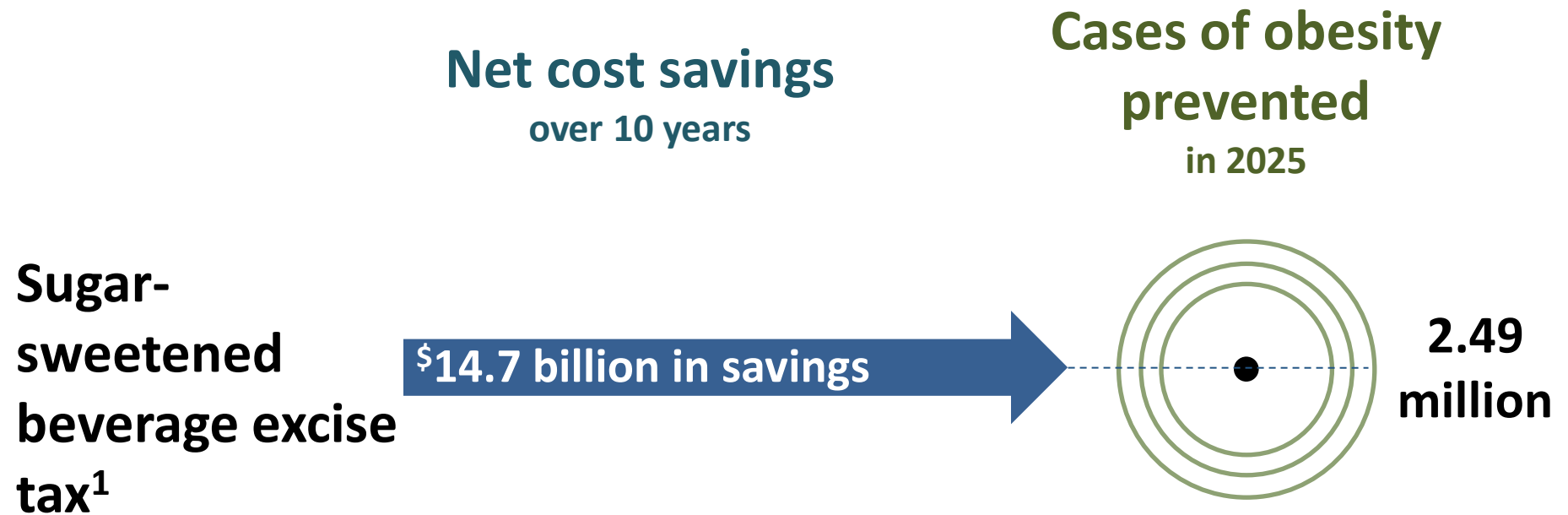
- There is good evidence for a wide range of **cost-effective** and **feasible** strategies that can improve population health, improve health equity, and prevent future obesity and chronic disease
- Some of these are already implemented
- For example: nutritional improvements to the WIC food package,¹ improved school meals (HHFKA)²



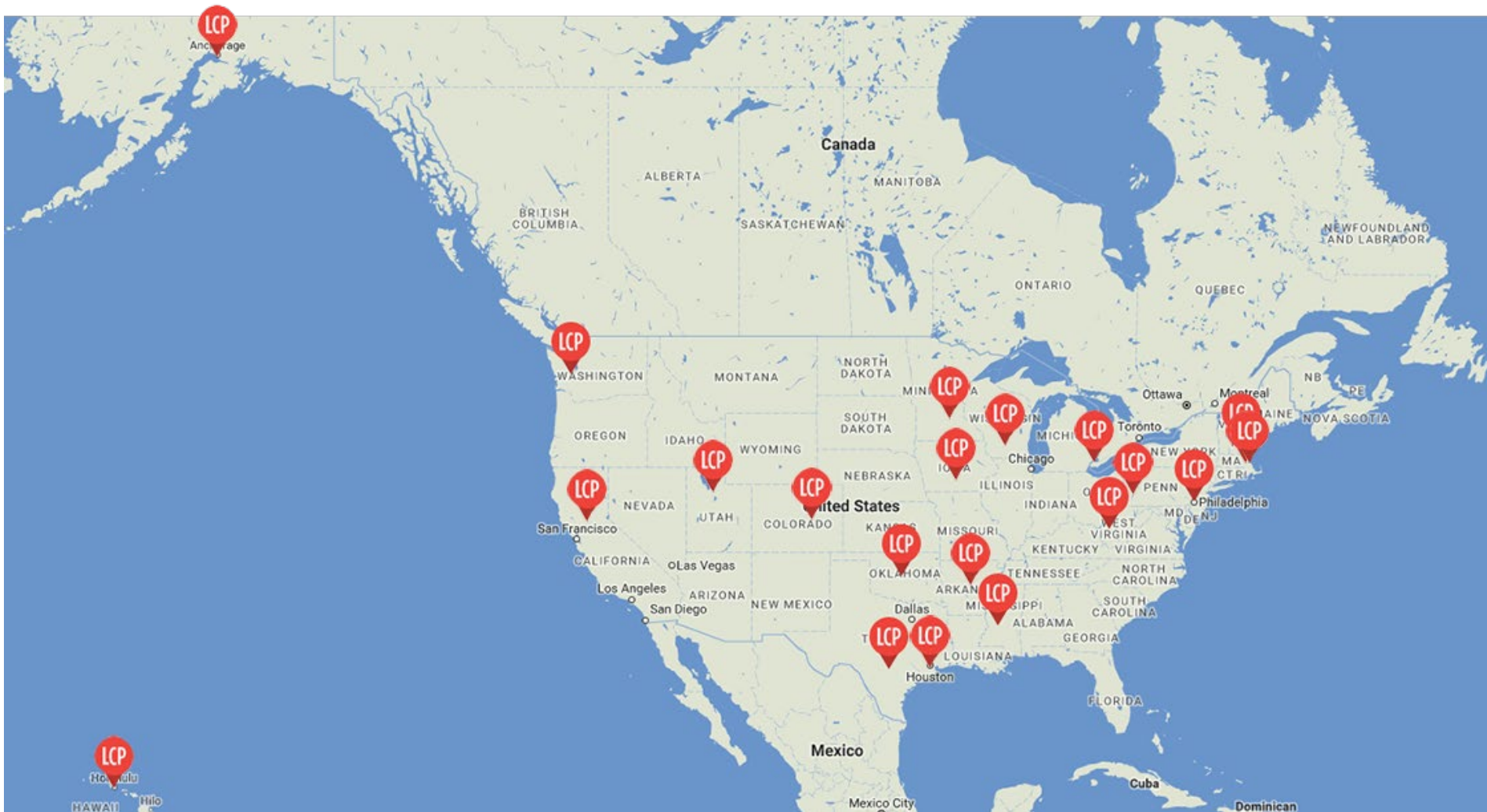
¹Daepf MIG, Gortmaker SL, Wang YC, Long MW, Kenney EL. WIC Food Package. Pediatrics. 2019 May;143(5).

²Kenney EL, Barrett JL, Bleich SN, Ward ZJ, Cradock AL, Gortmaker SL. Impact of The Healthy, Hunger-Free Kids Act On Obesity Trends. Health Aff (Millwood). 2020 Jul;39(7):1122-1129.

Population-wide strategy that is projected to save more in health care costs than it cost to implement



Learning Collaborative Partnerships



Learning Collaborative Partnerships



Apply CHOICES framework to identify “best value for money” strategies for states and cities

Learn how to apply evaluations of effectiveness, reach and cost to identify which strategies are the best value for money to prevent childhood and adult obesity throughout the U.S.



Example: CA Sugary Drink Tax

HEALTH IMPACT OF A \$0.02/OUNCE STATE EXCISE TAX ON SUGARY DRINKS



69 FEWER 12-OZ SUGARY DRINKS SERVINGS PER PERSON

in the first year



198,000 CASES OF OBESITY PREVENTED

in 2030



13,900 CASES OF DIABETES PREVENTED



502,000 REDUCTION IN DECAYED, MISSING, OR FILLED TEETH

over 10 years (Medi-Cal)

COST IMPACT OF A \$0.02/OUNCE STATE EXCISE TAX ON SUGARY DRINKS

\$46.89

HEALTH CARE COSTS SAVED PER \$1 INVESTED



\$1.79 BILLION SAVED IN NET COSTS

\$142

DECREASE IN SPENDING ON SUGARY DRINKS PER HOUSEHOLD

in the first year

The tax would be cost-saving, and in addition would raise more than \$1.3 billion in annual revenue

www.choicesproject.org/publications/report-california-sugary-drink-excise-tax

Gouck J, Whetstone L, Walter C, Pugliese J, Kurtz C, Seavey-Hultquist J, Barrett J, McCulloch S, Garrone M, Cradock A, Gortmaker, S. California: A Sugary Drink Excise Tax. California Department of Public Health, Sacramento, CA, the County of Santa Clara Public Health Department, San Jose, CA, and the CHOICES Learning Collaborative Partnership at the Harvard T.H. Chan School of Public Health, Boston, MA; March 2021.

Key Takeaway



- ★ There are feasible strategies that can prevent obesity, are likely cost-effective and will improve health equity.

Thank You!

If you are interested in the CHOICES Community of Practice, visit:

www.choicesproject.org/comm-of-practice



Join us at one of our coffee chats!

Questions? Email us: choicesproject@hsph.harvard.edu