

The Bigger Picture: Social Determinants of Health

North Country Health Improvement Summit

June 7, 2016

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City of Nashua, Division of Public Health and Community Services



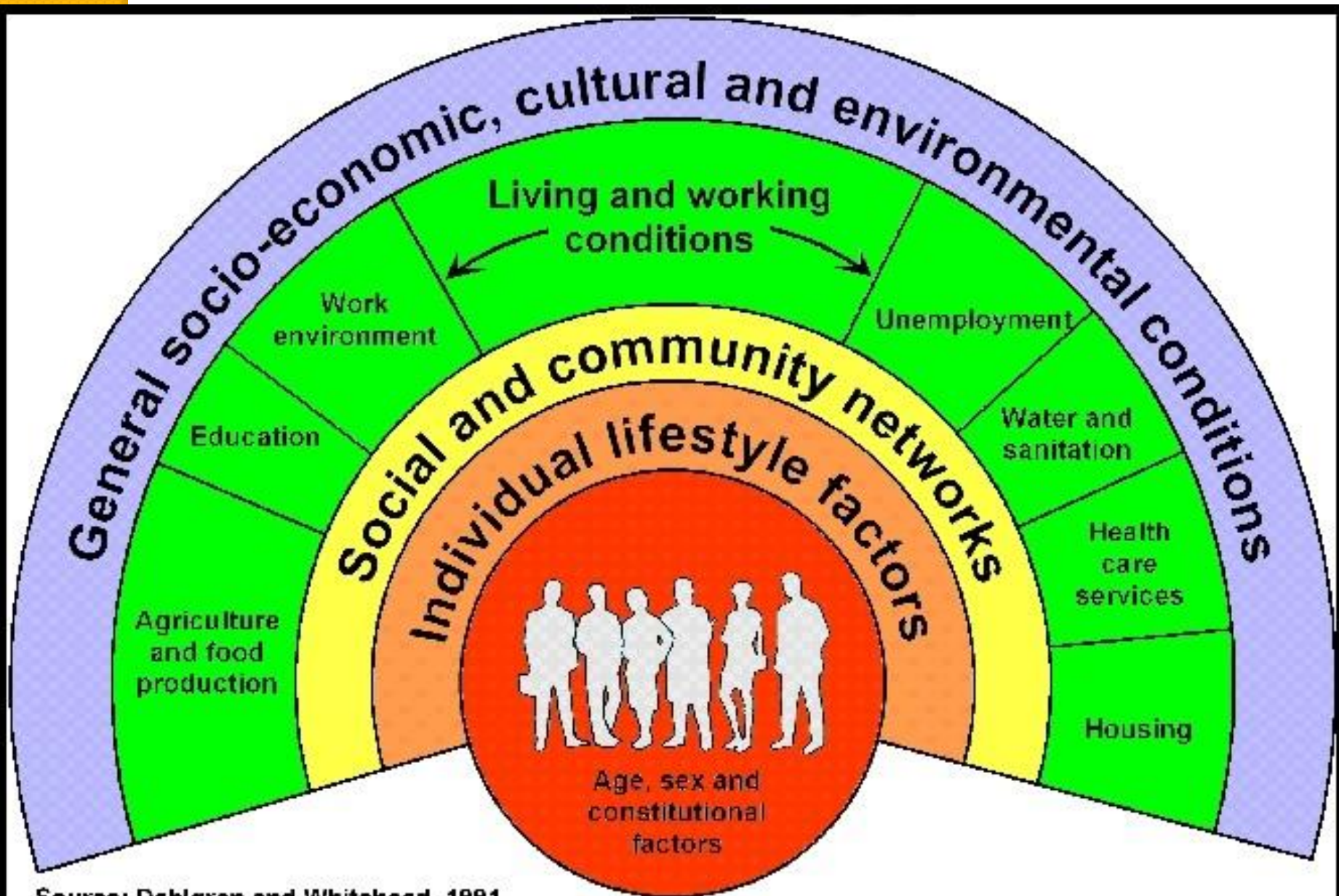
Social Determinants of Health

“Social determinants of health are conditions in which people are born, grow, live, work, and age.

These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.”

-World Health Organization





Source: Dahlgren and Whitehead, 1991

Social Determinants of Health

Genes, biology, and health behaviors together account for about **25%** of population health, social determinants of health represent the rest.

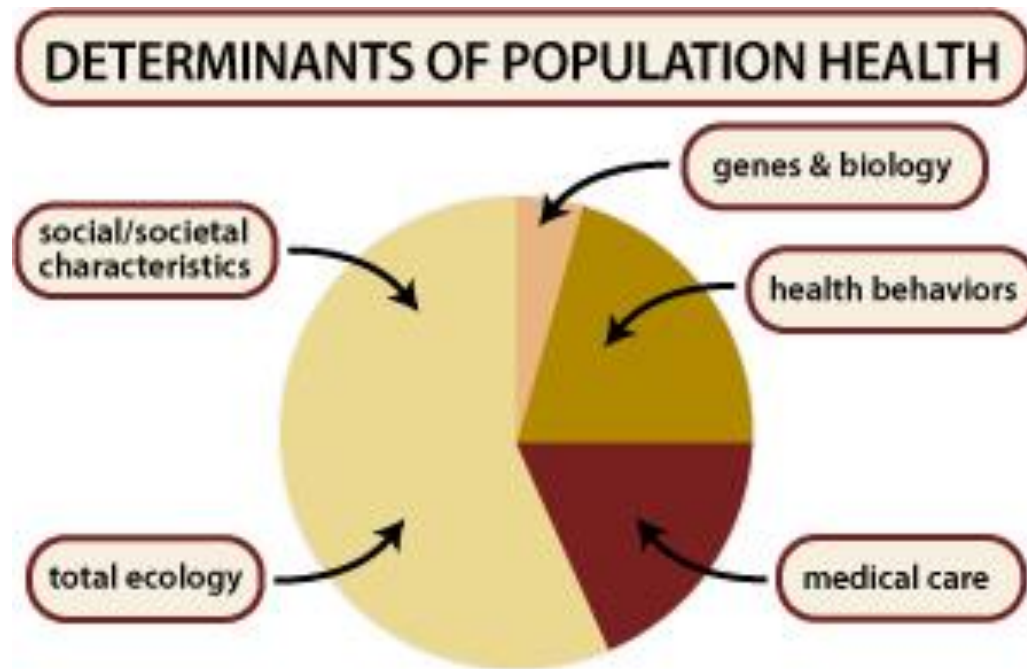


Figure 1.2: Growing Communities: Social Determinants, Behavior, and Health

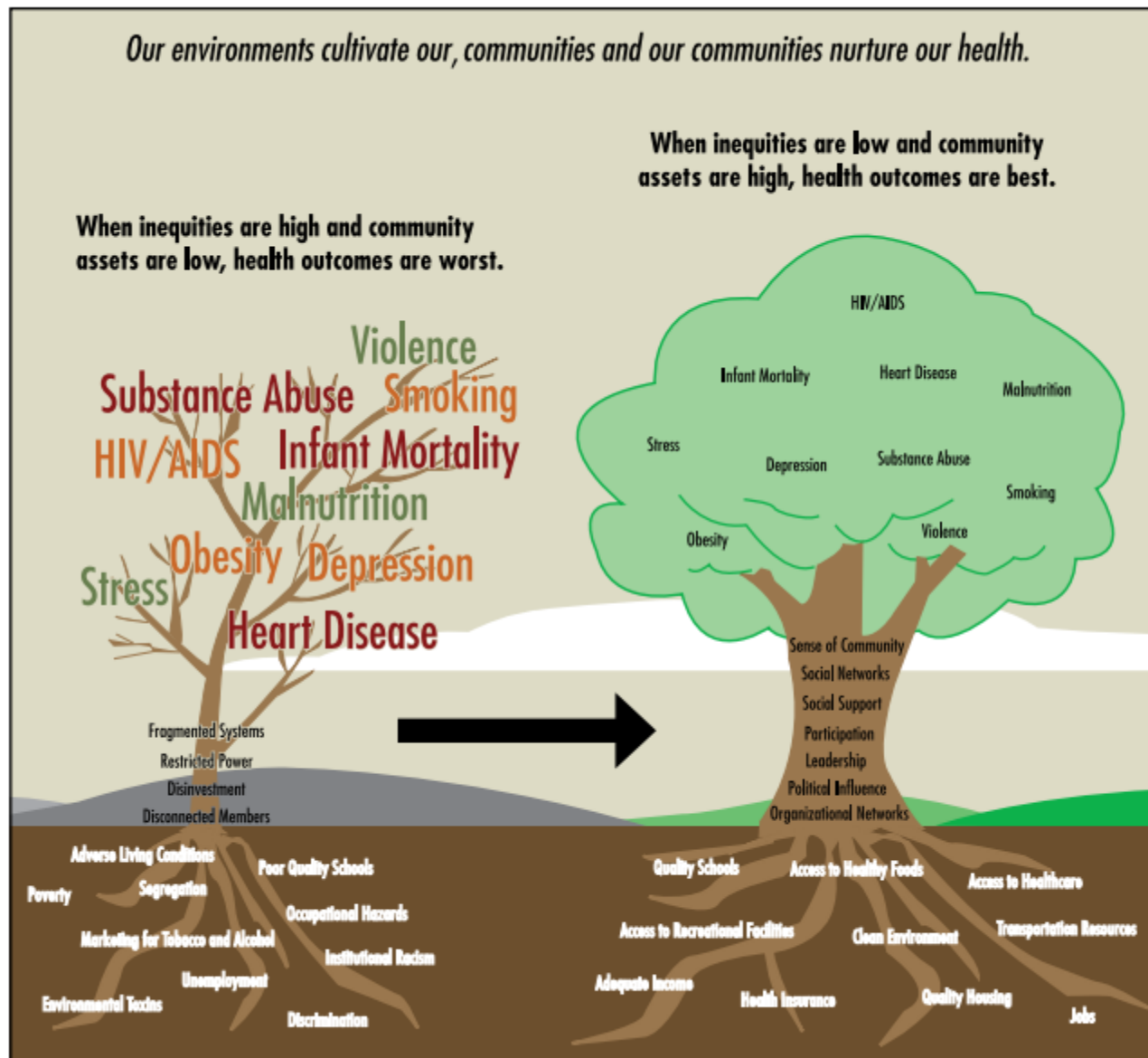


Figure adapted from Anderson et al, 2003; Marmoeal, 1999; and Wilkinson et al, 2003.³⁹⁻⁴¹

Life Expectancy

RWJF Commission
to Build a Healthier America

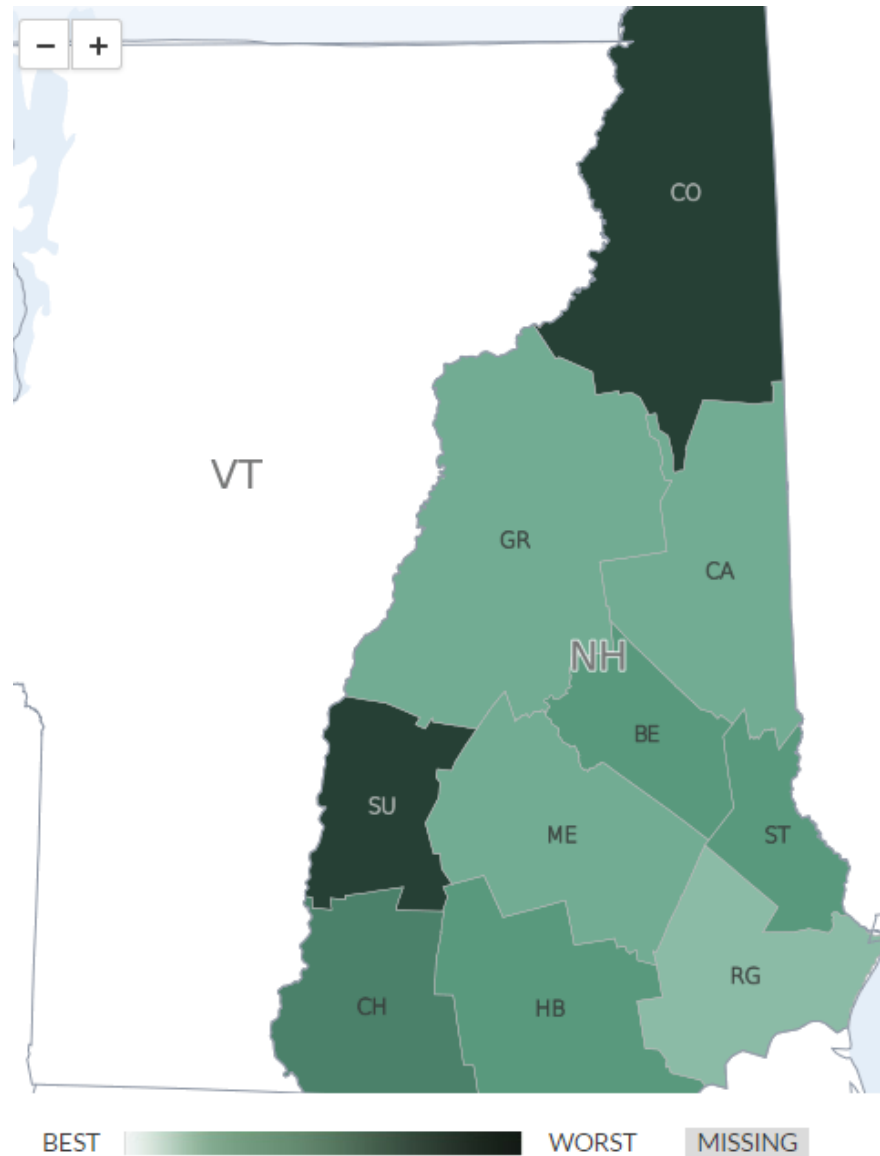
Robert Wood Johnson Foundation



<http://www.rwjf.org/en/library/infographics/new-orleans-map.html>

Premature Mortality

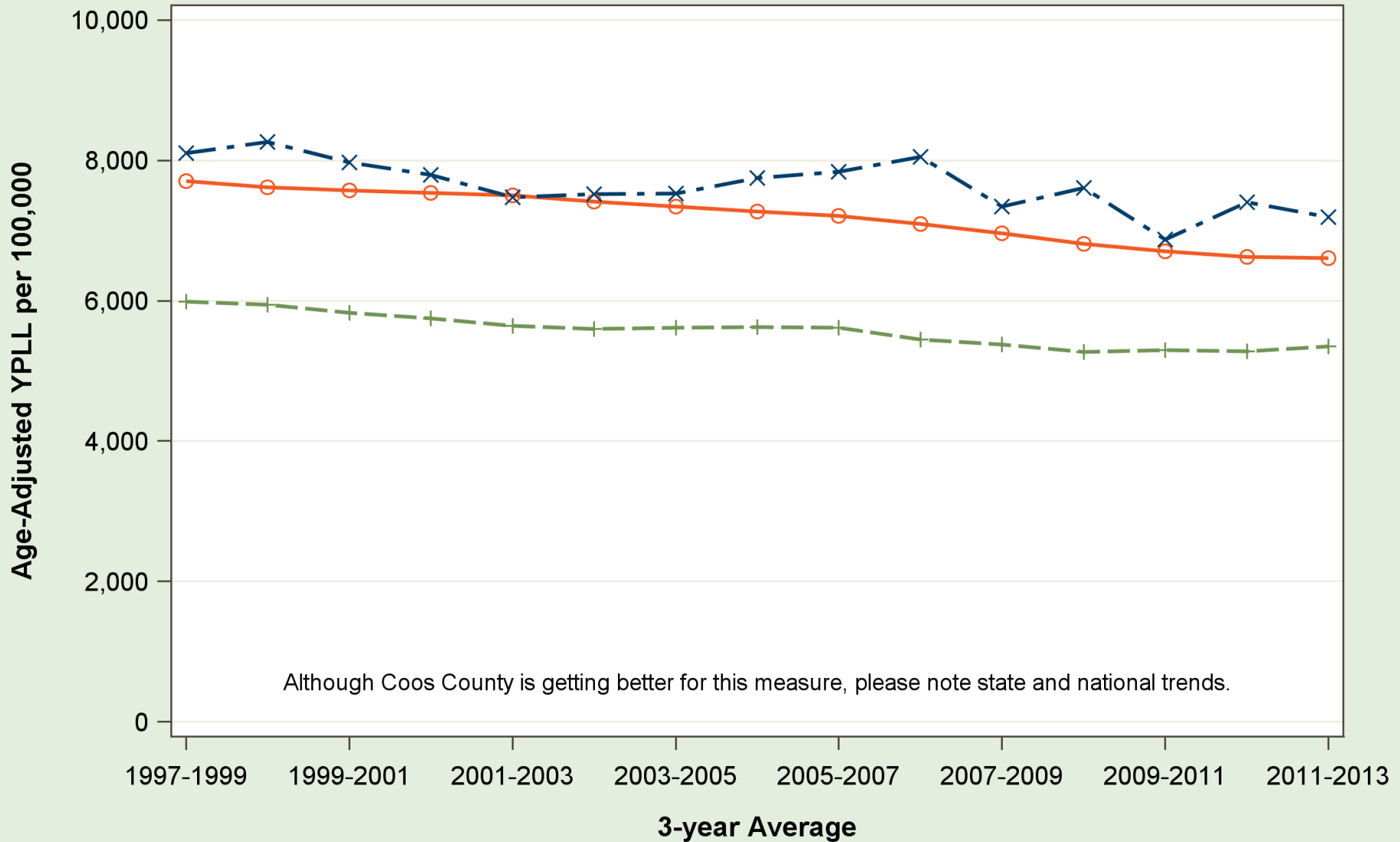
Years of potential life lost before age 75 per 100,000 population (age-adjusted)



Data: 2011-2013
<http://www.countyhealthrankings.org/app/new-hampshire/2016/measure/outcomes/1/data>

Premature death in Coos County, NH

Years of Potential Life Lost (YPLL): County, State and National Trends

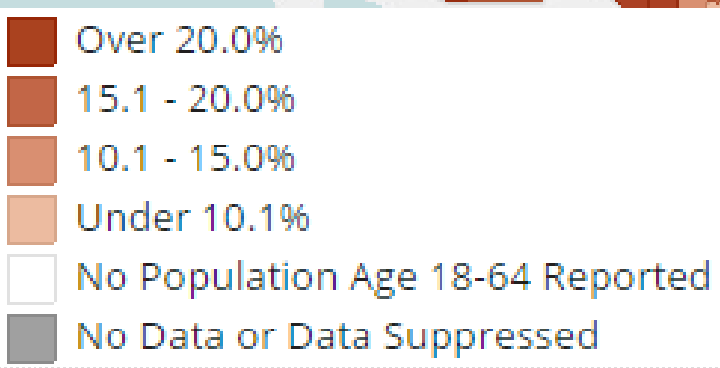
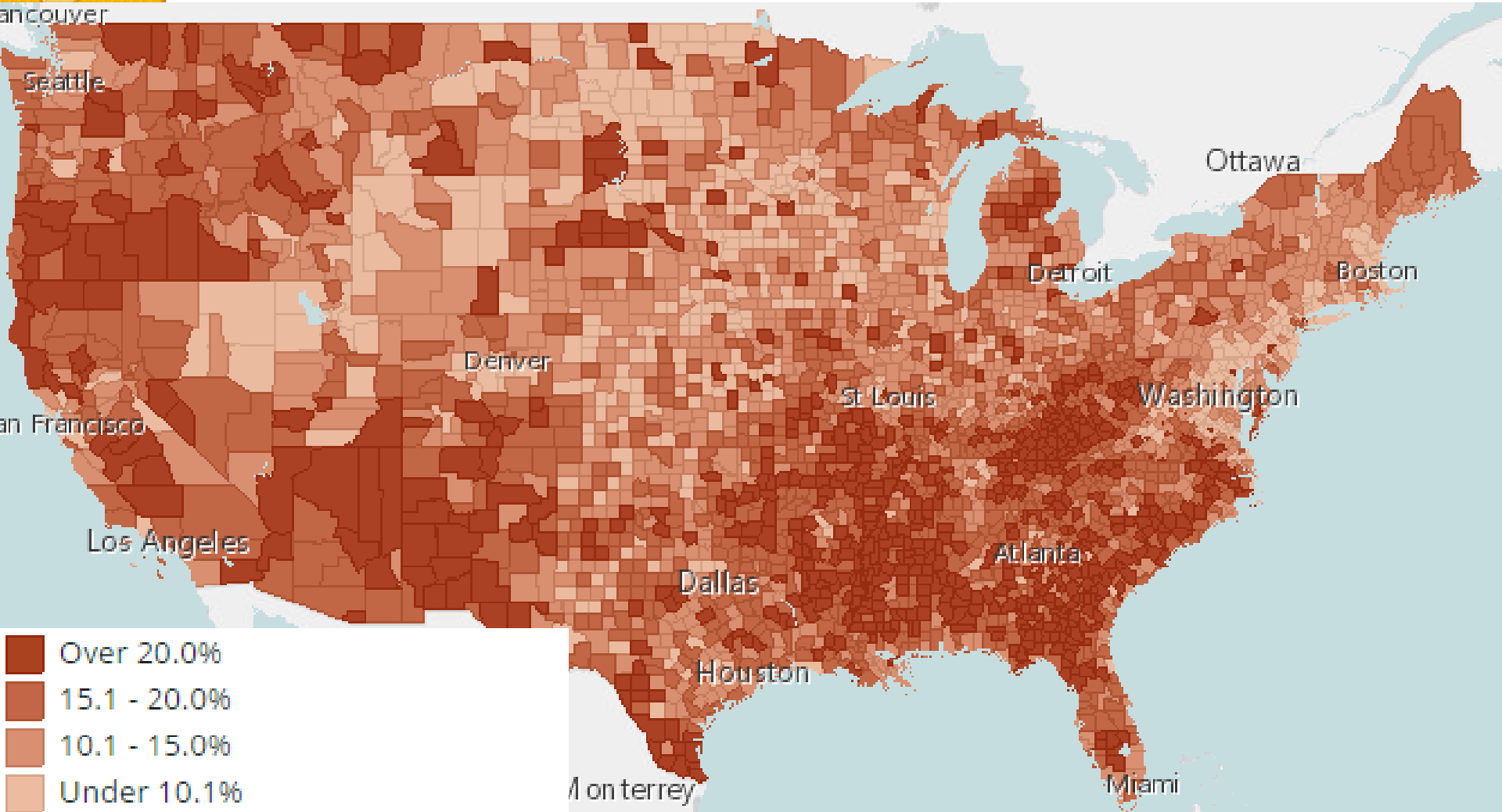


Although Coos County is getting better for this measure, please note state and national trends.

— x — Coos County — + — New Hampshire — o — United States

Please see Measuring Progress/Rankings Measures for more information on trends

% Below the Poverty Level



Community Commons, ACS 2010-2014

% Below Poverty Level

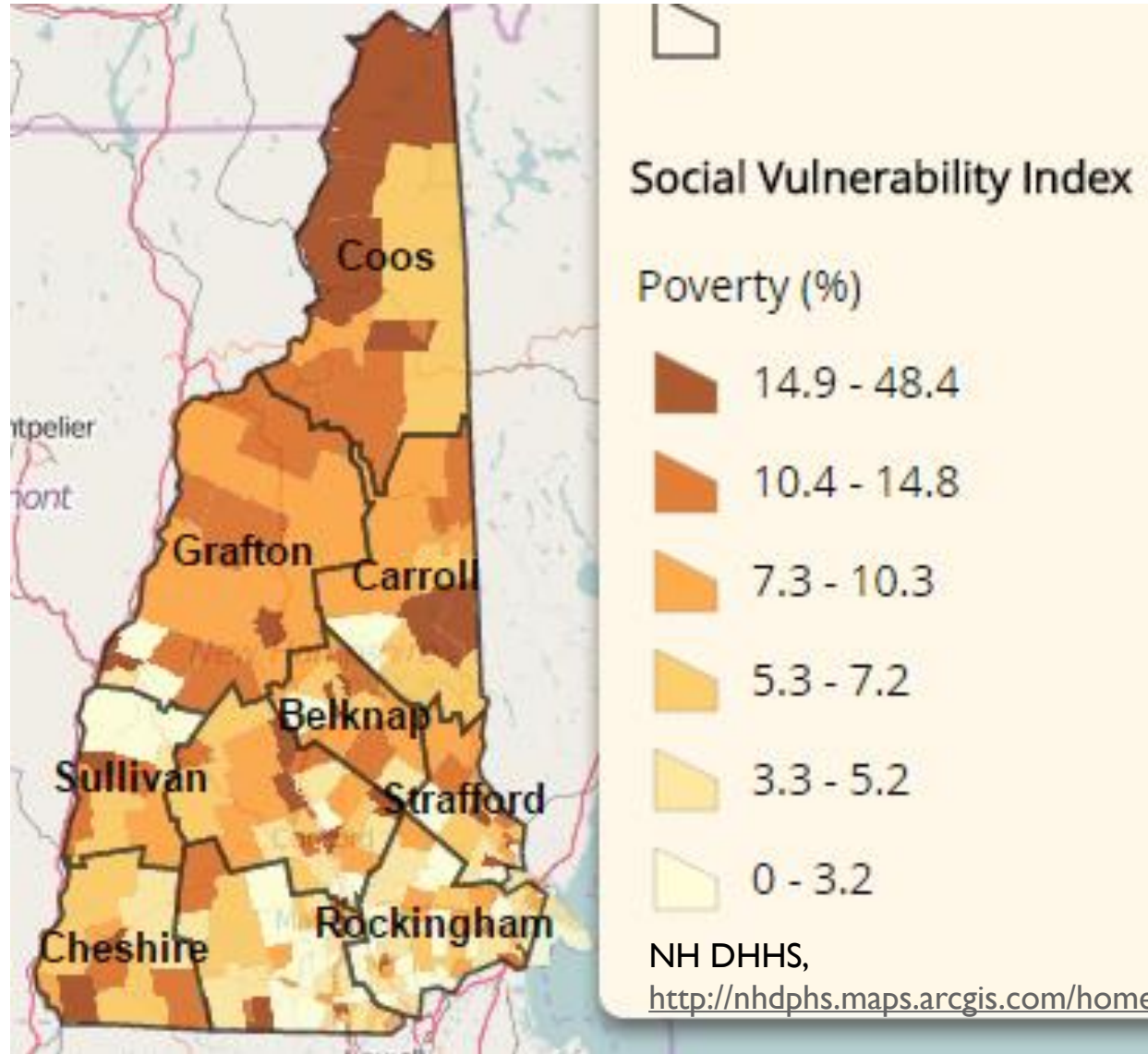
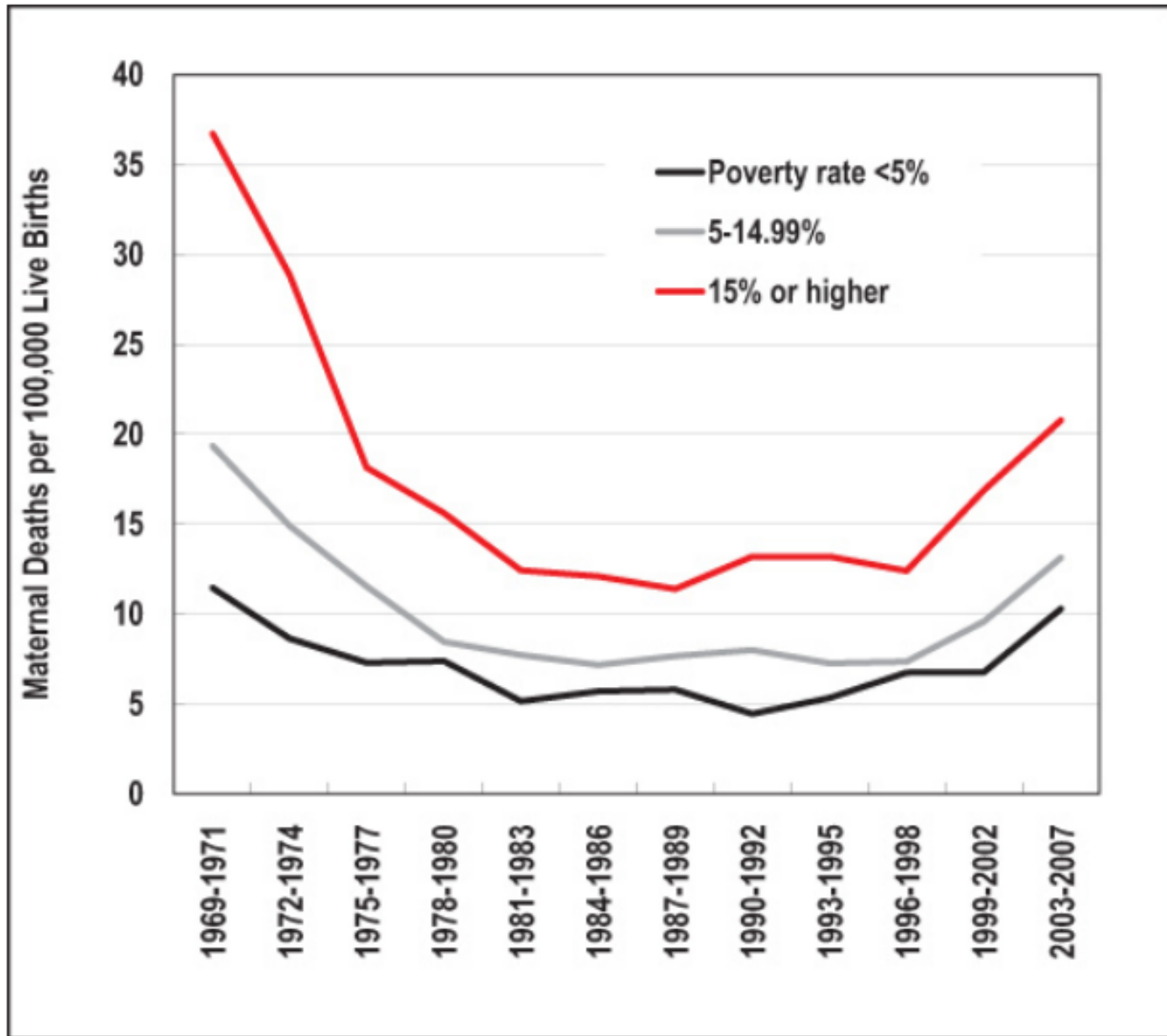
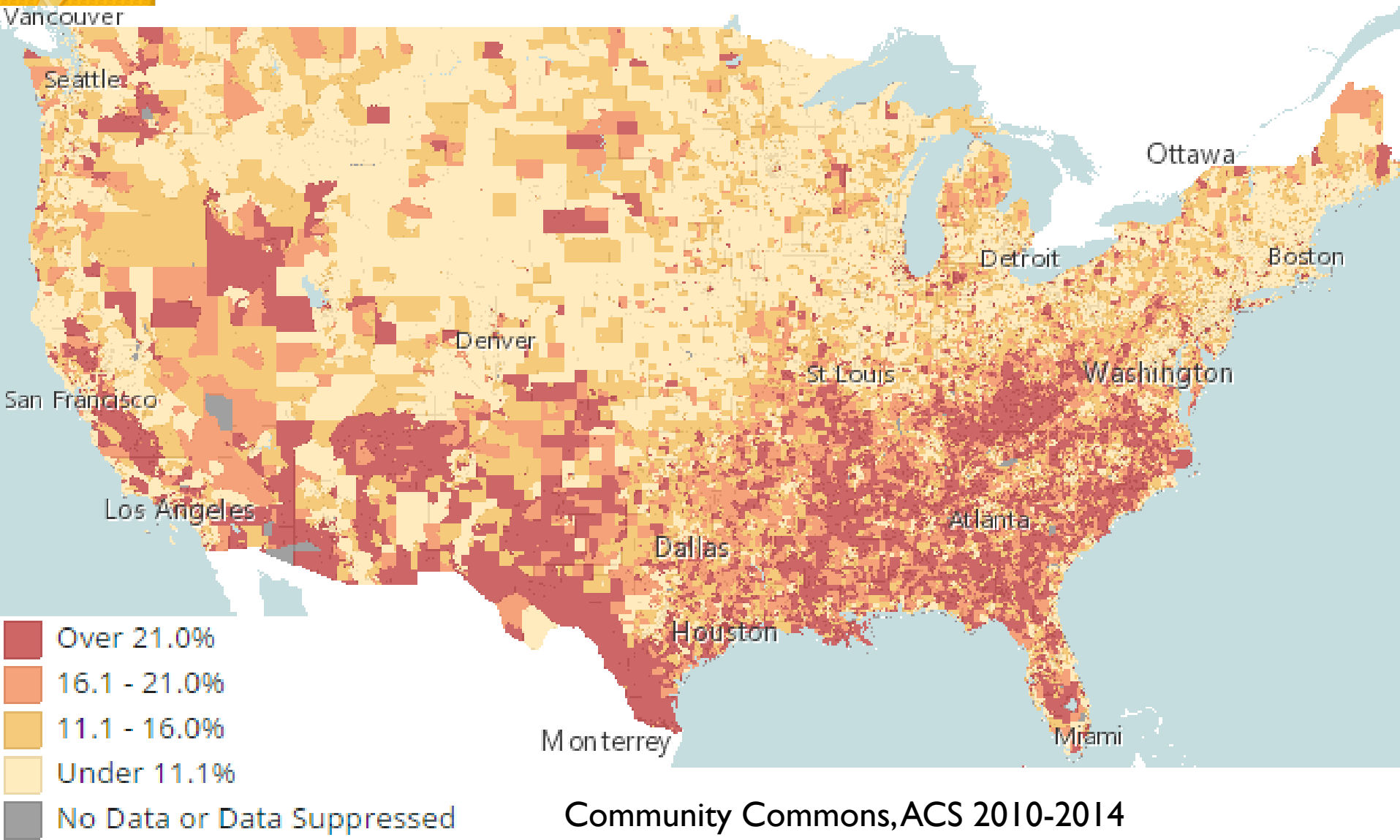


Figure 3: Maternal Mortality Rate by County-Level Family Poverty Rate, United States, 1969-2007

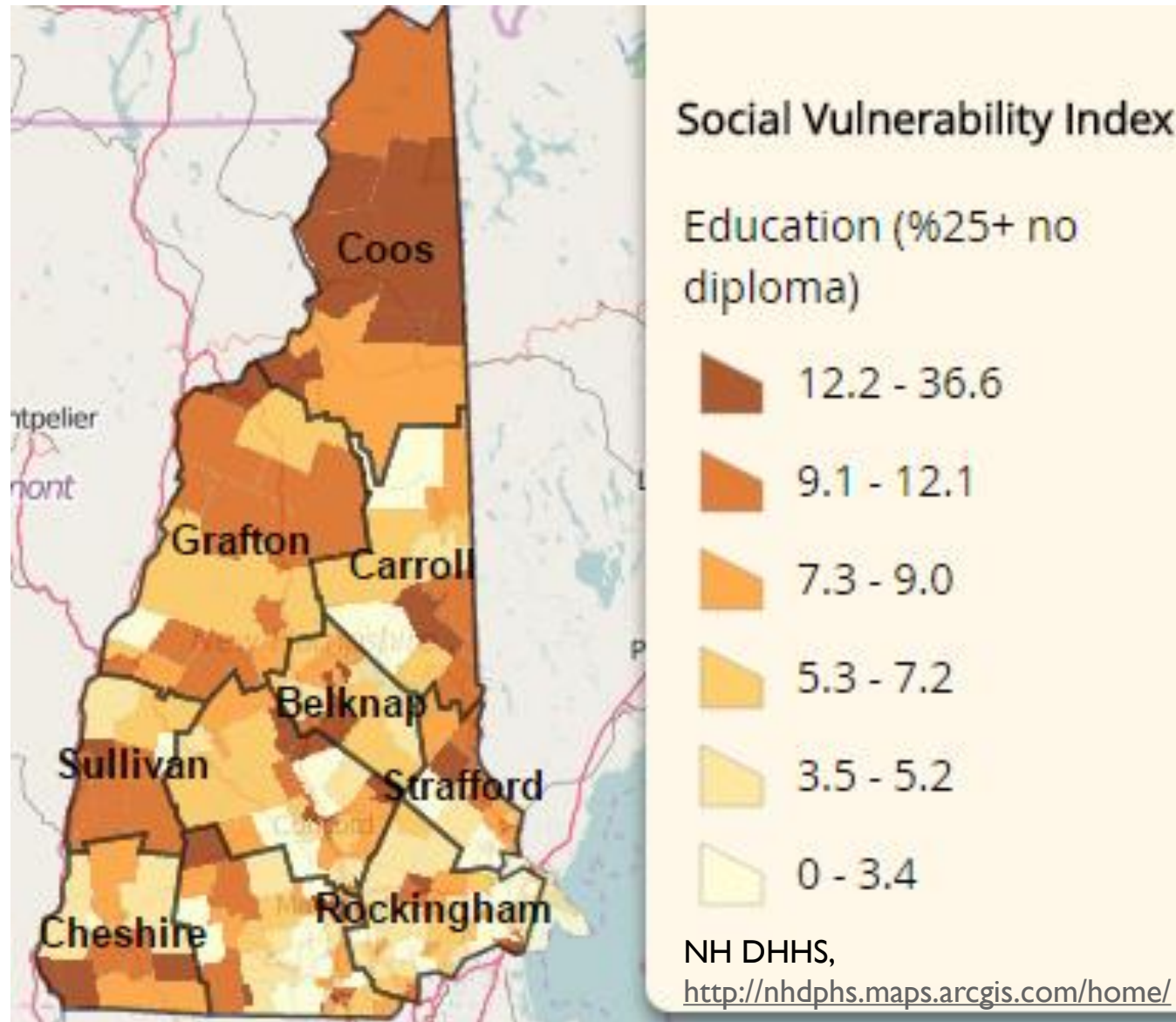


<http://www.hrsa.gov/our-stories/mchb75th/mchb75maternalmortality.pdf>

% No High School Diploma

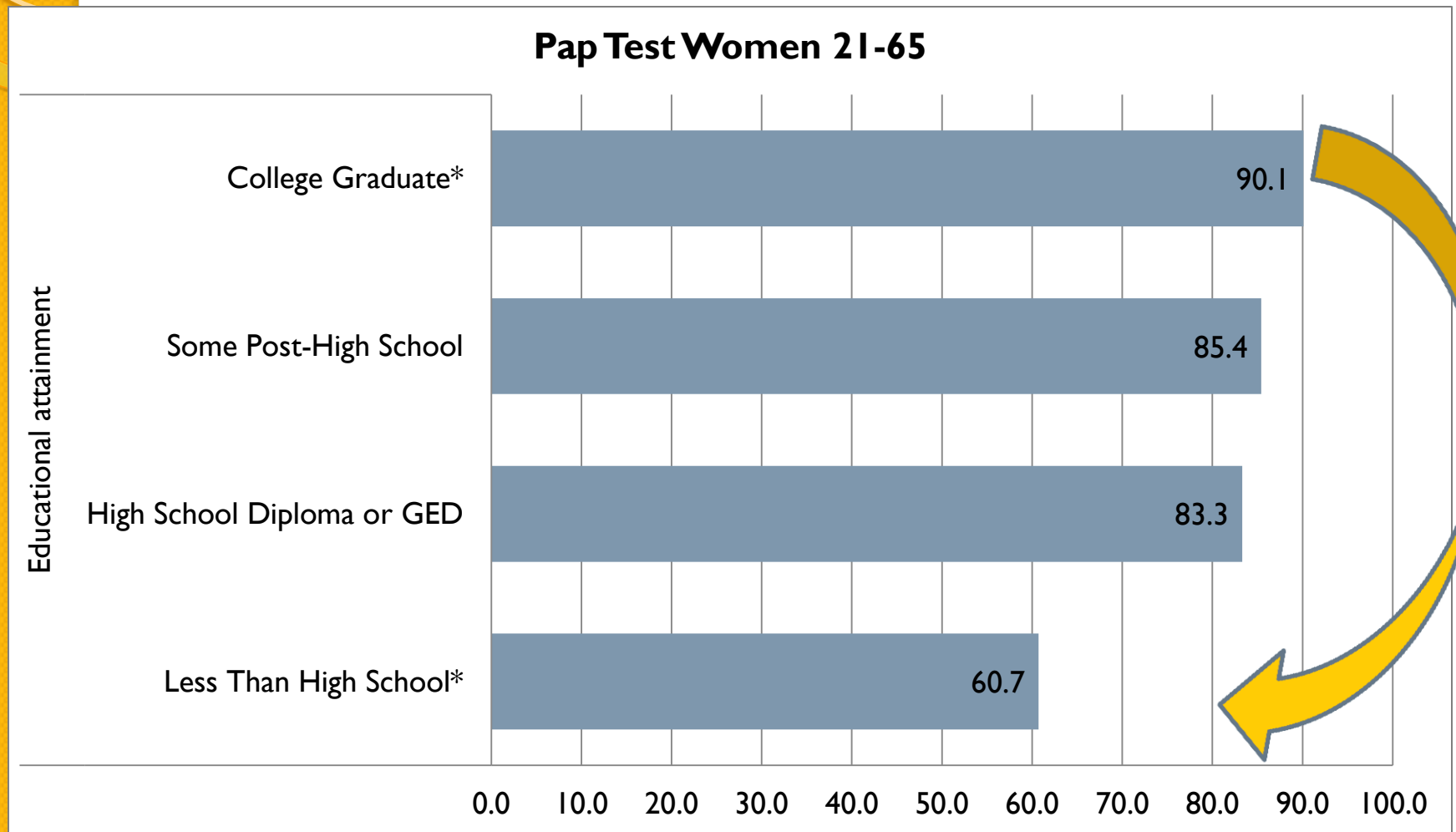


% Less than High School Diploma

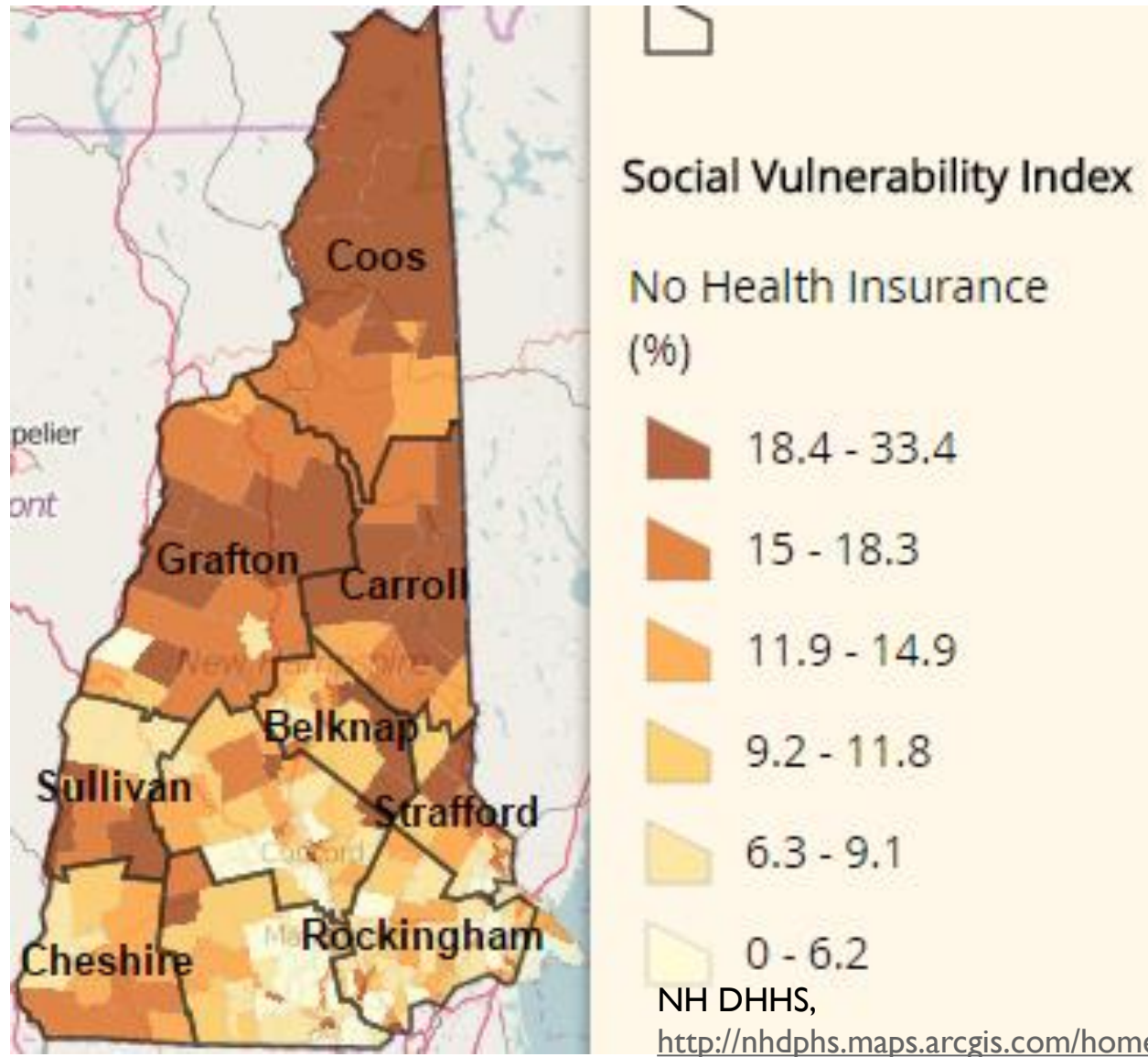


Pap Test by Education

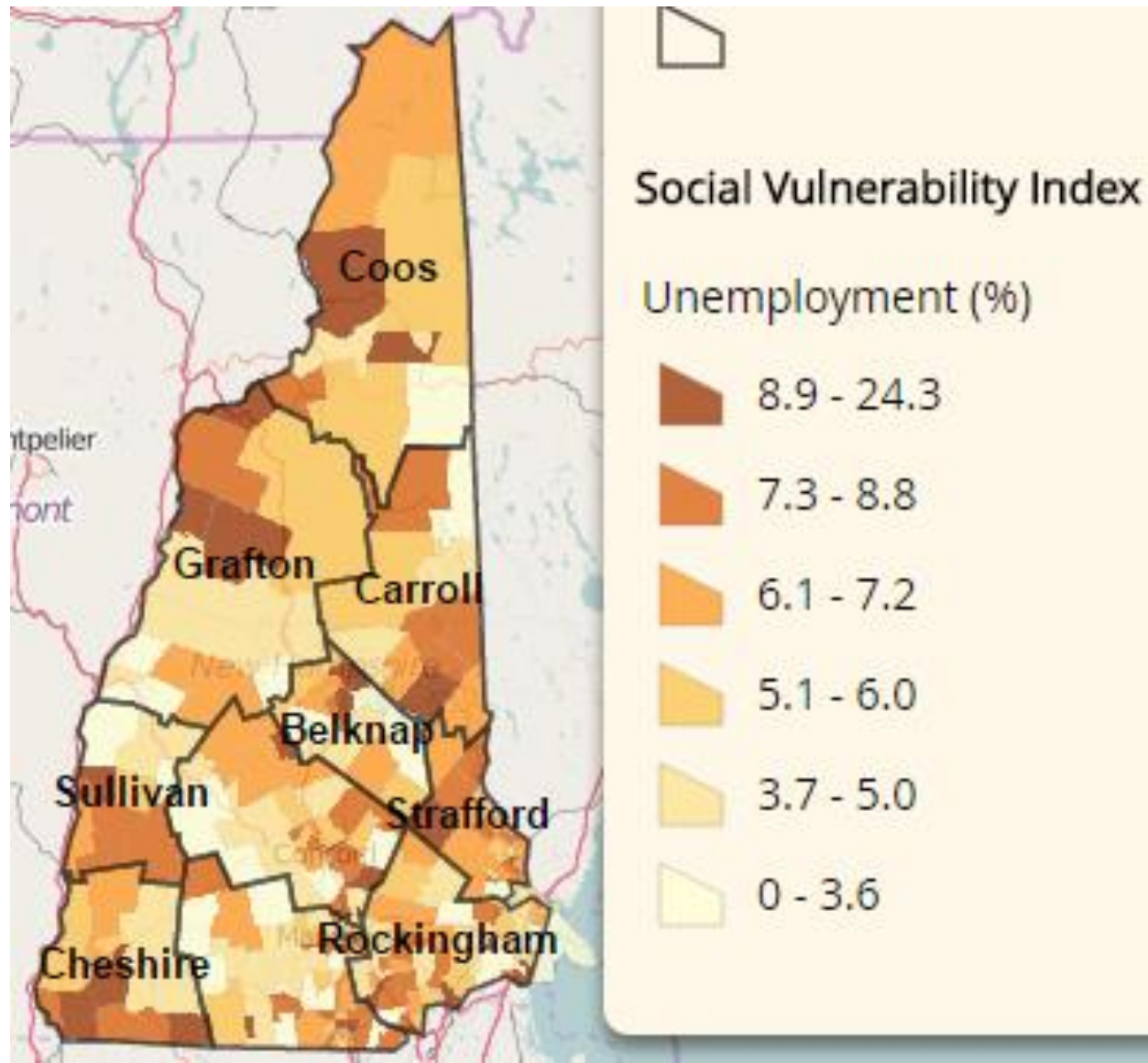
NH 2014 BRFSS



% Without Health Insurance



% Unemployed



2015-2017 NCPHR CHIP Priority Areas 1 & 5

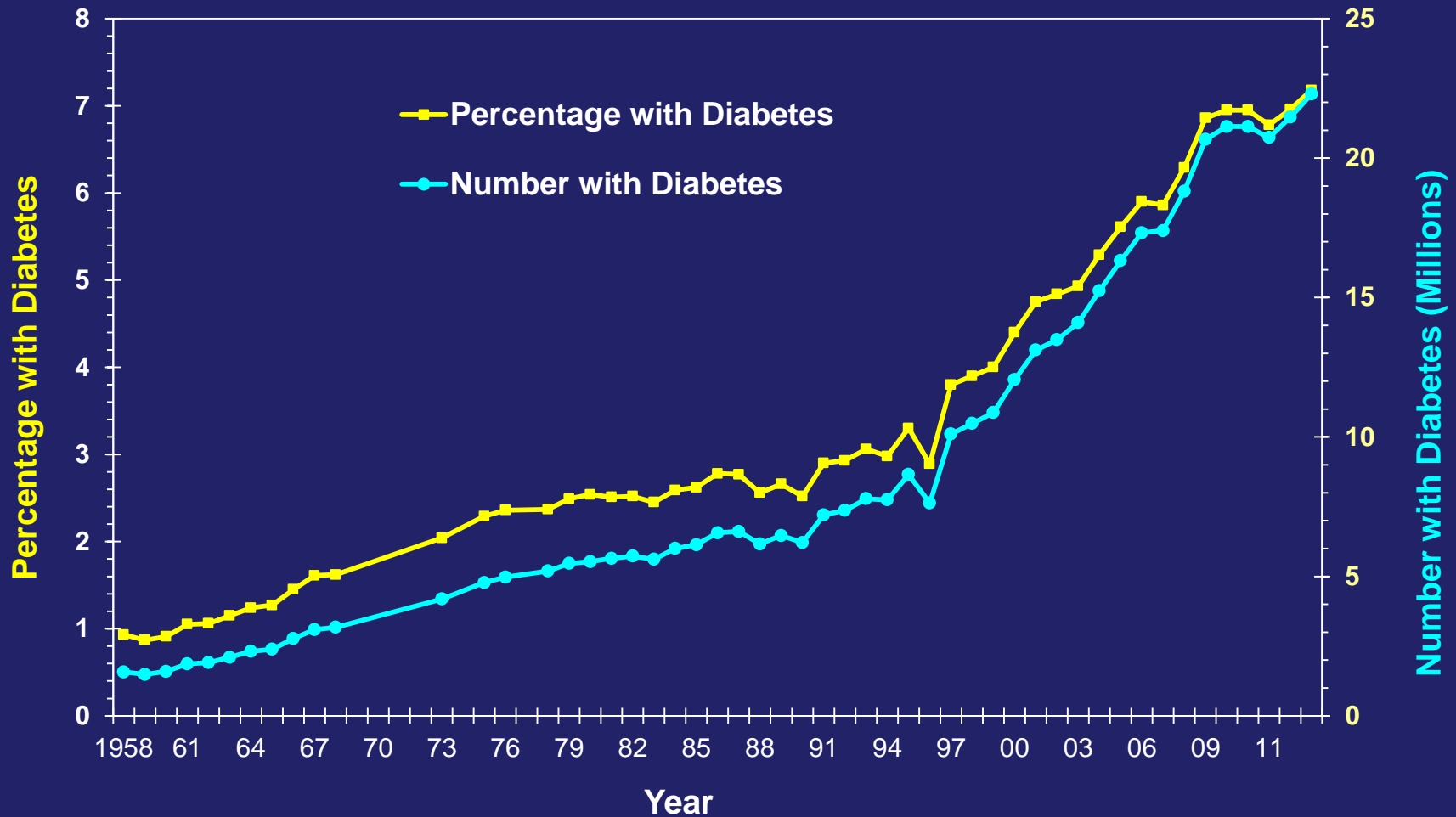
**DIABETES,
CARDIOVASCULAR
DISEASE, OBESITY AND
THE SDOH**

Three's a crowd

- Obesity is a risk factor for diabetes
- Obesity and diabetes are risk factors for heart disease
- 1 in 4 deaths from heart disease in US
- 1 in 11 people in US have diabetes



Number and Percentage of U.S. Population with Diagnosed Diabetes, 1958-2013



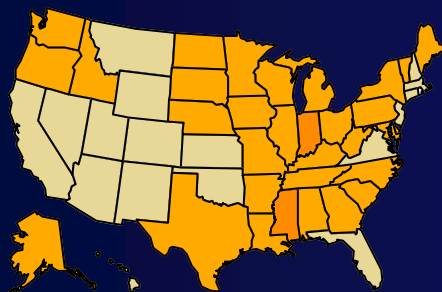
CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/statistics>



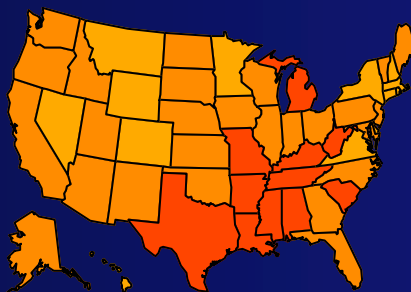
Age-adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

Obesity (BMI ≥ 30 kg/m²)

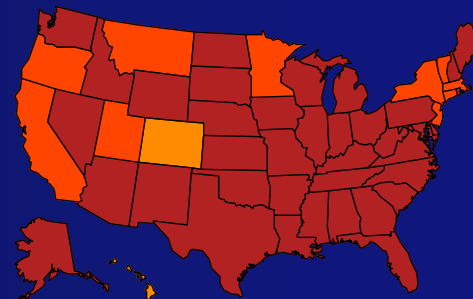
1994



2000

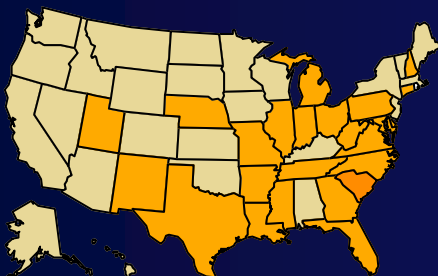


2013

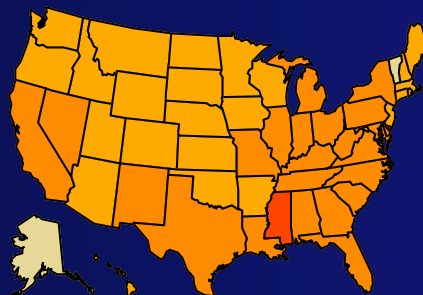


Diabetes

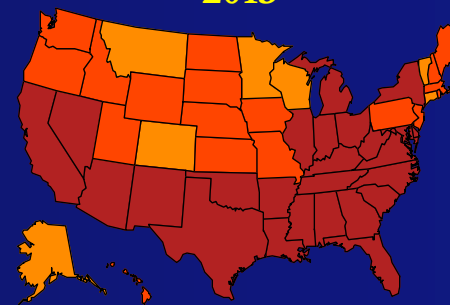
1994



2000



2013

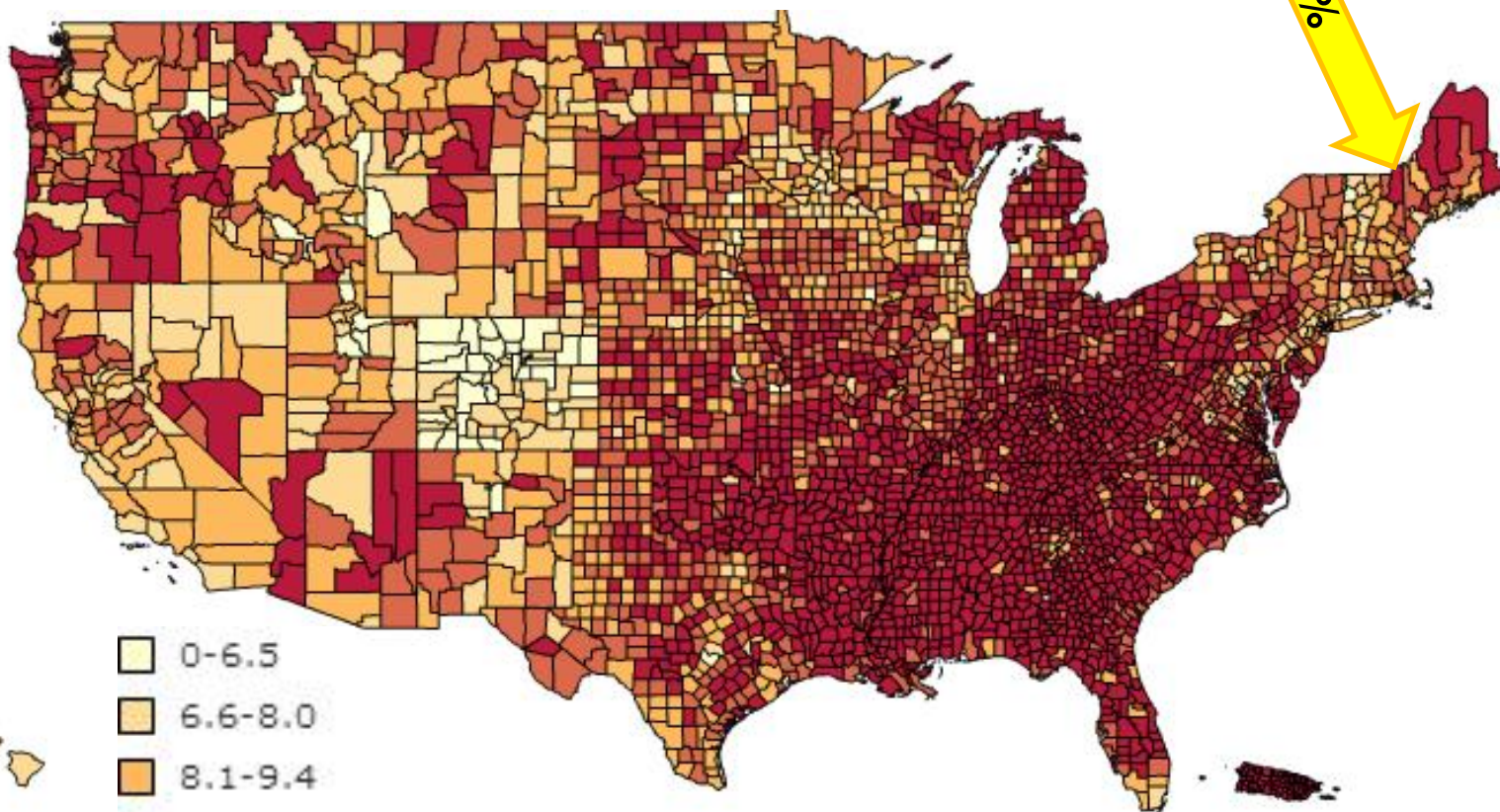


CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at

<http://www.cdc.gov/diabetes/statistics>



% Diagnosed Diabetes by County, 2013



- 0-6.5
- 6.6-8.0
- 8.1-9.4
- 9.5-11.1
- 11.2+
- No Data

12%

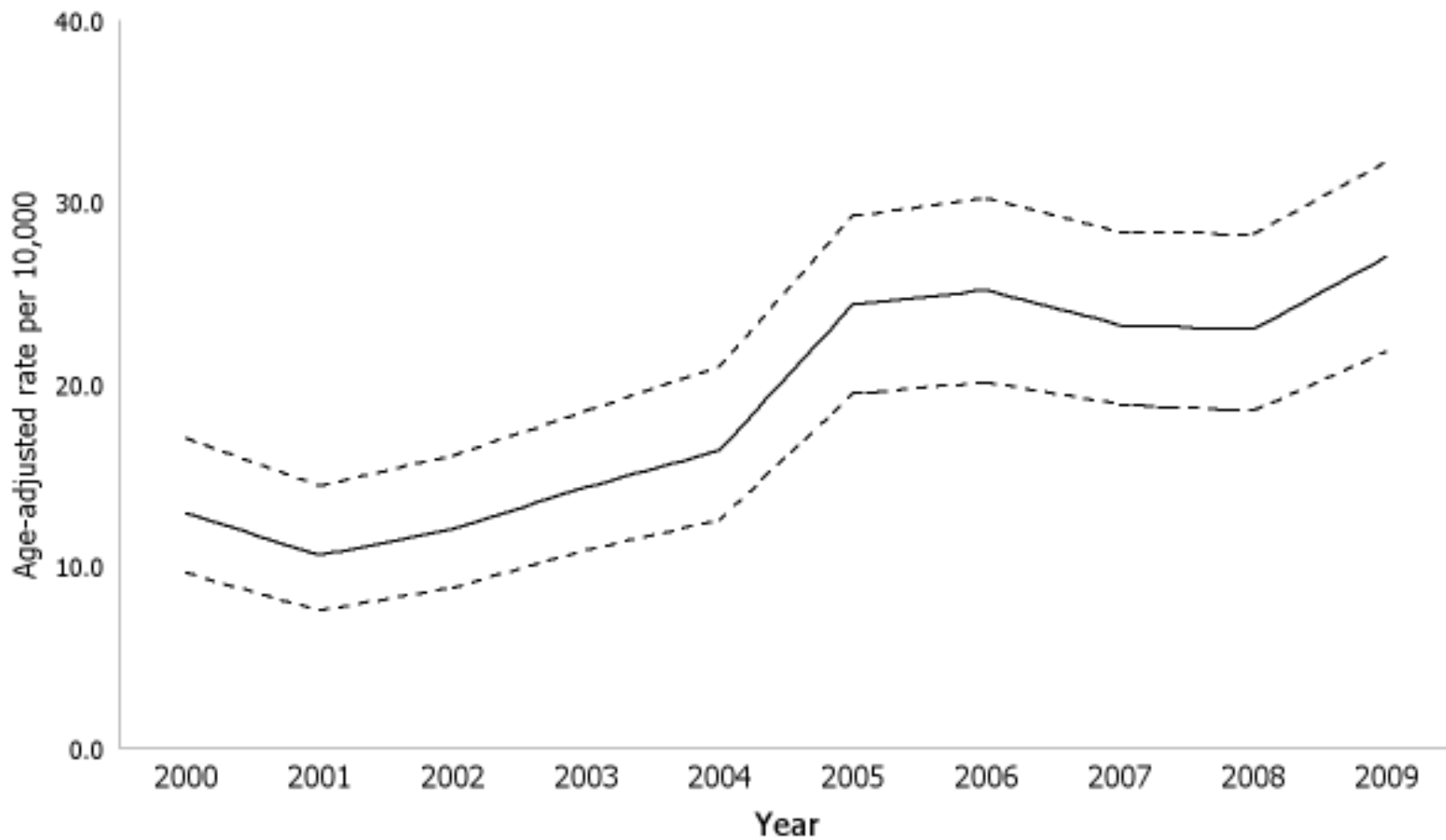
Diabetes hospital visits for Ambulatory Care Sensitive Conditions (emergency dept.)

Age-adjusted rate; Both genders; All ages; 2000-2009;

County; Coos

— Both genders

..... 95%CI

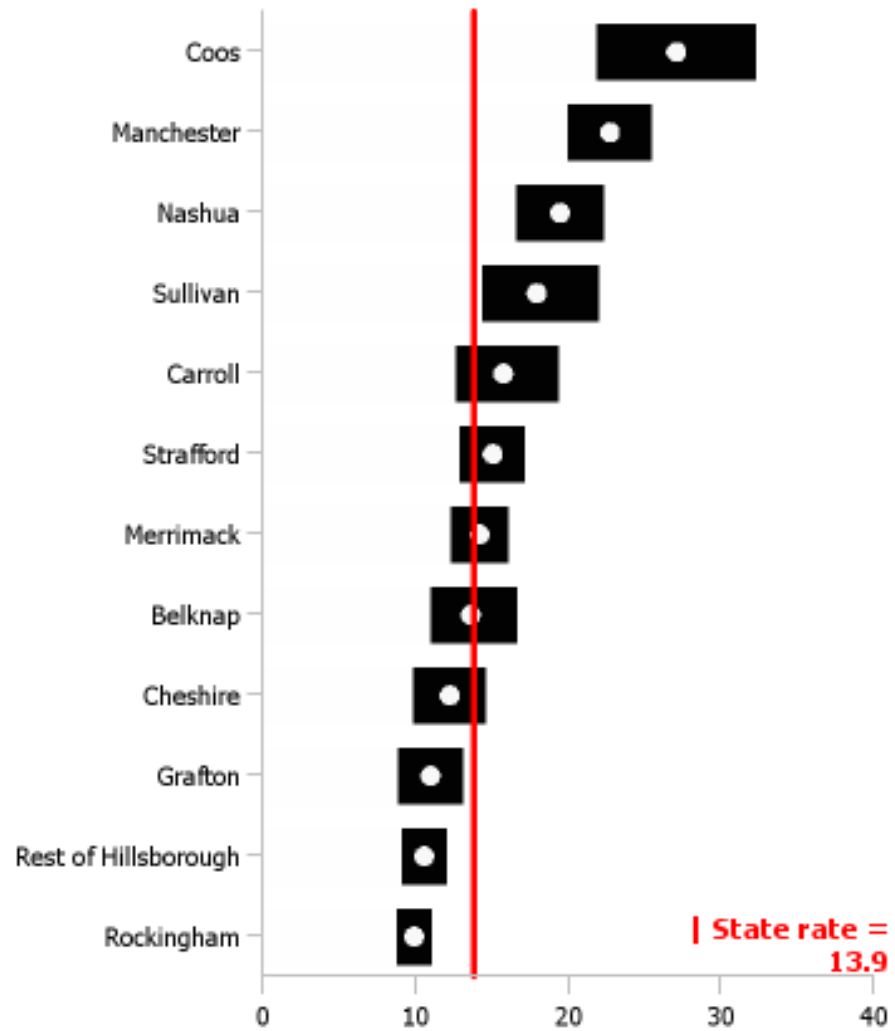
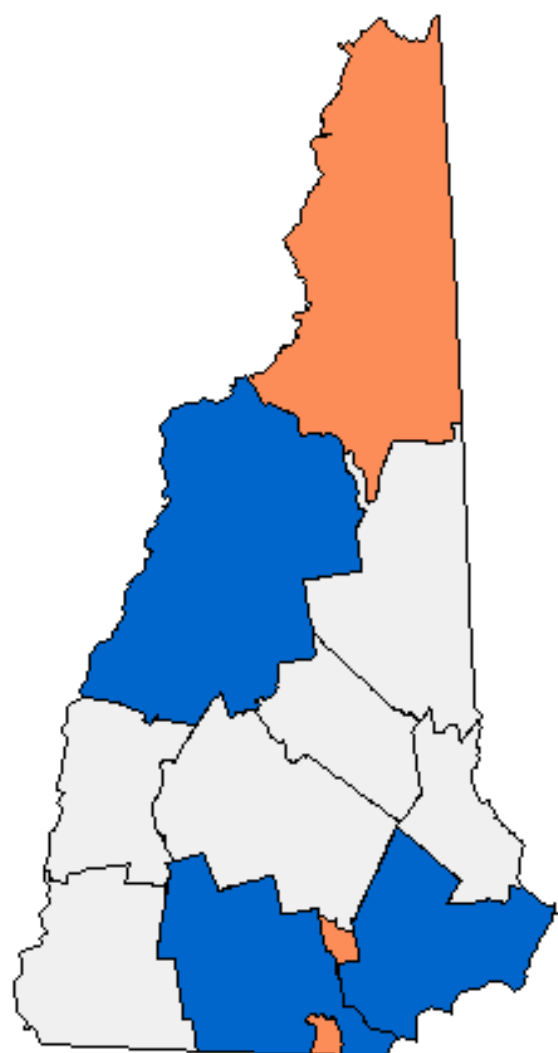


Source: wisdom.dhhs.nh.gov

Diabetes hospital visits for Ambulatory Care Sensitive Conditions (emergency dept.)

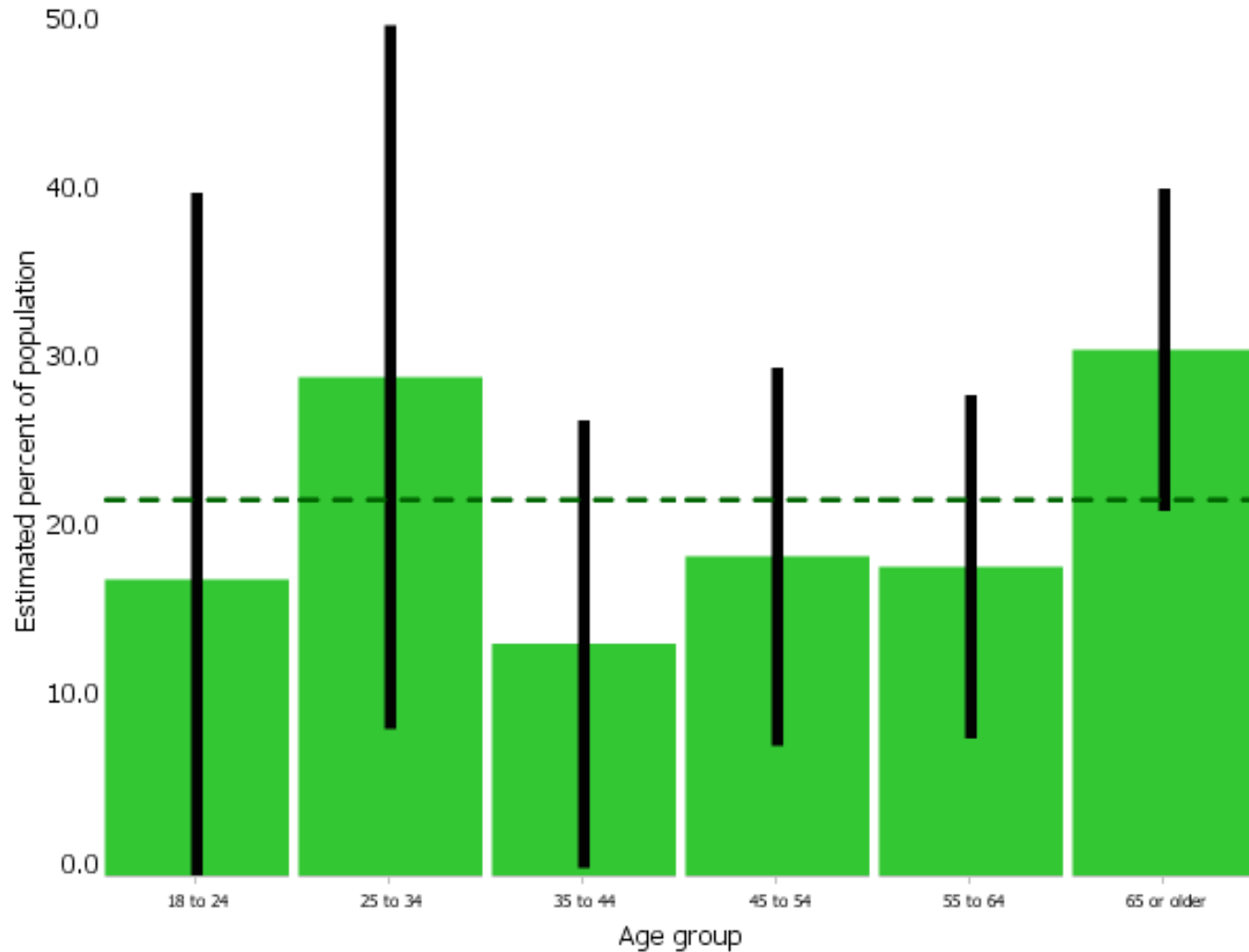
Age-adjusted rate; All Sexes; All ages; 2009

County with Manchester and Nashua



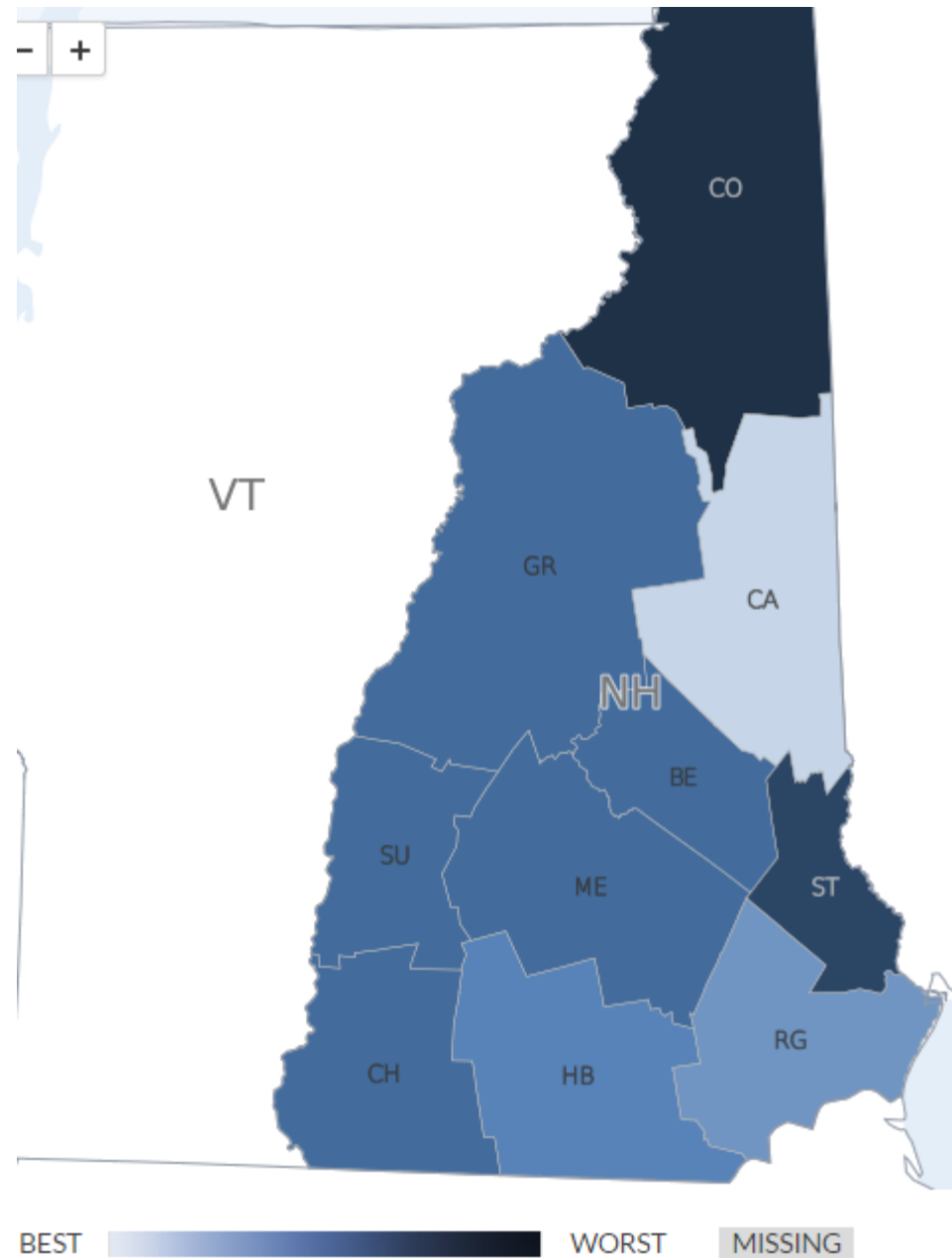
Significantly lower than rest of state	No difference than rest of state	Significantly higher than rest of state	1-4 events
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Percent of adults who eat fruits and vegetables 5 or more times per day; 2009, Coos County



Source: wisdom.dhhs.nh.gov

Food Environment Index

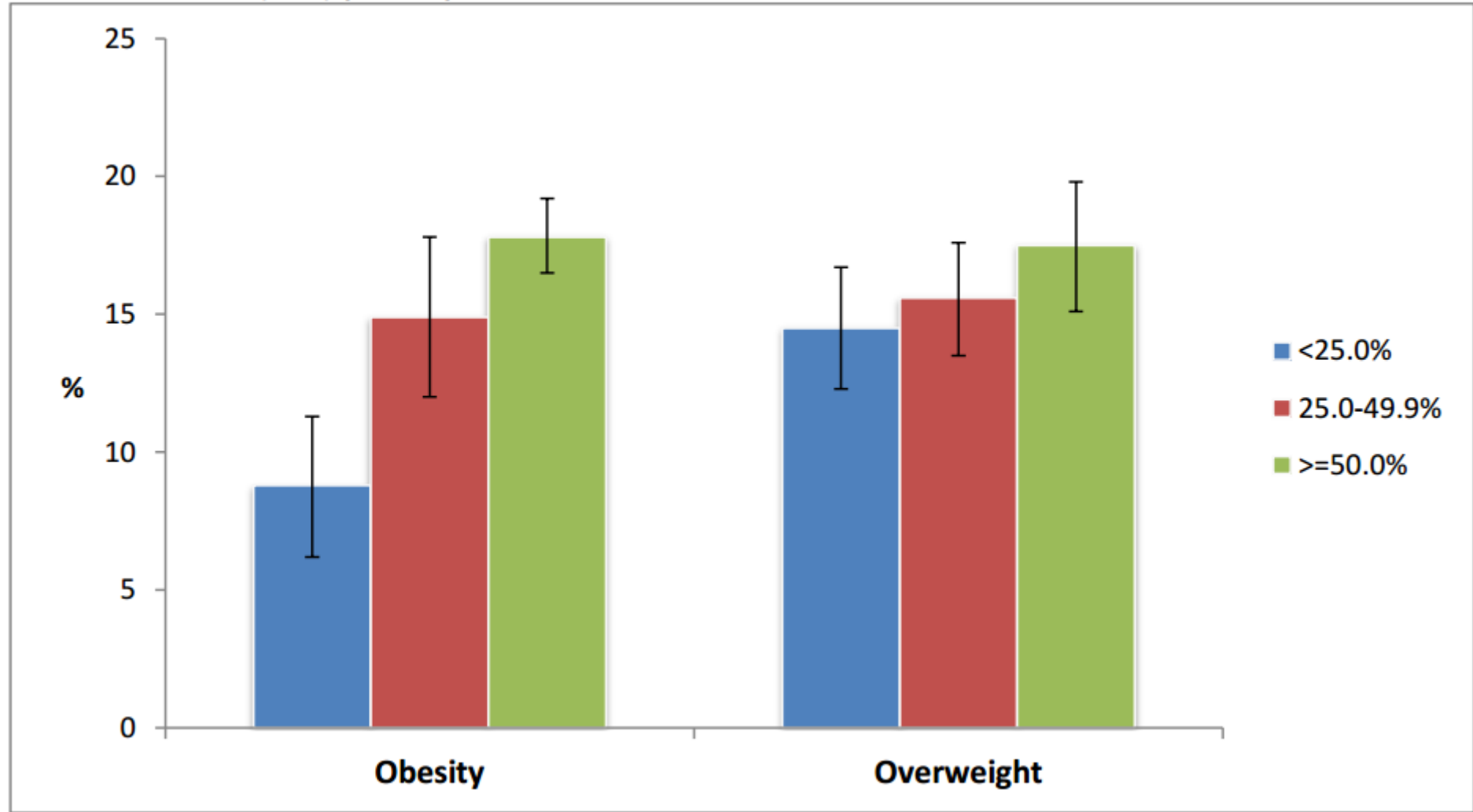


<http://www.countyhealthrankings.org/app/new-hampshire/2016/measure/factors/133/map>

% Obese, Overweight, Third Graders

Variable	Coos	Nashua	NH
Obese	21.6	17.4	12.6 (10.6-14.6)
Overweight	15.6	17.5	15.4 (14.0-16.8)
Obese & Overweight	37.2	35.0	28.0 (25.4-30.4)

Figure 7 - Statewide prevalence* and 95% CI of overweight and obesity, stratified by Free and Reduced Lunch (FRL) participation at the school level



*Only 7-10 year olds included in analyses

2015-2017 NCPHR CHIP Priority Areas 2



**ORAL HEALTH AND
THE SDOH**

Oral Health & SDOH

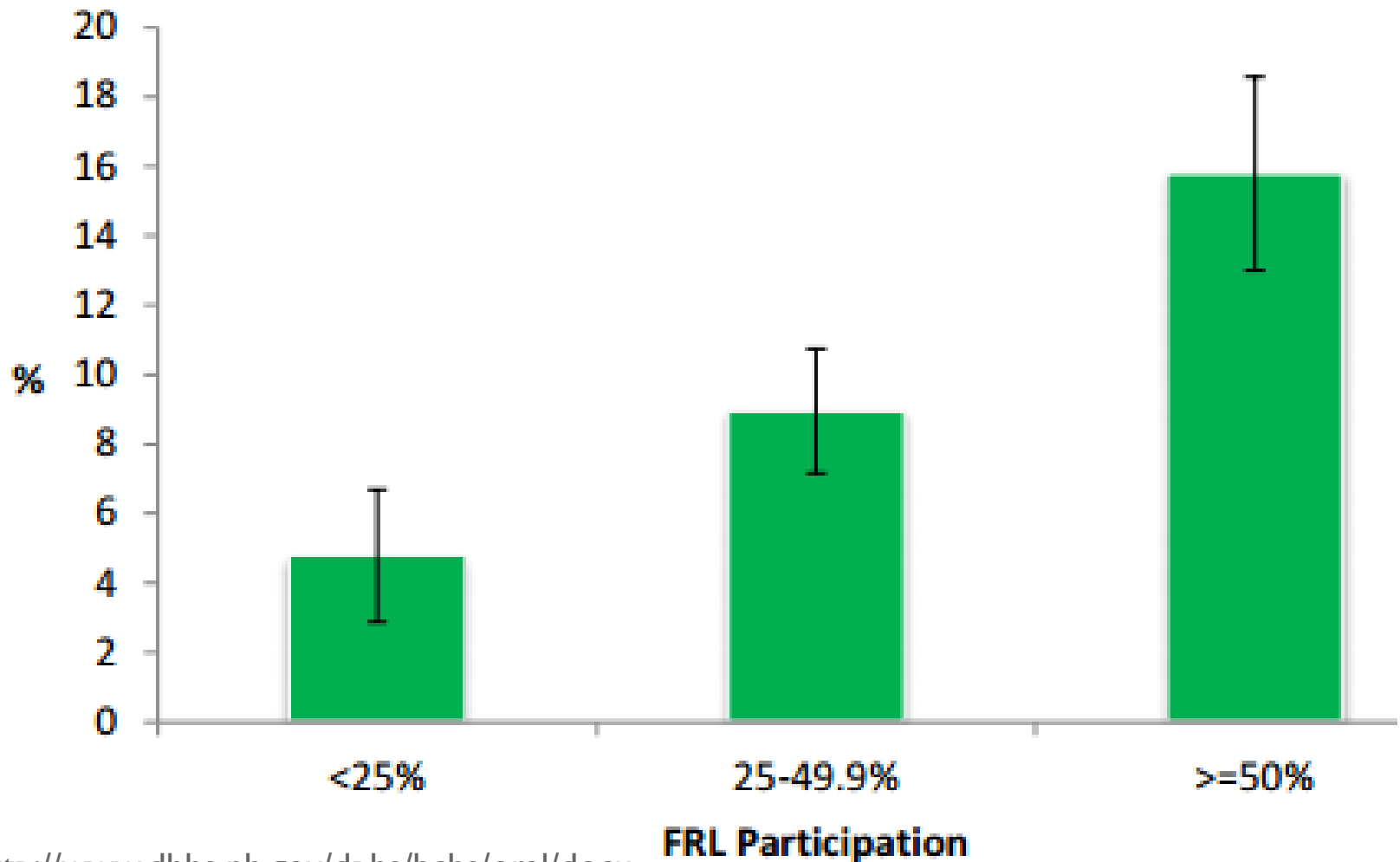
- Tooth decay causes pain, loss of teeth, problem with chewing and speaking
- Affects an individuals ability to get employment
- Children being bullied
- Access to dentists and dental coverage

Oral Health, Third Graders, Prevalence

Variable	Coos	Nashua	NH
Decay experience	56.0	48.4	35.4 (31.0-39.7)
Untreated decay	14.0	17.3	8.2 (6.7-9.7)
Treated Decay	50.6	40.0	31.8 (27.6-35.9)
Dental sealants	53.5	69.5	60.9 (57.4-64.4)
Need treatment	12.5	17.6	8.1 (6.6-9.7)
Need urgent treatment	0.5	2.7	1.0 (0.3-1.7)

<http://www.dhhs.nh.gov/dp/hs/bchs/oral/documents/t hirdgradesurvey2014.pdf>

Untreated decay by FRL Participation, Third Grade Survey, NHDHHS





BEHAVIORAL HEALTH

Risk Factors, Protective Factors

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Self-Control
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-drug Use Policies
Poverty	Community	Strong Neighborhood Attachment

Adverse Childhood Experiences

ACES can have lasting effects on....



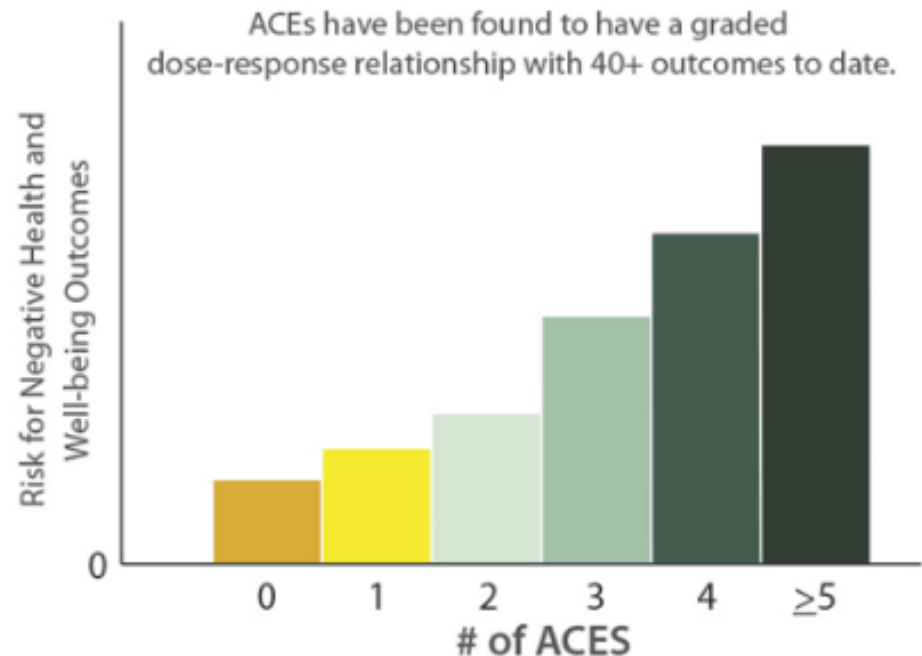
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)



Life Potential (graduation rates, academic achievement, lost time from work)

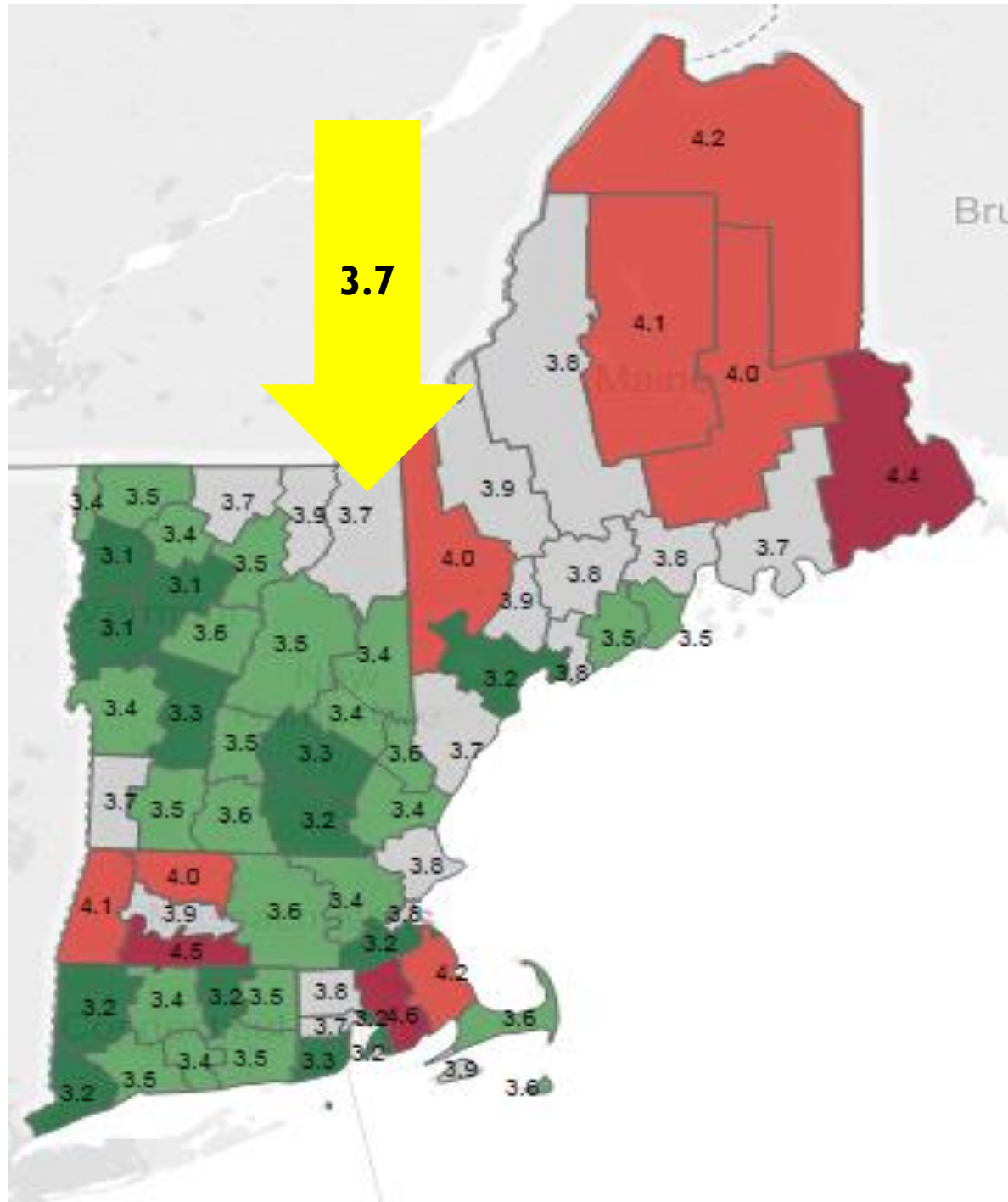


*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

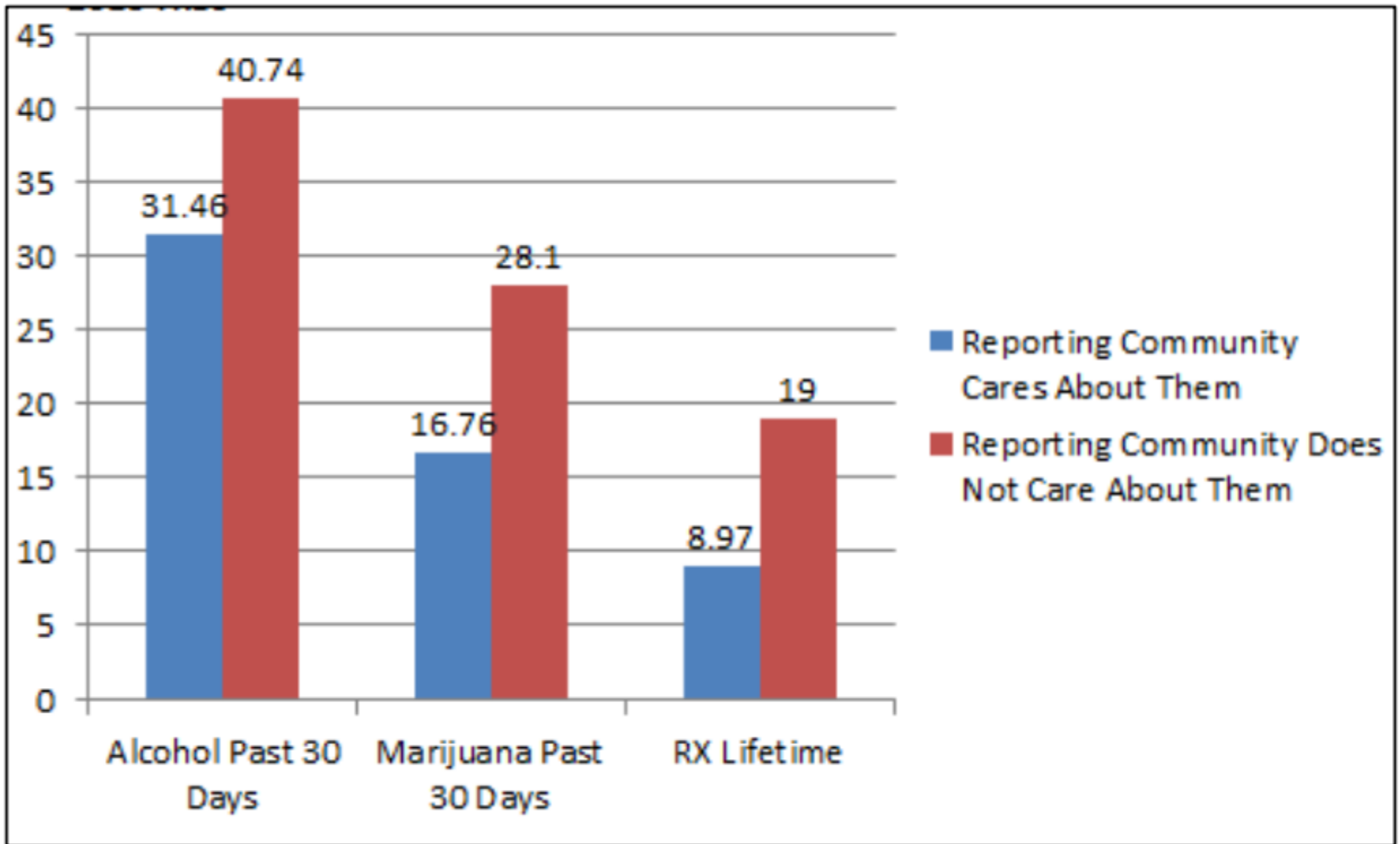
Mentally Unhealthy Days

North Country Health Consortium,

2016 County Health Rankings



Substance Use Among those Who Feel Community Cares About Them



Source: 2013 YRBS

http://www.nchcnh.org/pdf/NCHC_Community_Health_Improvement.pdf



DATA SOURCES

DATA IN ACTION

NH Data Sources: Demo

- **NH Health WISDOM:**

https://wisdom.dhhs.nh.gov/wisdom/#Topic_0A46F3243F264DBABDB40F4B8BABE47I_Anon

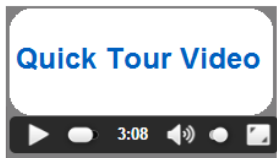
- **NH Social Vulnerability Index:**

<http://nhdphs.maps.arcgis.com/home/>



WISDOM

Connecting NH to Health Data



[Getting Started](#)

[Data Source](#)

[Tutorials](#)

[Updates](#)

[Technical Support](#)

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State Health Improvement Priorities



Asthma



Cancer prevention



Healthy mothers and babies



Heart disease and stroke



Injury prevention



Misuse of alcohol and drugs



Obesity/Diabetes



Tobacco

State Initiatives



NH Environmental Public Health Tracking Program



Occupational Health Surveillance Program

Social Vulnerability Index (SVI)

NH Department of Health & Human Services

- Useful tool for emergency preparedness and public-health planning
- Helps identify demographic groups and geographic locations with higher vulnerability to environmental and public health hazards

New Hampshire Public Health Data

Featured Content



**2010 -2014 Socioeconomic
Vulnerability**



**2010-2014 Demographic
Vulnerability Measures**



**2010-2014 Housing &
Transportation Vulnerability**



**2010-2014 Social
Vulnerability Overview**

Putting the SDOH into Action in the Community



TOOLS FOR PUTTING SOCIAL

DETERMINANTS OF HEALTH INTO ACTION

CDC: <http://www.cdc.gov/socialdeterminants/tools/index.htm>

Community Toolbox:

<http://ctb.ku.edu/en/table-of-contents/analyze/analyze-community-problems-and-solutions/social-determinants-of-health/main>

County Health Rankings:

<http://www.countyhealthrankings.org/roadmaps/action-center>

Neighborhood A

- Parks and green space
- 12% of students eligible for Free/Reduced Lunch
- Little violence
- Median household income is \$110,000
- 4% are unemployed
- 2% below the poverty level

Neighborhood B

- Little green space, sidewalks in disrepair
- 81% of students eligible for Free/Reduced Lunch
- More violence
- Median household income is \$30,000
- 1 out of 10 are unemployed and 1/3 are below the poverty level

A Tale of Two Nashua Neighborhoods

Impacting SDOH in Nashua





Ways to Wellness



Planting the seeds to a healthier future!



An initiative of the
NORTH COUNTRY
HEALTH CONSORTIUM

Be Active Stress Less Get Connected Community Resources For Providers North Country Highlights All

 Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

SEARCH



CDCA-Z INDEX ▾


Division of Community Health (DCH): Making Healthy Living Easier

[CDC](#) > [DCHHome](#) > [Resources](#)

A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease



Introduction

[A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease](#)  [PDF-7.3MB] provides lessons learned and innovative ideas on how to maximize the effects of policy, systems and environmental improvement strategies—all with the goal of reducing health disparities and advancing health equity.

Incorporating Health Equity into Foundational Skills of Public Health

Maximizing Healthy Food and Beverage Strategies to Advance Health Equity

Continuing to move forward

Where are we now? Where do we want to go?

What partners do we need to engage in order to address the major social determinants of health impacting our community (e.g., housing, transportation, education, urban planning, business)?

What are some creative ways to capture and highlight the lived experience of health inequities in our community?

What barriers to community engagement should we consider?

How can we integrate the SDOH into our community efforts?

Thank you!

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- aconley@sjnh.org
- 603-548-0992

*Try to be a rainbow in someone's cloud.
-Maya Angelou*

SDOH Resources

- **WHO:**

http://www.who.int/social_determinants/en/

- **Healthy People 2020:**

<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

- **A New Way to Talk About the SDOH:**

<http://www.rwjf.org/content/dam/farm/reports/reports/2010/rwjf63023>

- **CDC**

<http://www.cdc.gov/socialdeterminants/>

http://www.cdc.gov/dhdsp/docs/data_set_directory.pdf

Additional Resources

- **Community Commons**

<http://www.communitycommons.org/>

- **American Factfinder**

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>