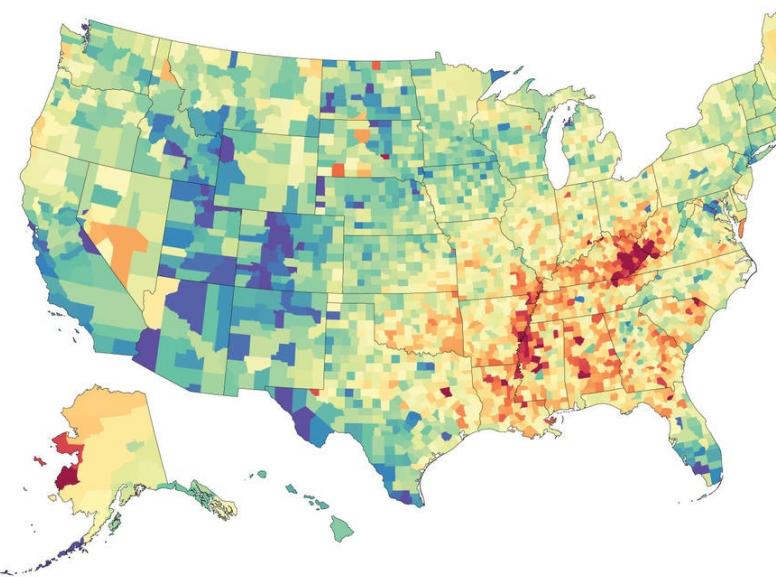


Overview of Health Disparities

LA BEST 2022

Mariana C. Stern, PhD

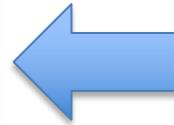
Professor of Preventive Medicine & Urology, Ira Goodman Chair of Cancer Research
Associate Director of Population Science

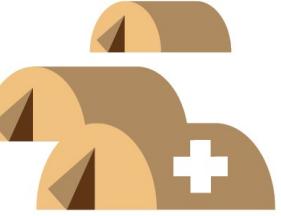


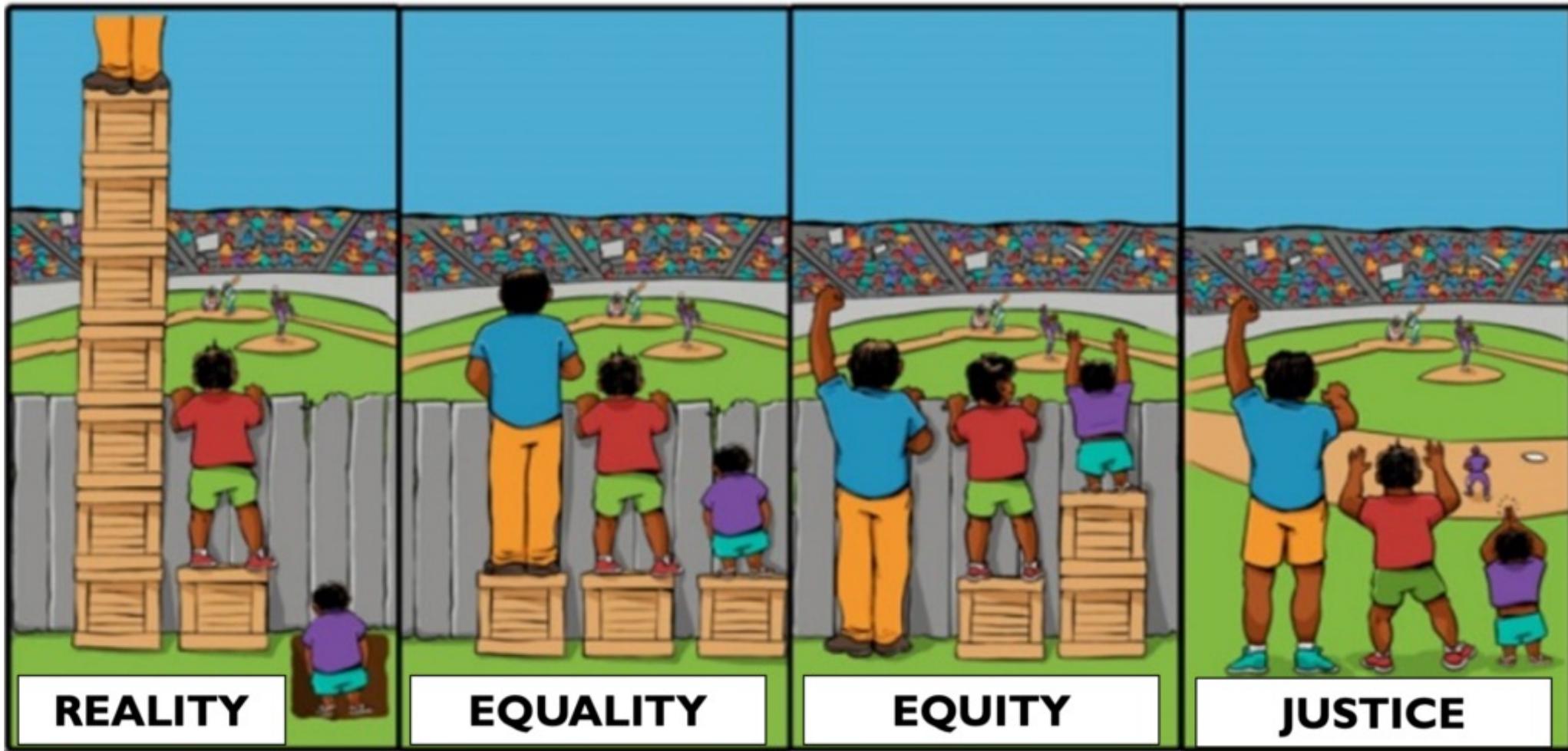
Health disparities are adverse differences in disease burden experienced by racial and ethnic minorities and other medically underserved populations

Minorities & Medically Underserved Populations


American Indian or Alaska Native A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
Asian A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
Black or African American A person having origins in any of the Black racial groups of Africa and the African Diaspora.
Hispanic or Latino* A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
Native Hawaiian or Other Pacific Islander A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.



Individuals belonging to different ancestry, race, or ethnicity 	Individuals of low socioeconomic status 	Individuals who lack or have limited health insurance coverage 
Residents in certain U.S. geographic locations, such as rural areas, or territories, such as Puerto Rico and Guam 	Members of the sexual and gender minority communities 	Certain immigrants, refugees, or asylum seekers 
Individuals with disabilities 	Adolescents and young adults 	Elderly 



REALITY

One gets **more than** is needed, while the other gets **less than** is needed. Thus, a huge disparity is created.

EQUALITY

The assumption is that **everyone benefits from the same supports**. This is considered to be equal treatment.

EQUITY

Everyone gets the support they need, which produces equity.

JUSTICE

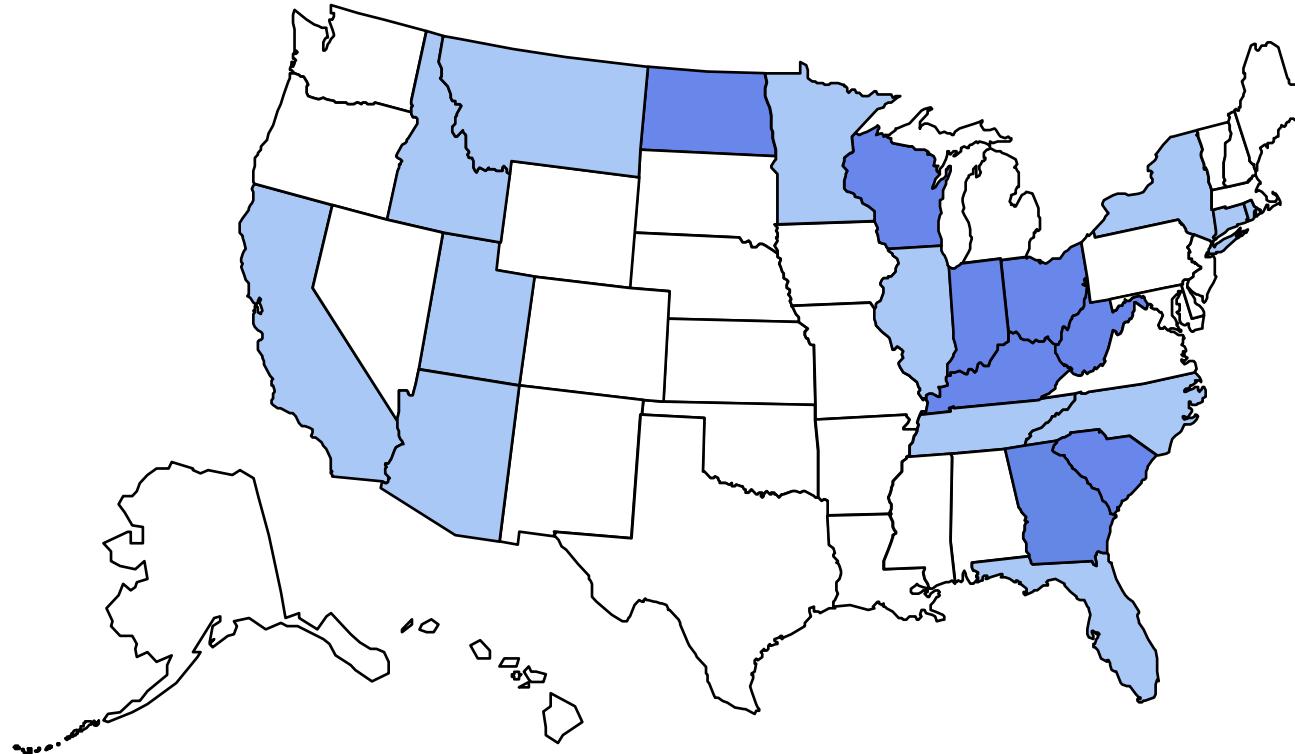
All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.

THE OBESITY EPIDEMIC



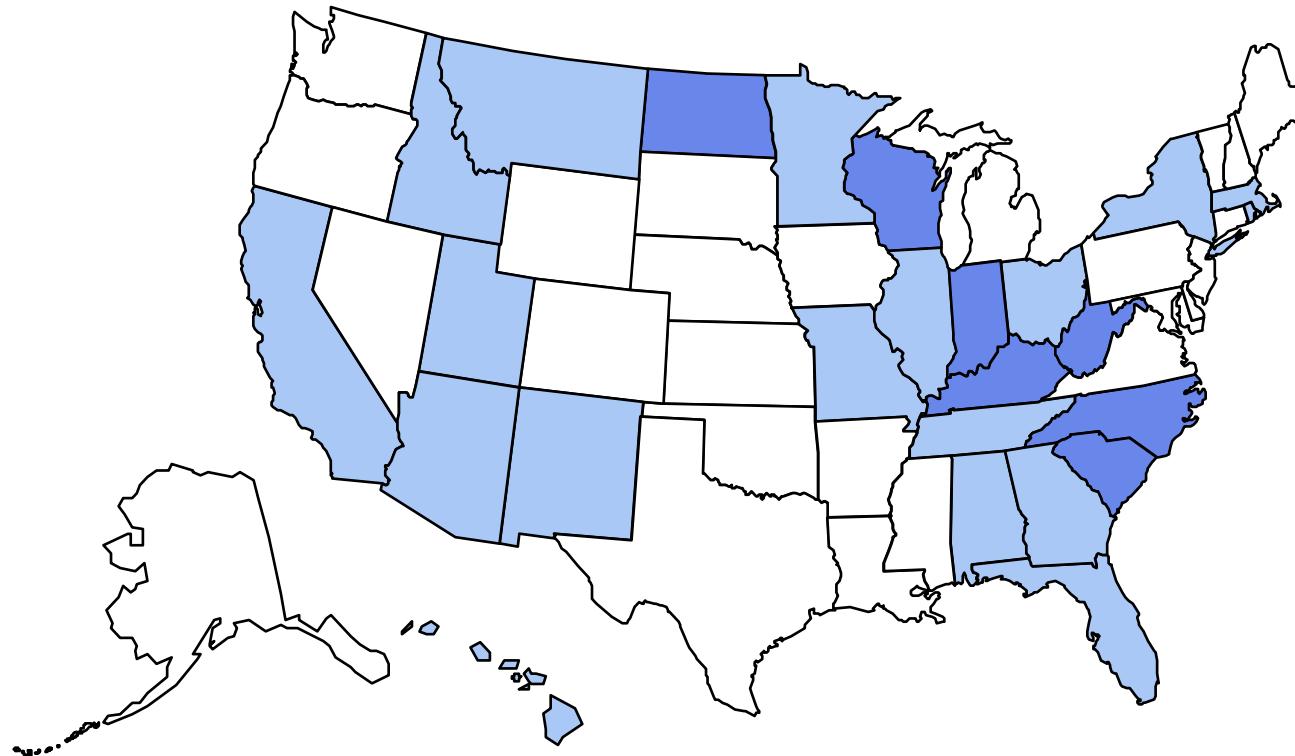
Obesity Trends* Among U.S. Adults BRFSS, 1985

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



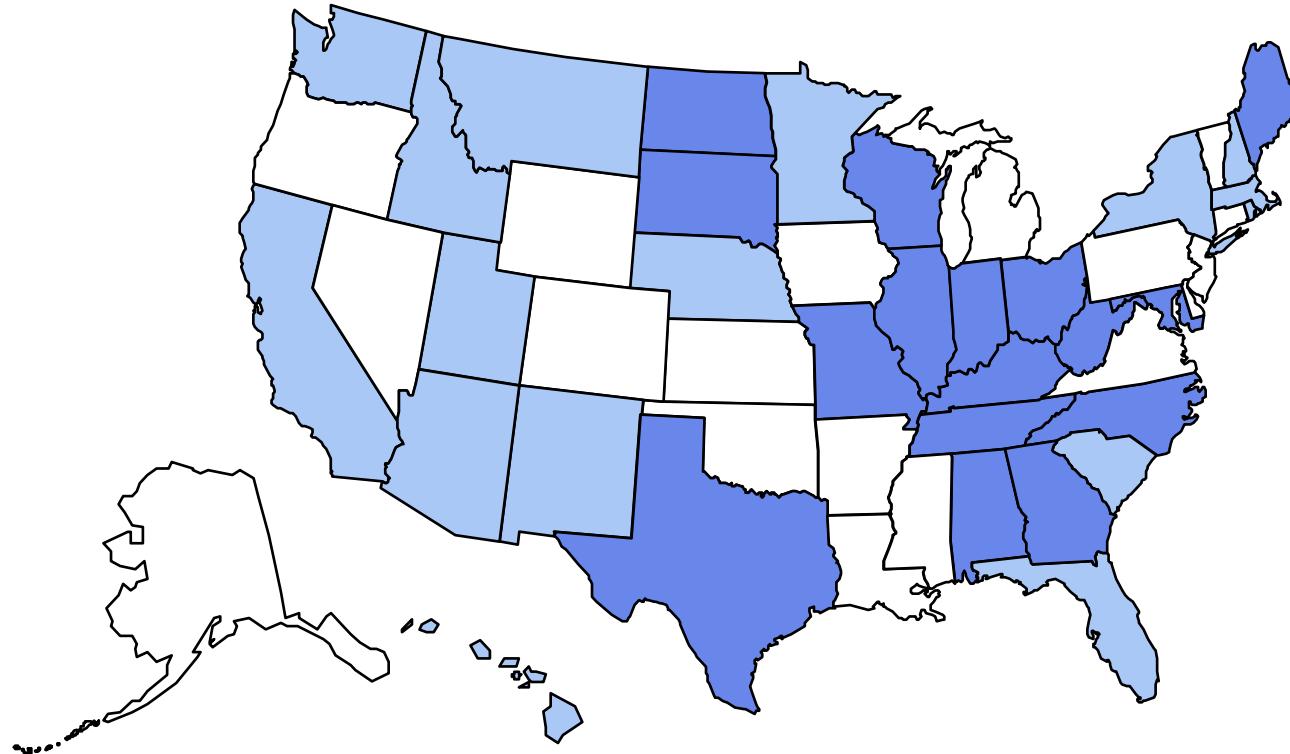
Obesity Trends* Among U.S. Adults BRFSS, 1986

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



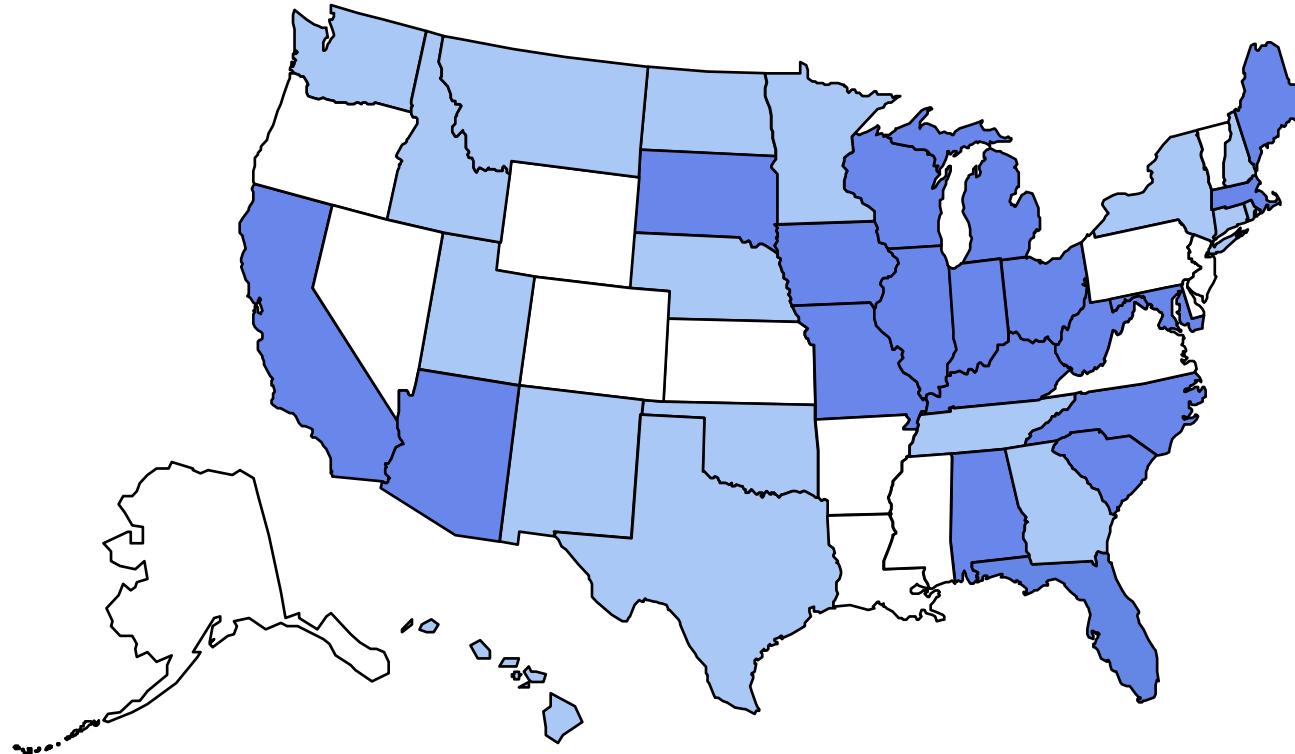
Obesity Trends* Among U.S. Adults BRFSS, 1987

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



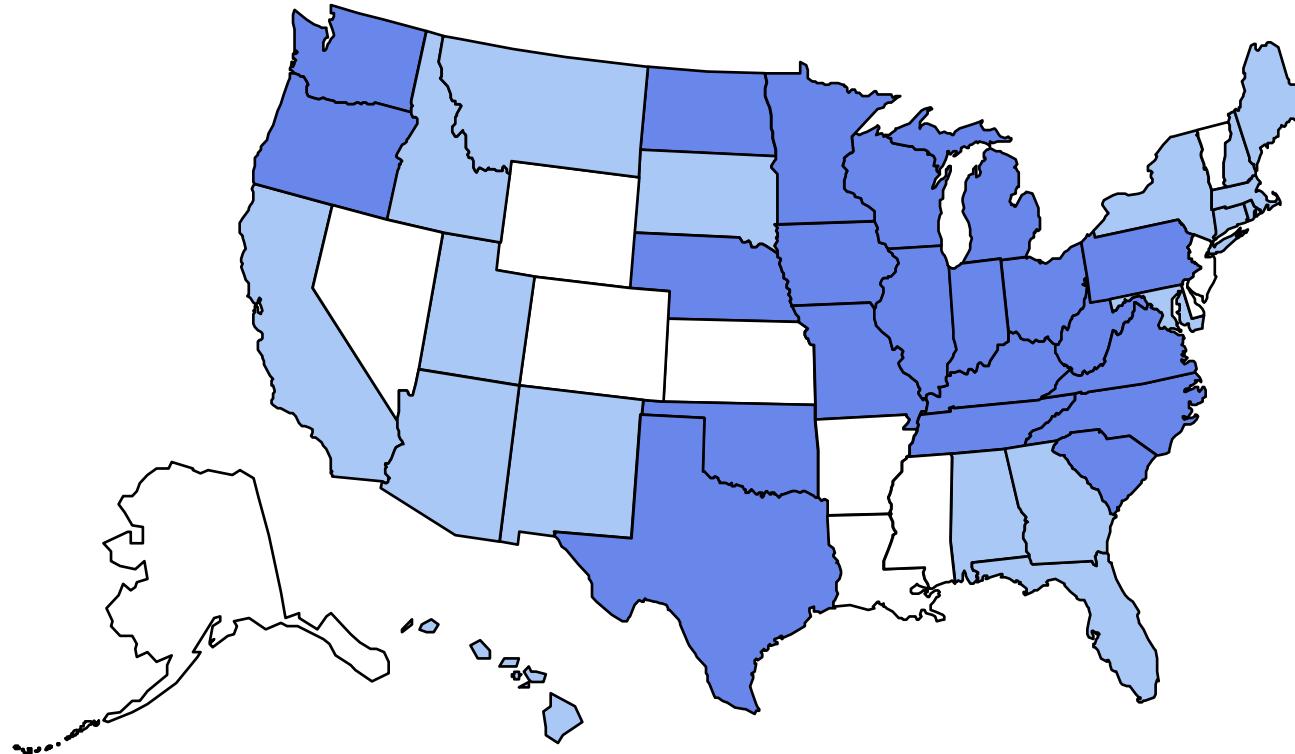
Obesity Trends* Among U.S. Adults BRFSS, 1988

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



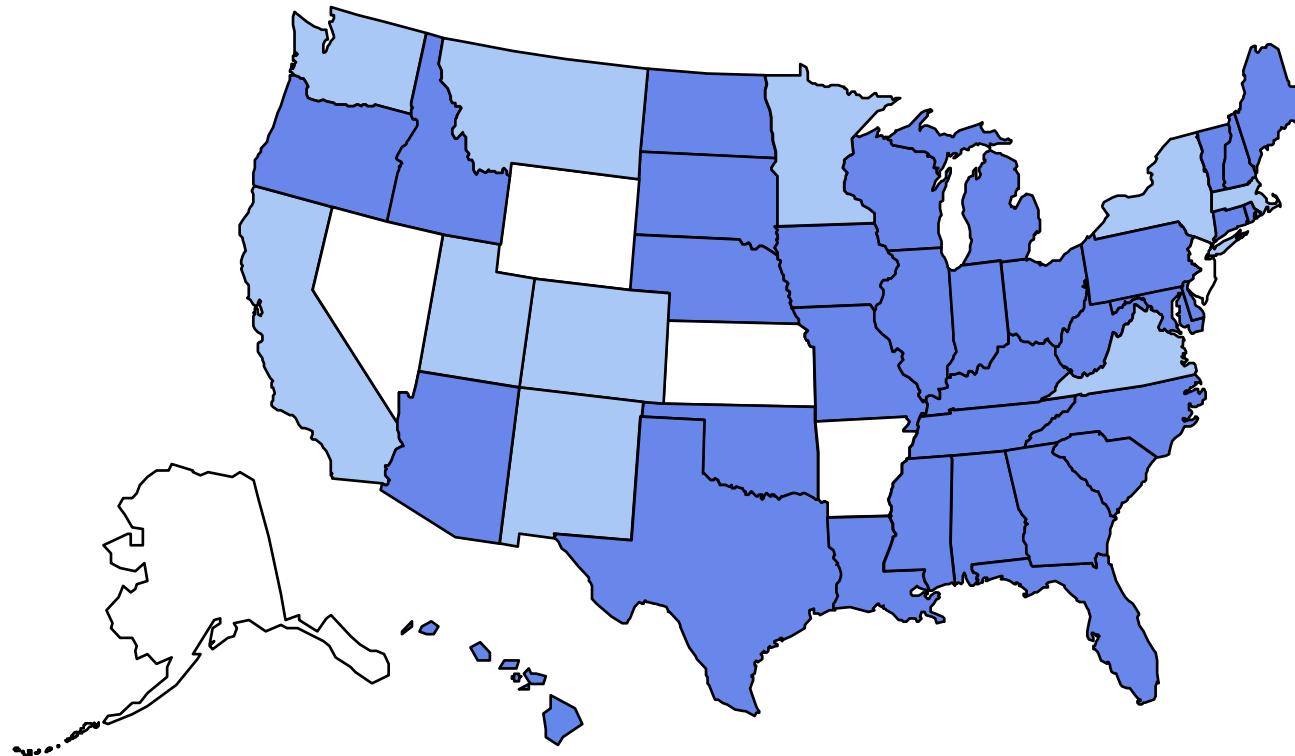
Obesity Trends* Among U.S. Adults BRFSS, 1989

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 1990

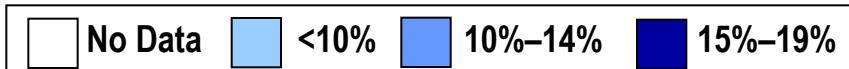
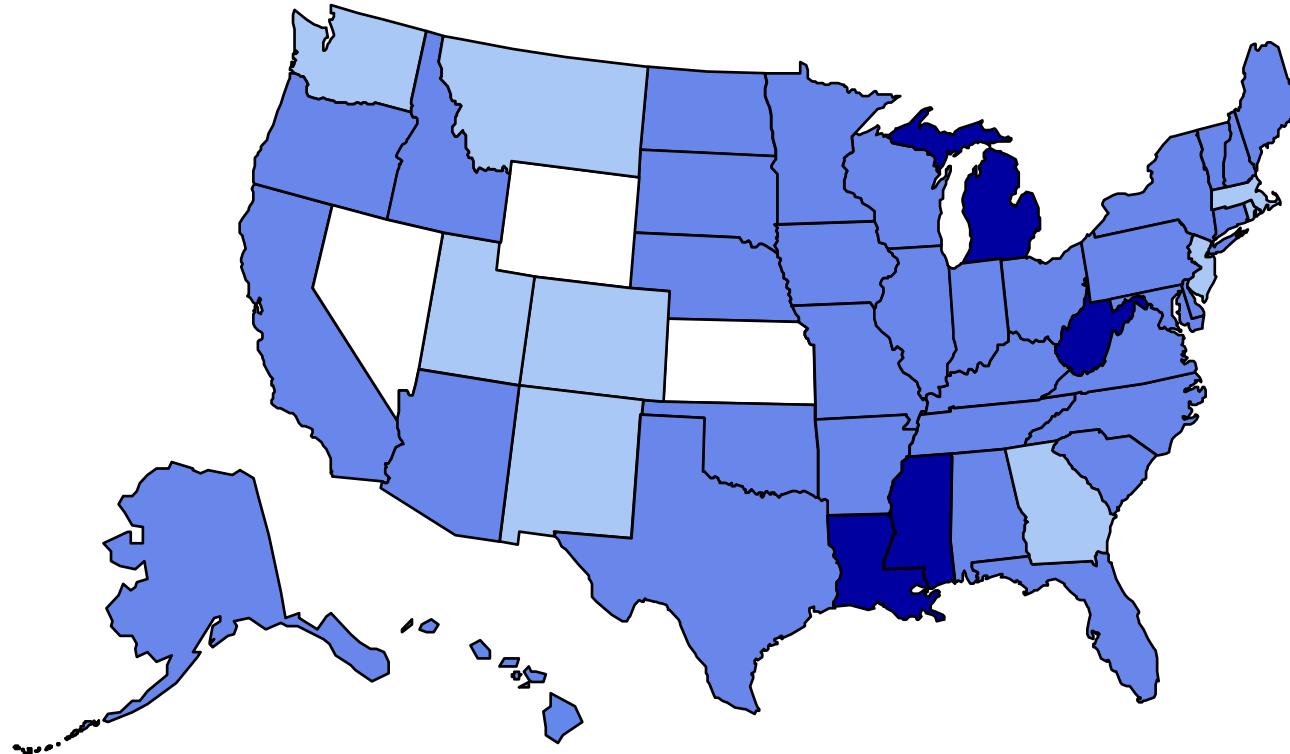
(*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)



Source: Behavioral Risk Factor Surveillance Systems, CDC

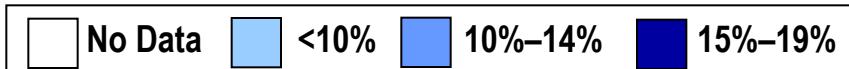
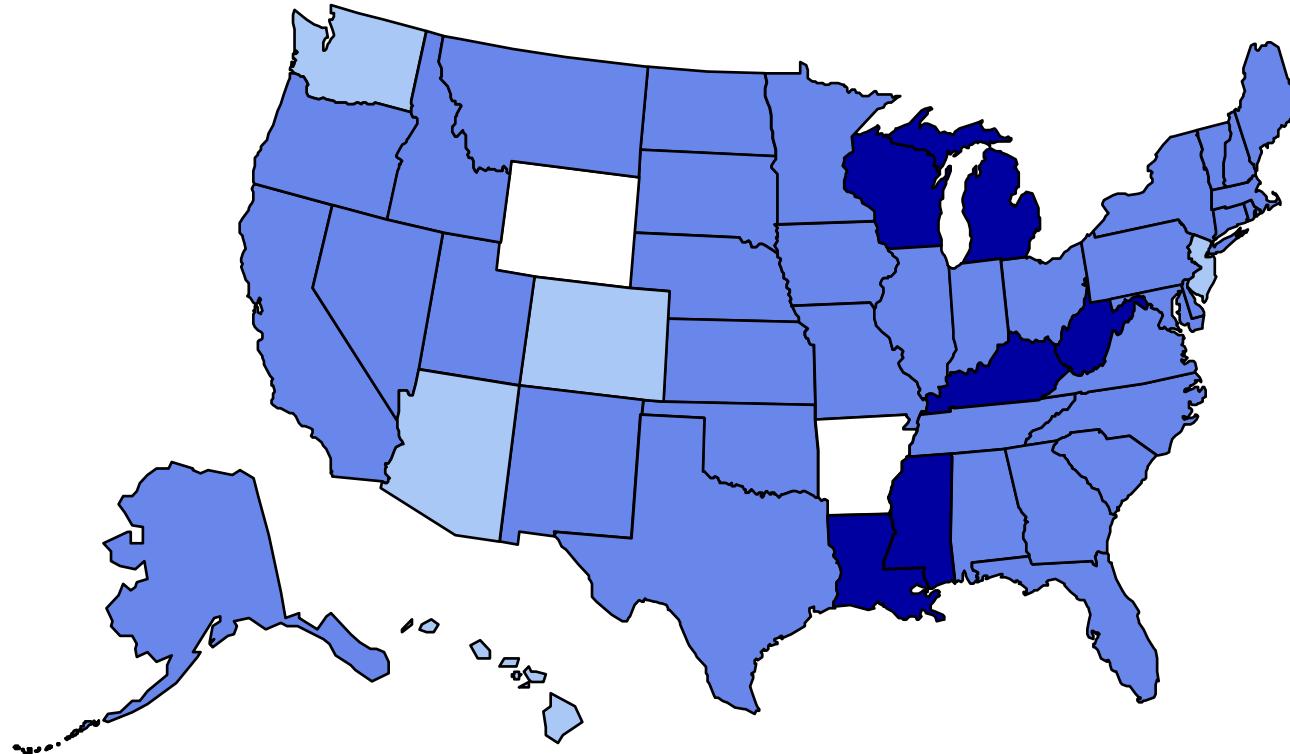
Obesity Trends* Among U.S. Adults BRFSS, 1991

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



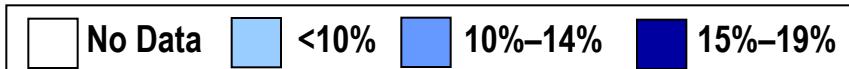
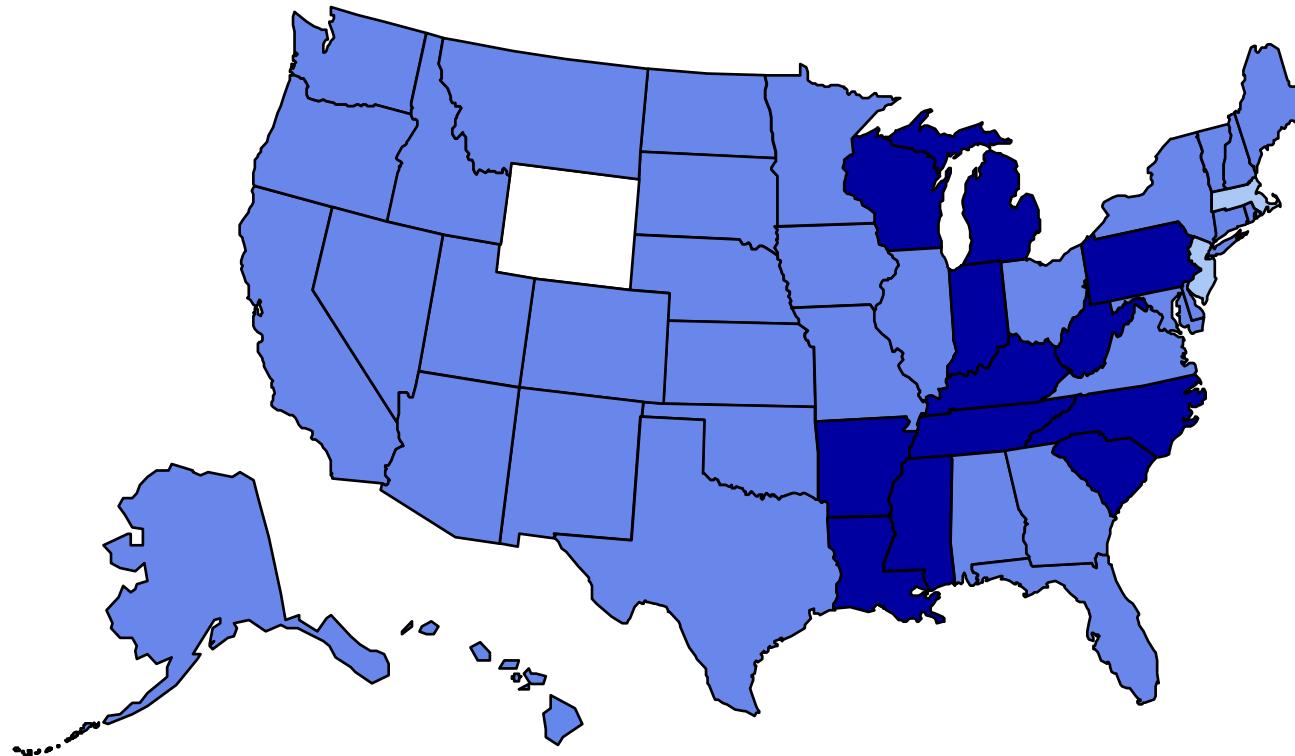
Obesity Trends* Among U.S. Adults BRFSS, 1992

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



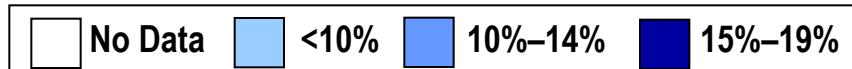
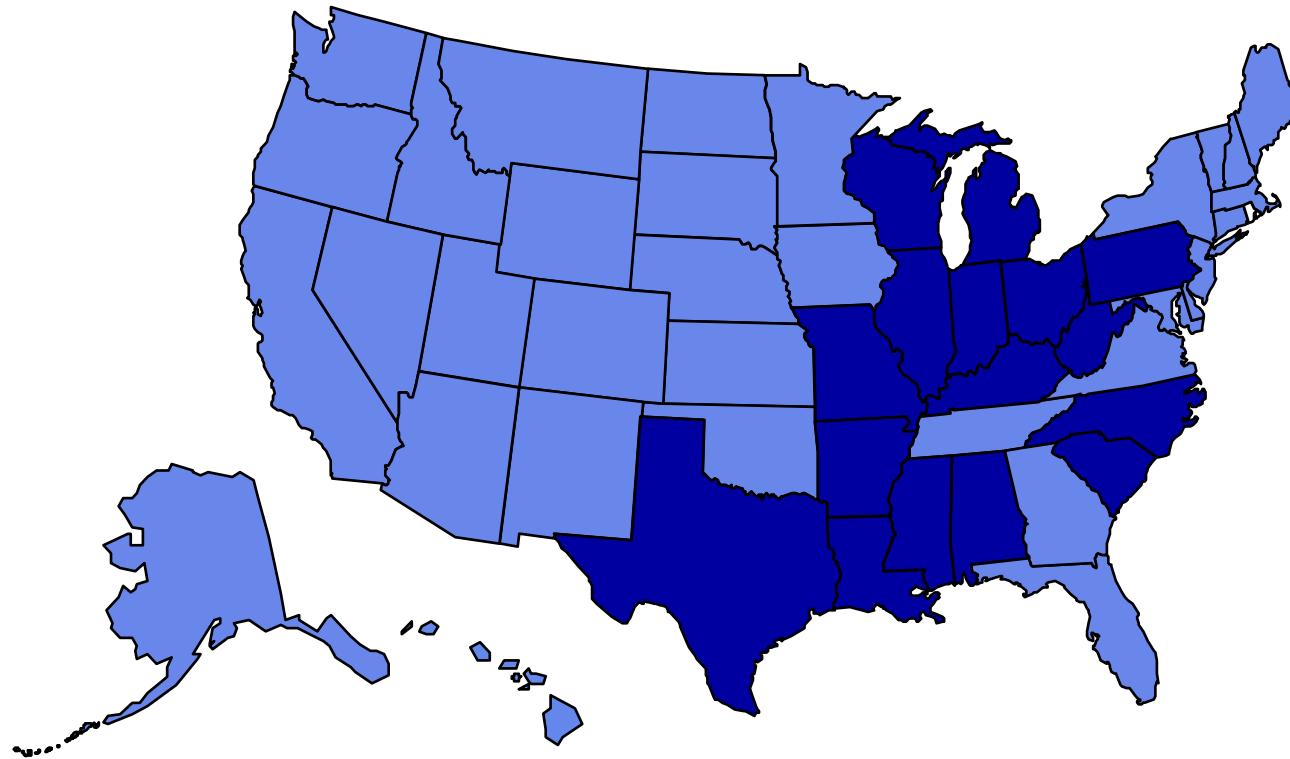
Obesity Trends* Among U.S. Adults BRFSS, 1993

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 1994

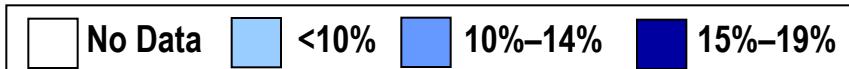
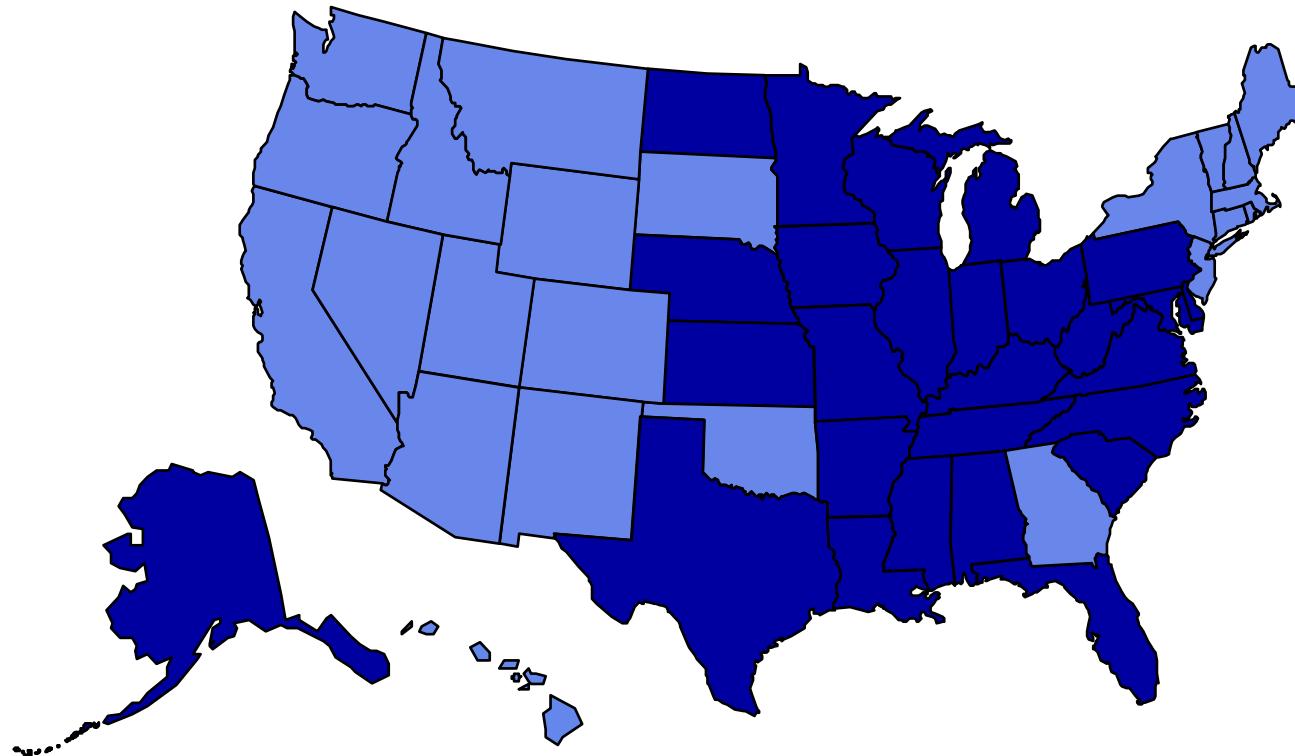
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

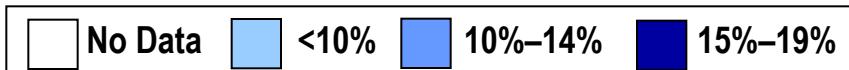
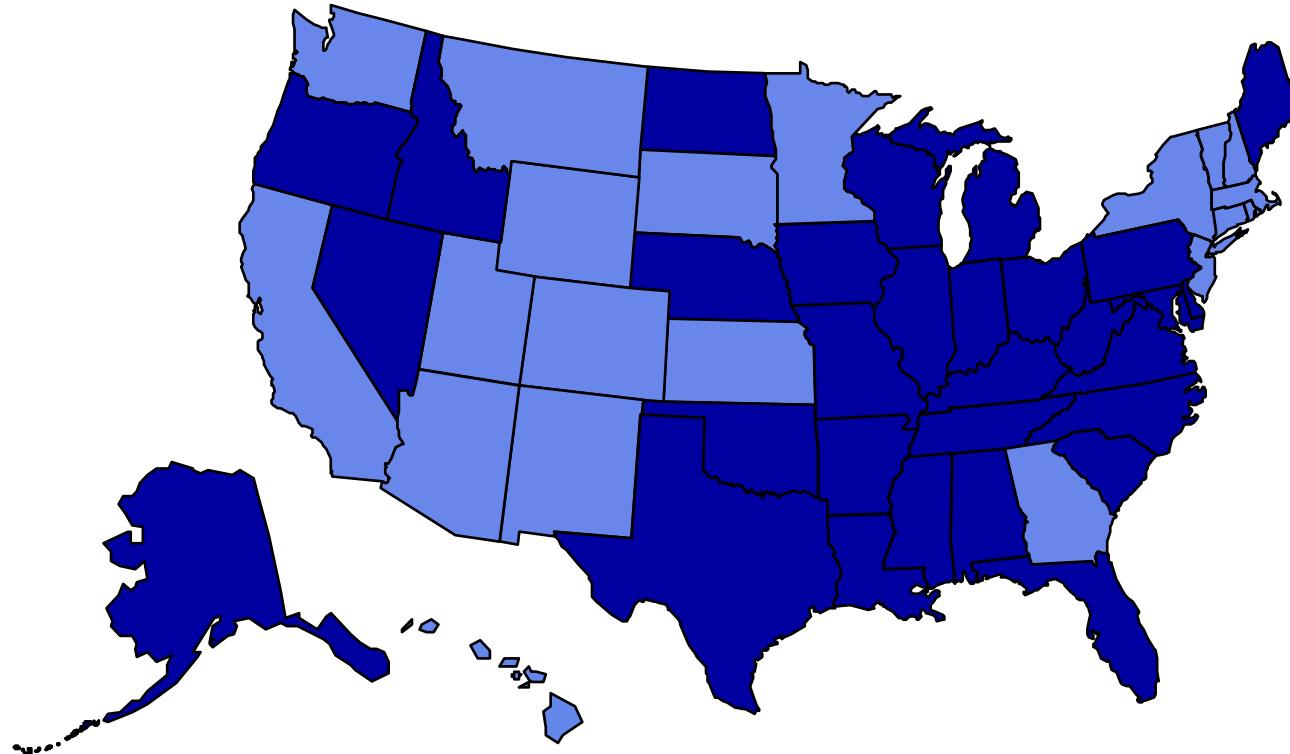
BRFSS, 1995

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



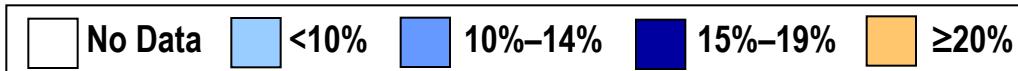
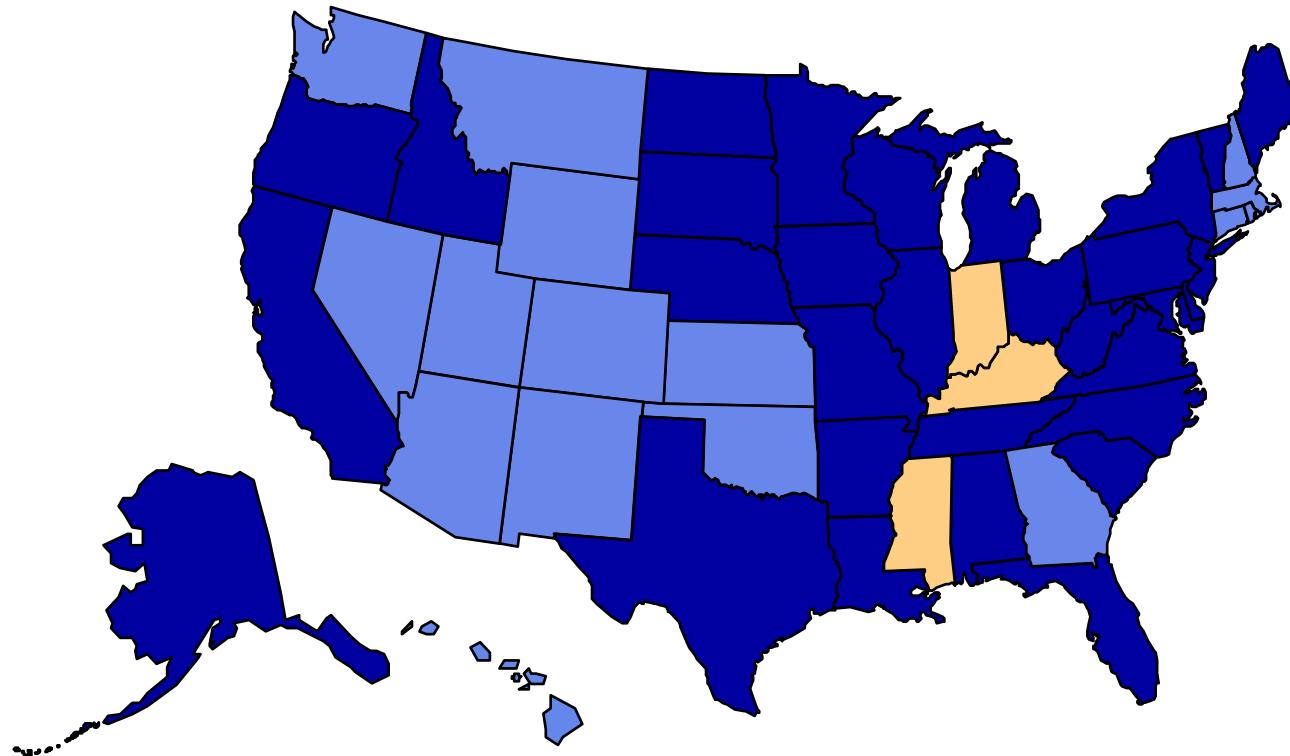
Obesity Trends* Among U.S. Adults BRFSS, 1996

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



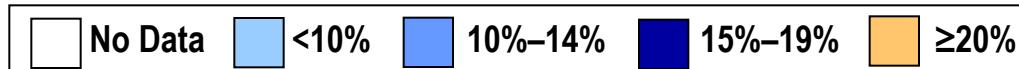
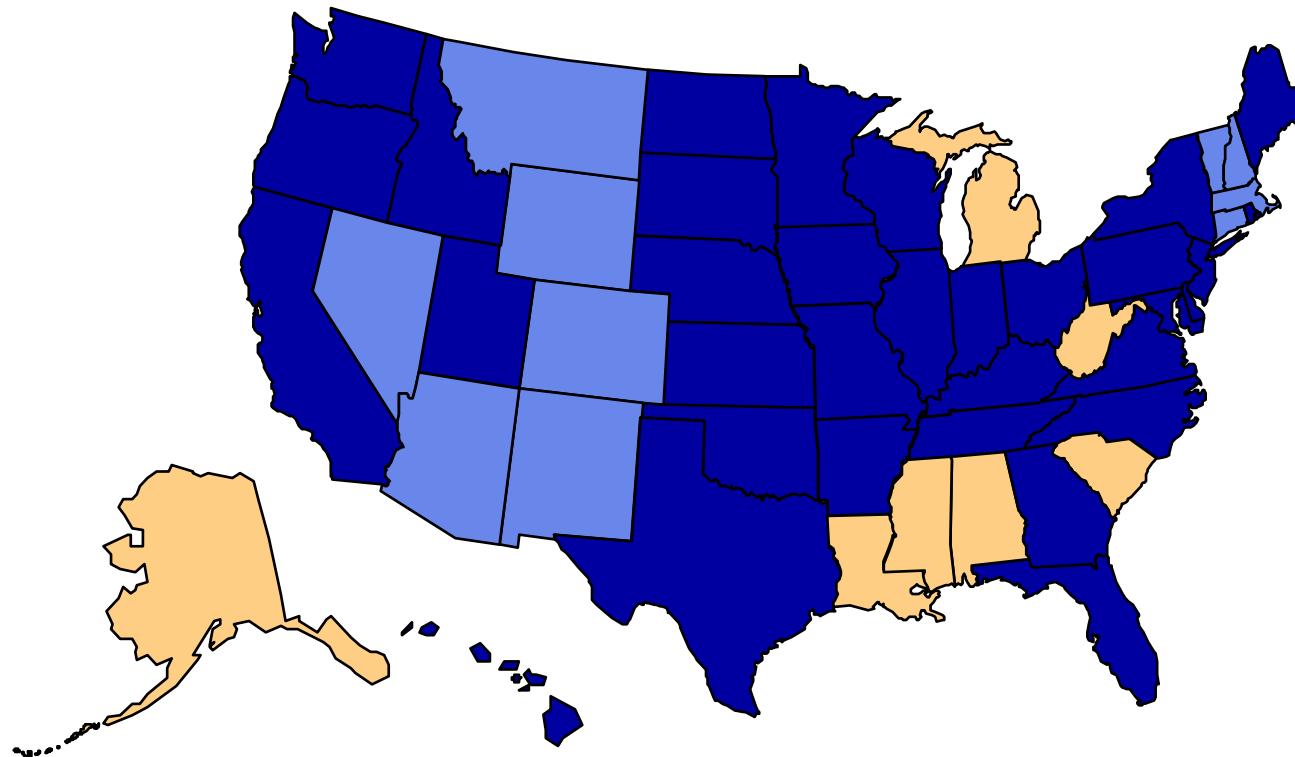
Obesity Trends* Among U.S. Adults BRFSS, 1997

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



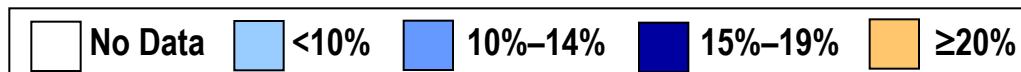
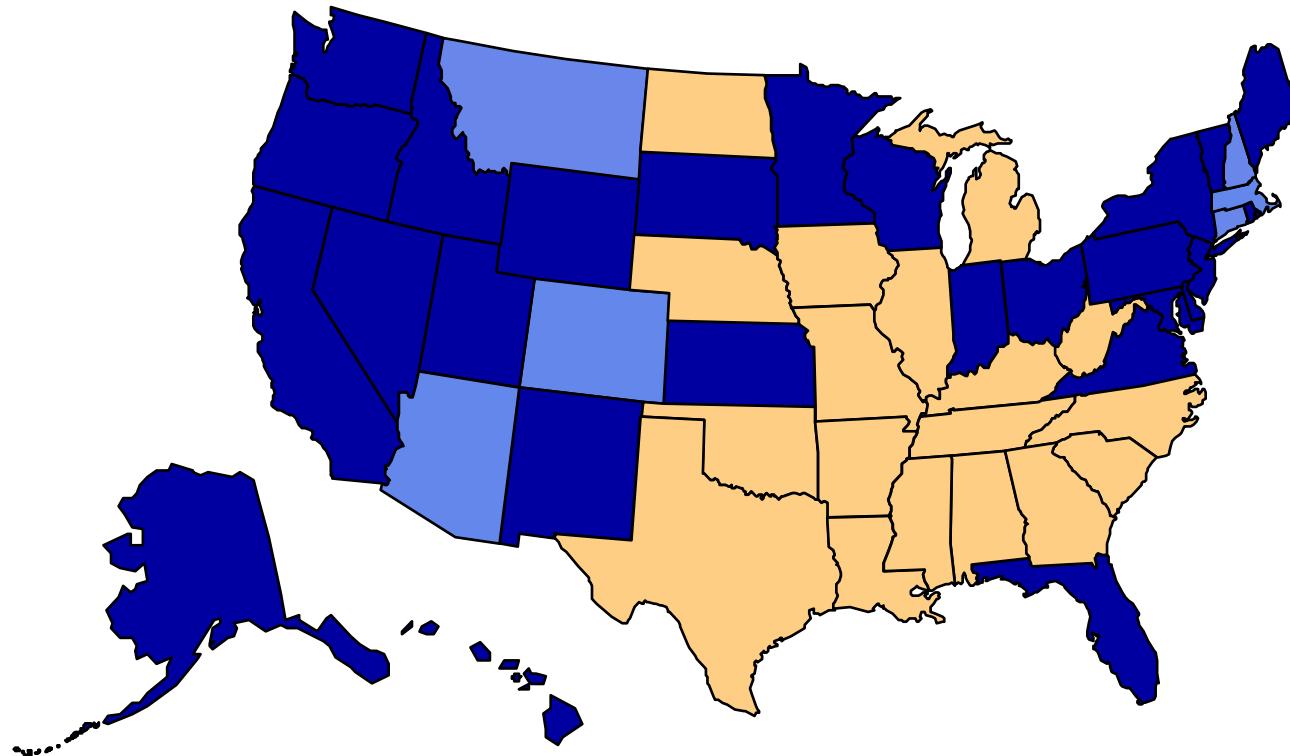
Obesity Trends* Among U.S. Adults BRFSS, 1998

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



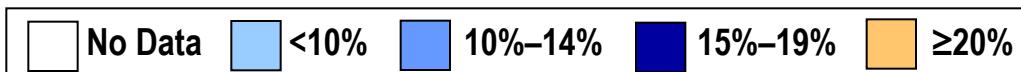
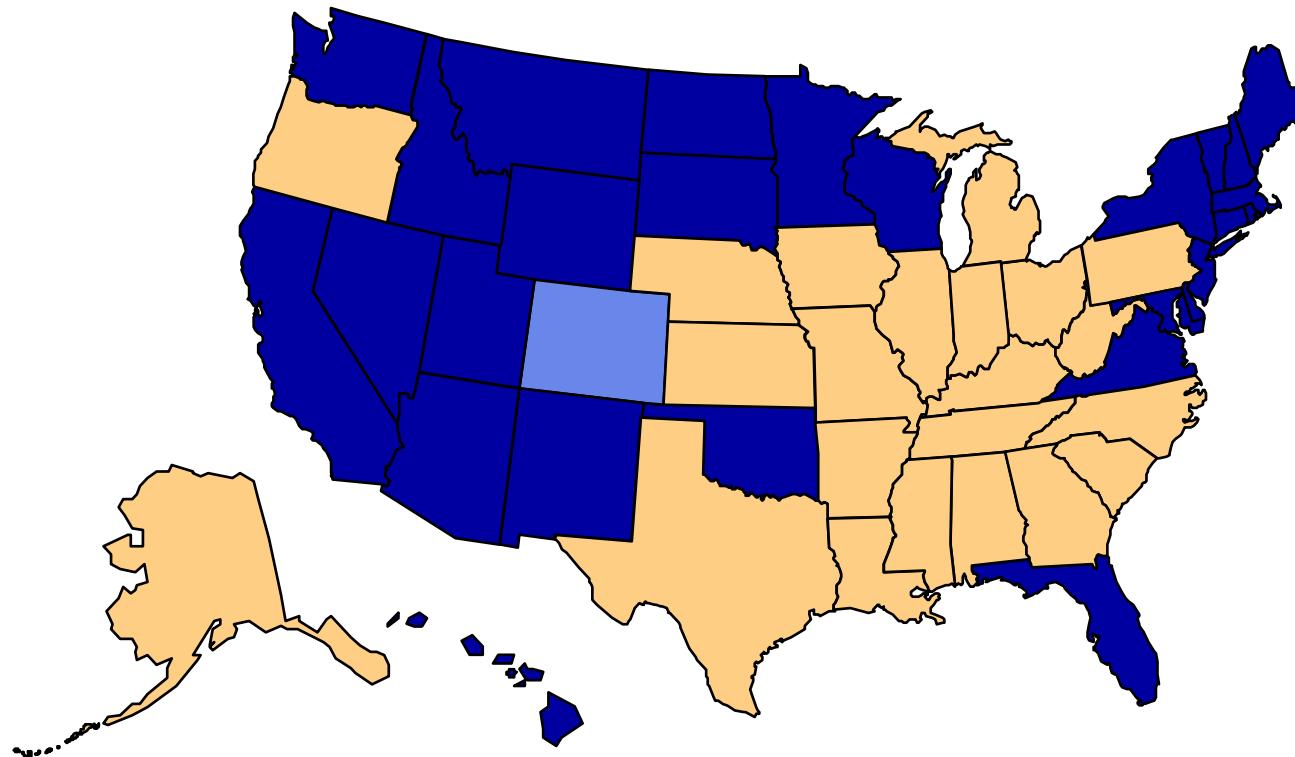
Obesity Trends* Among U.S. Adults BRFSS, 1999

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



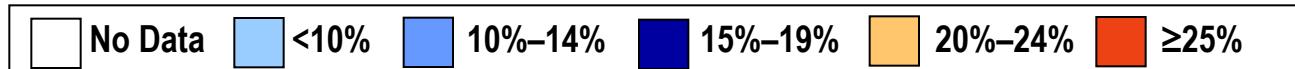
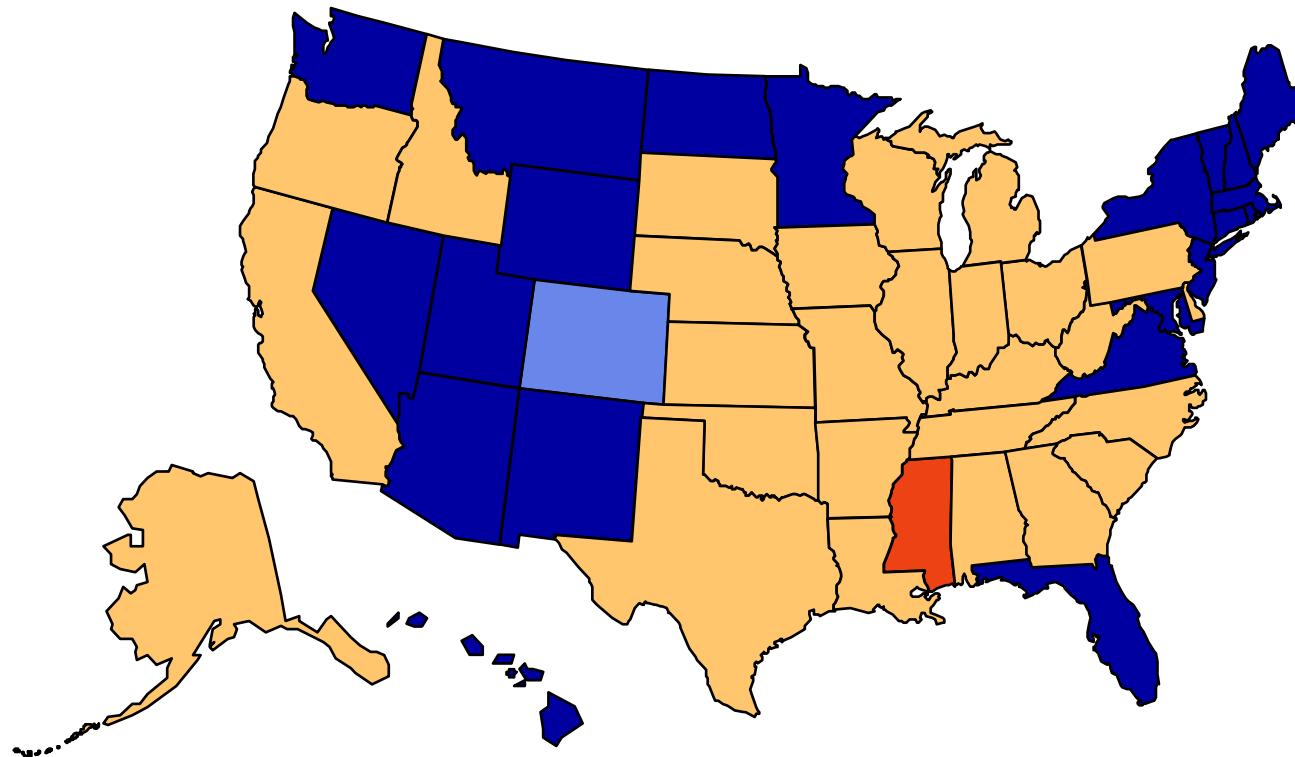
Obesity Trends* Among U.S. Adults BRFSS, 2000

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



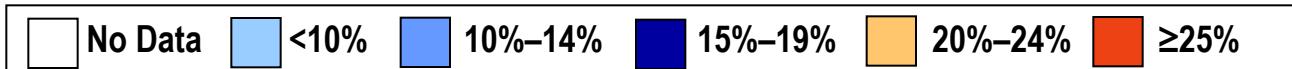
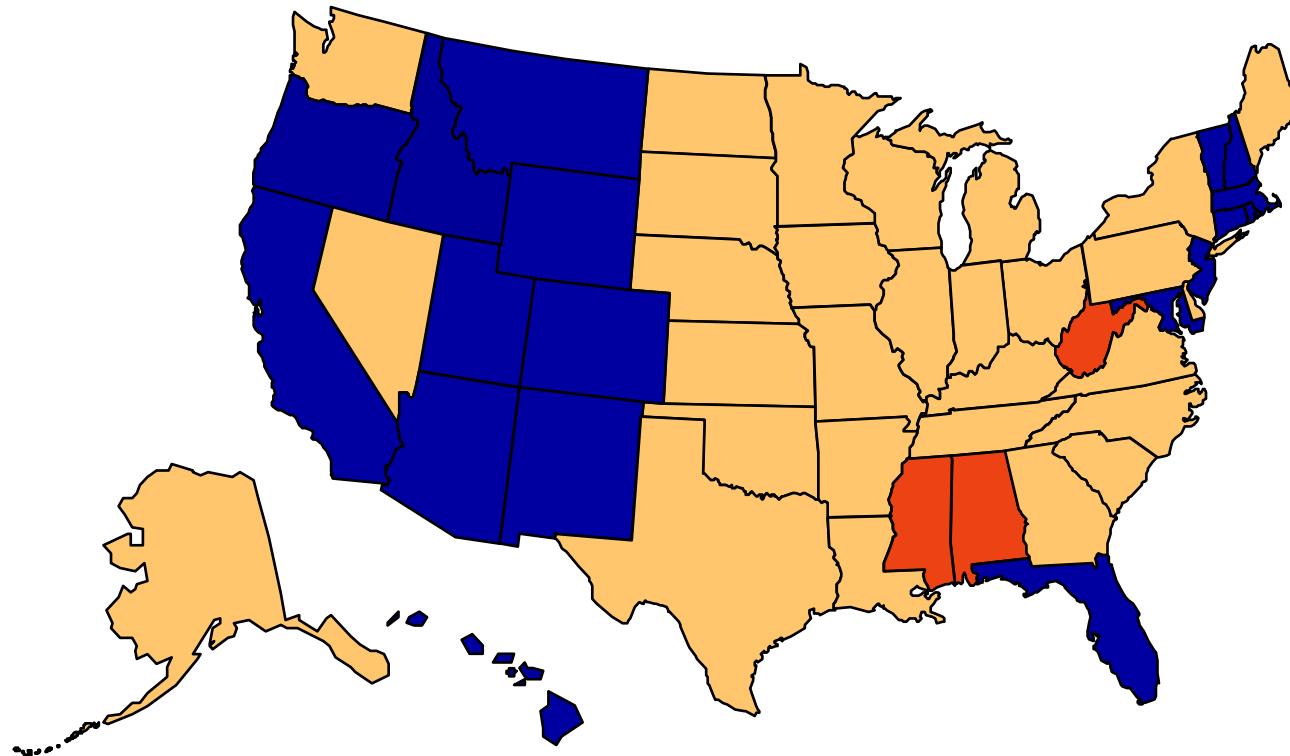
Obesity Trends* Among U.S. Adults BRFSS, 2001

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



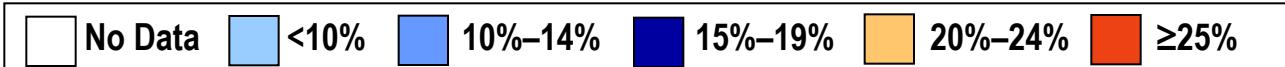
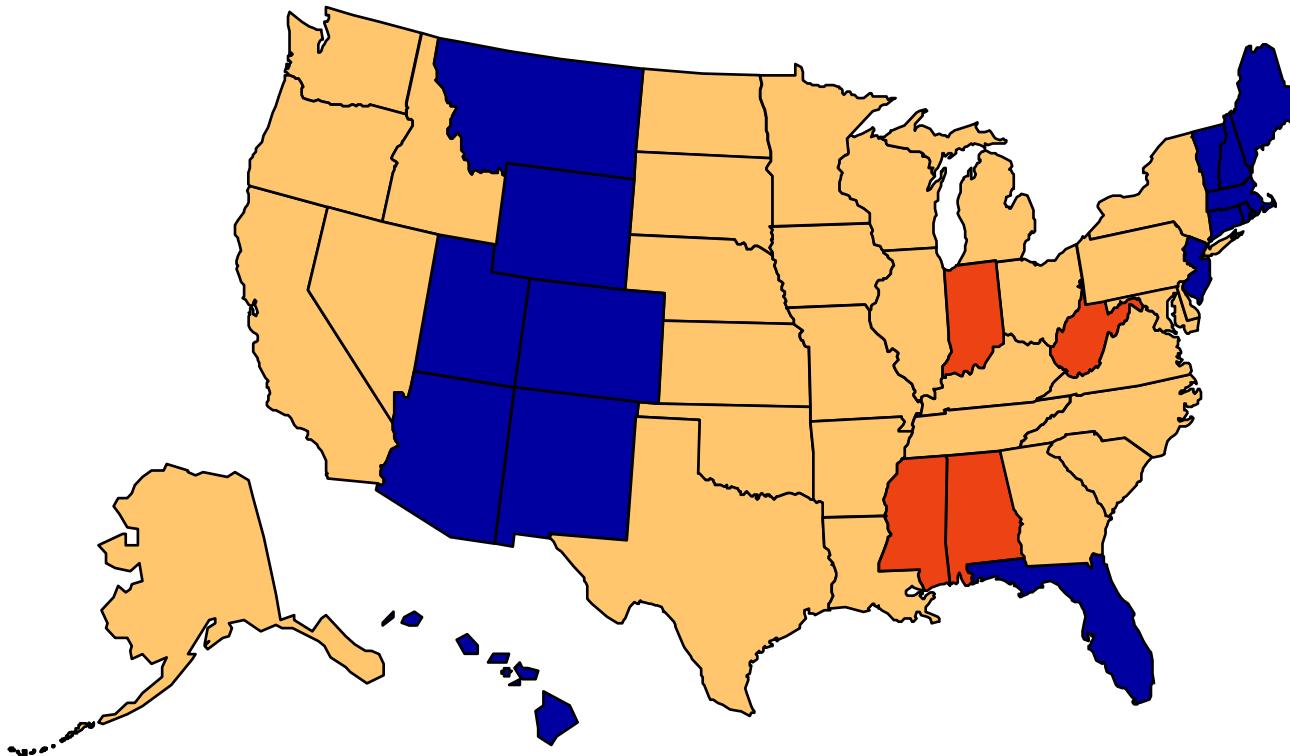
Obesity Trends* Among U.S. Adults BRFSS, 2002

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



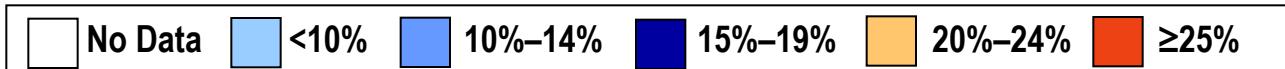
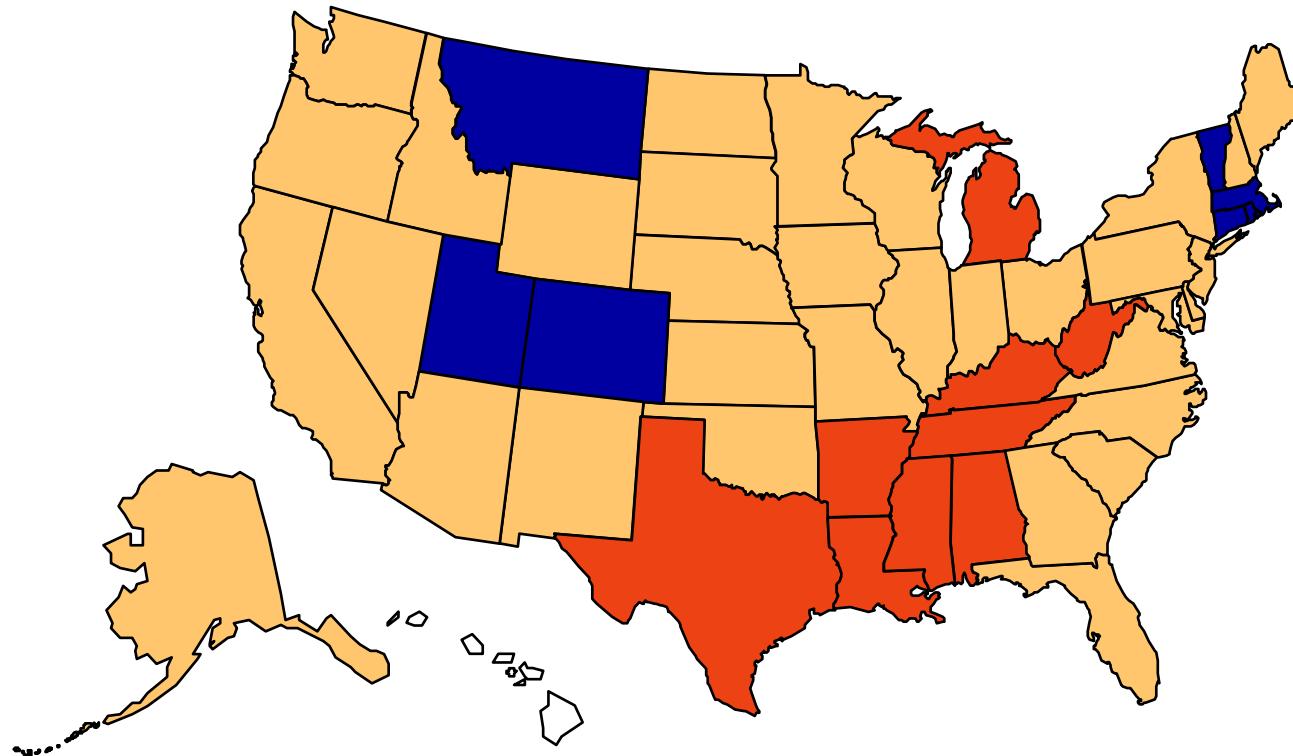
Obesity Trends* Among U.S. Adults BRFSS, 2003

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



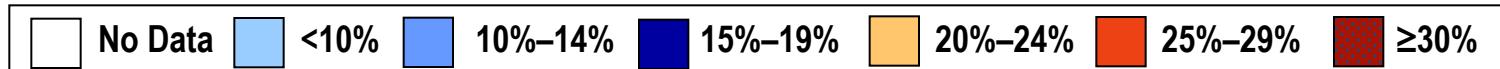
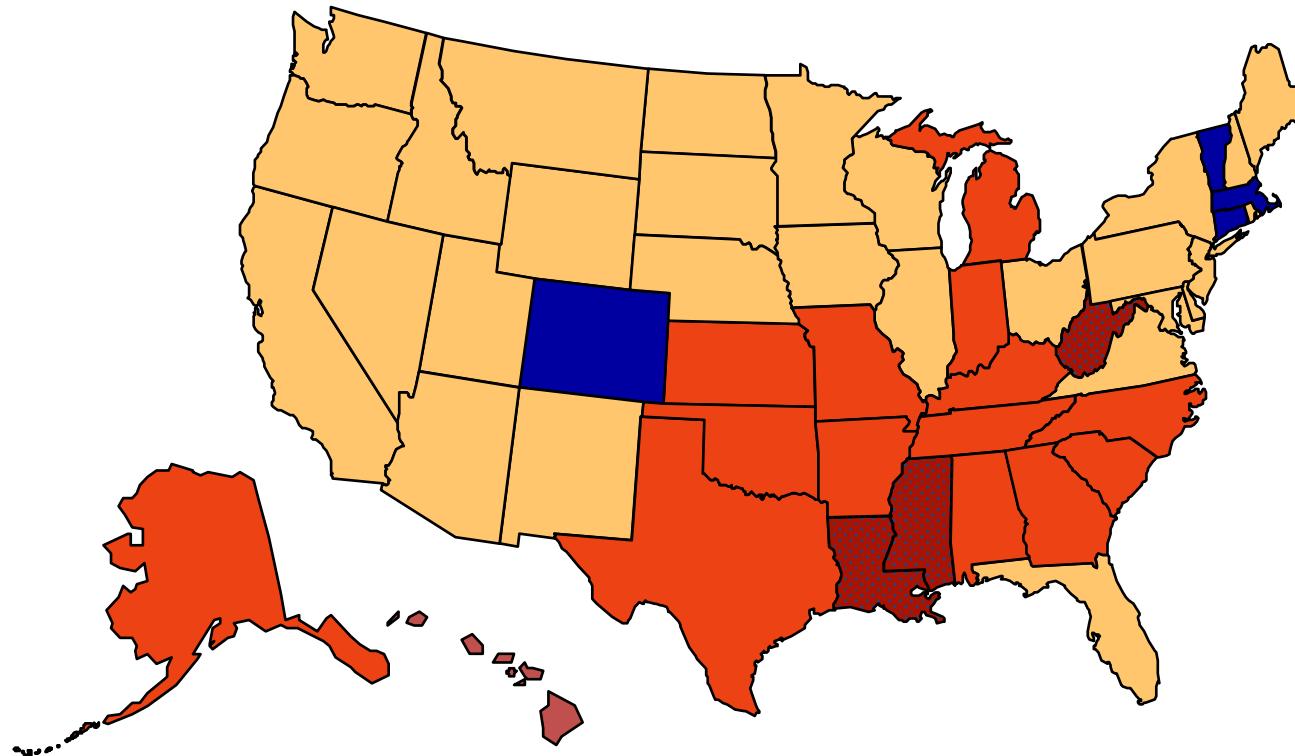
Obesity Trends* Among U.S. Adults BRFSS, 2004

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



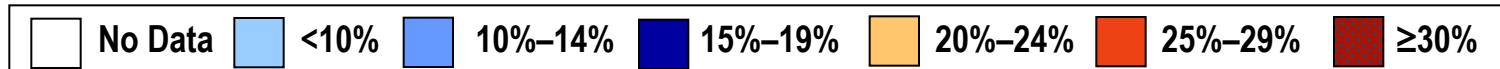
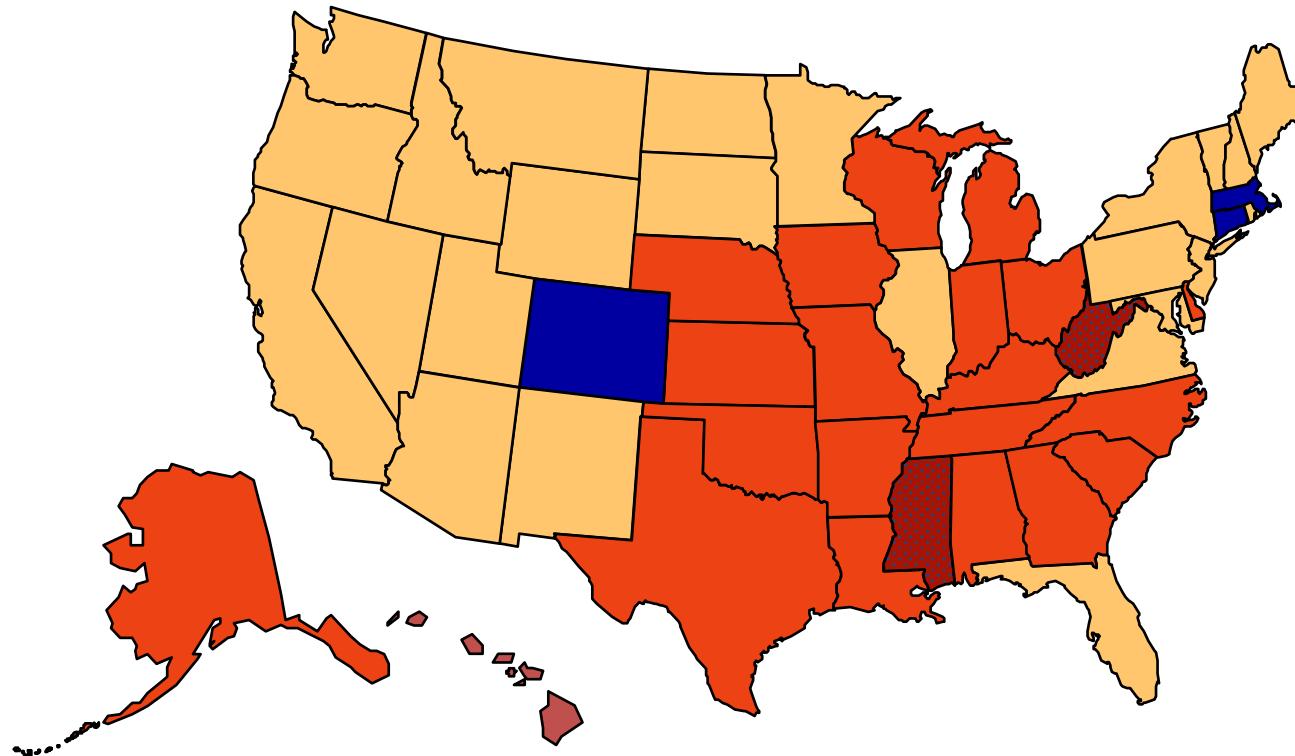
Obesity Trends* Among U.S. Adults BRFSS, 2005

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



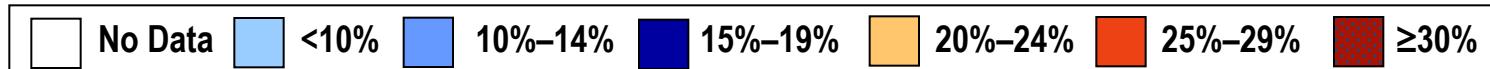
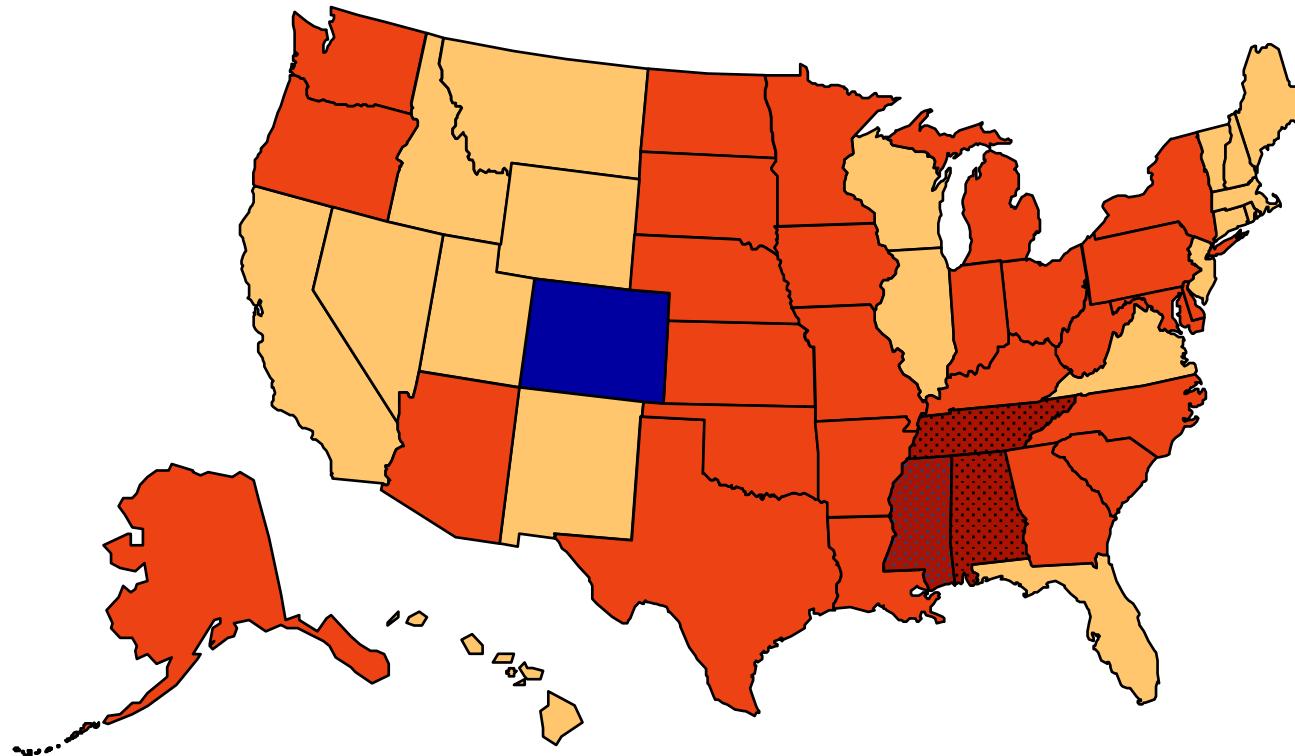
Obesity Trends* Among U.S. Adults BRFSS, 2006

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



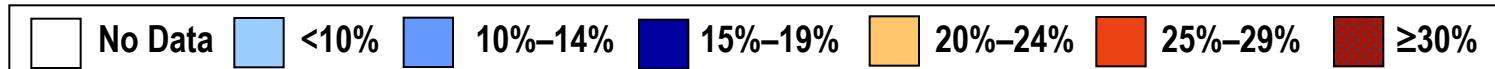
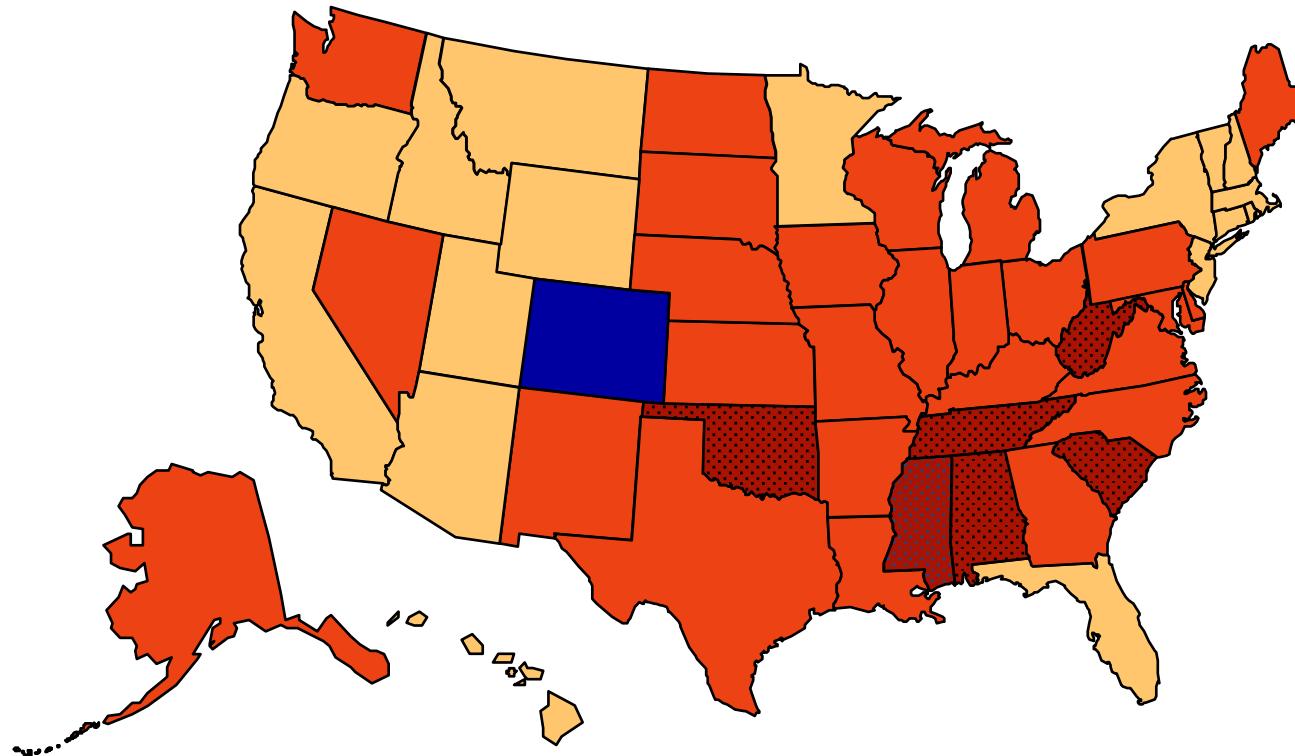
Obesity Trends* Among U.S. Adults BRFSS, 2007

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



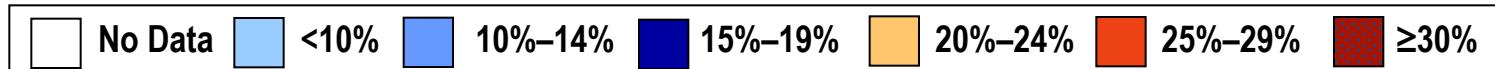
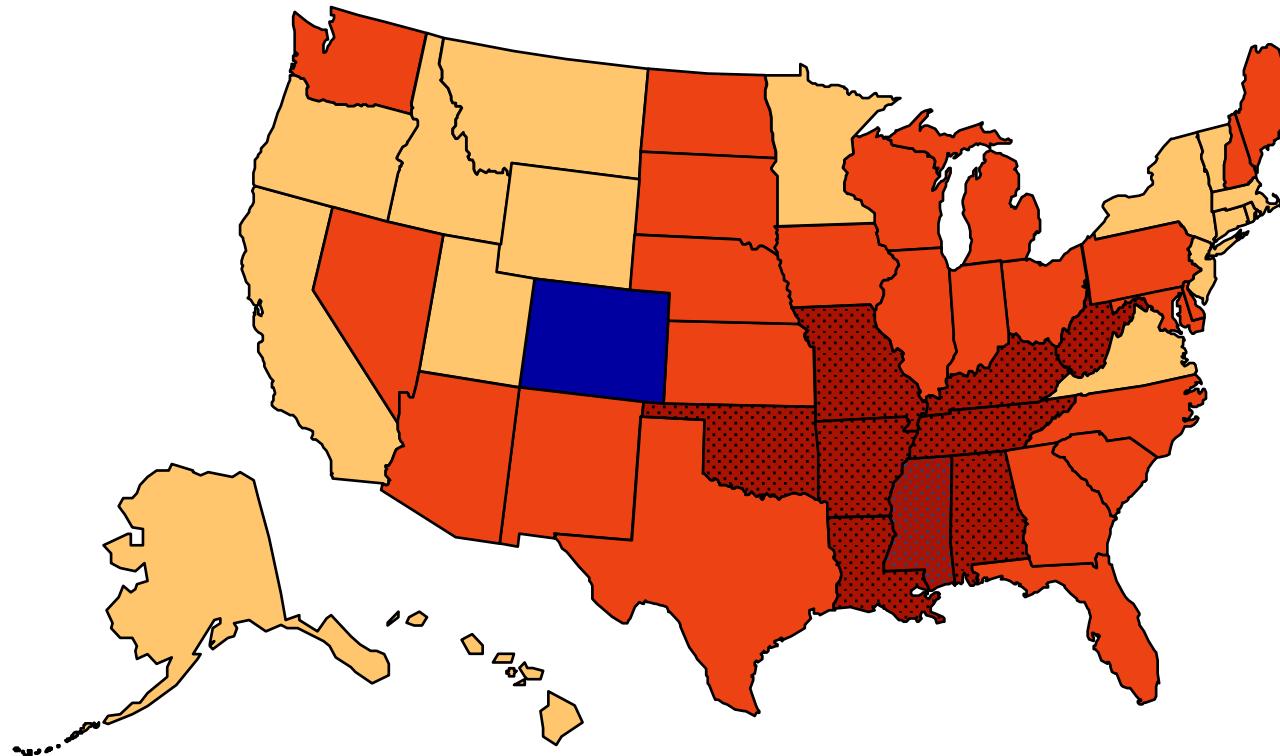
Obesity Trends* Among U.S. Adults BRFSS, 2008

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



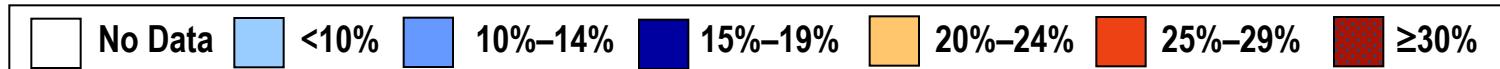
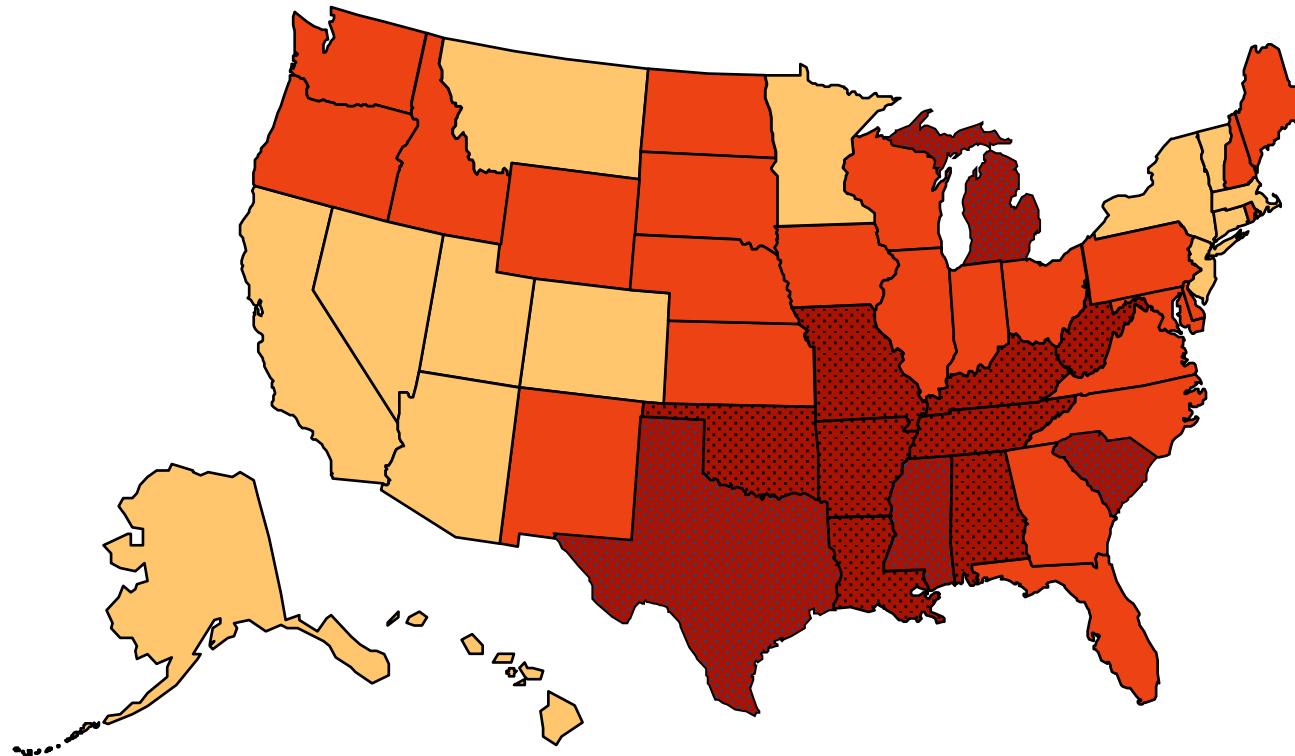
Obesity Trends* Among U.S. Adults BRFSS, 2009

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



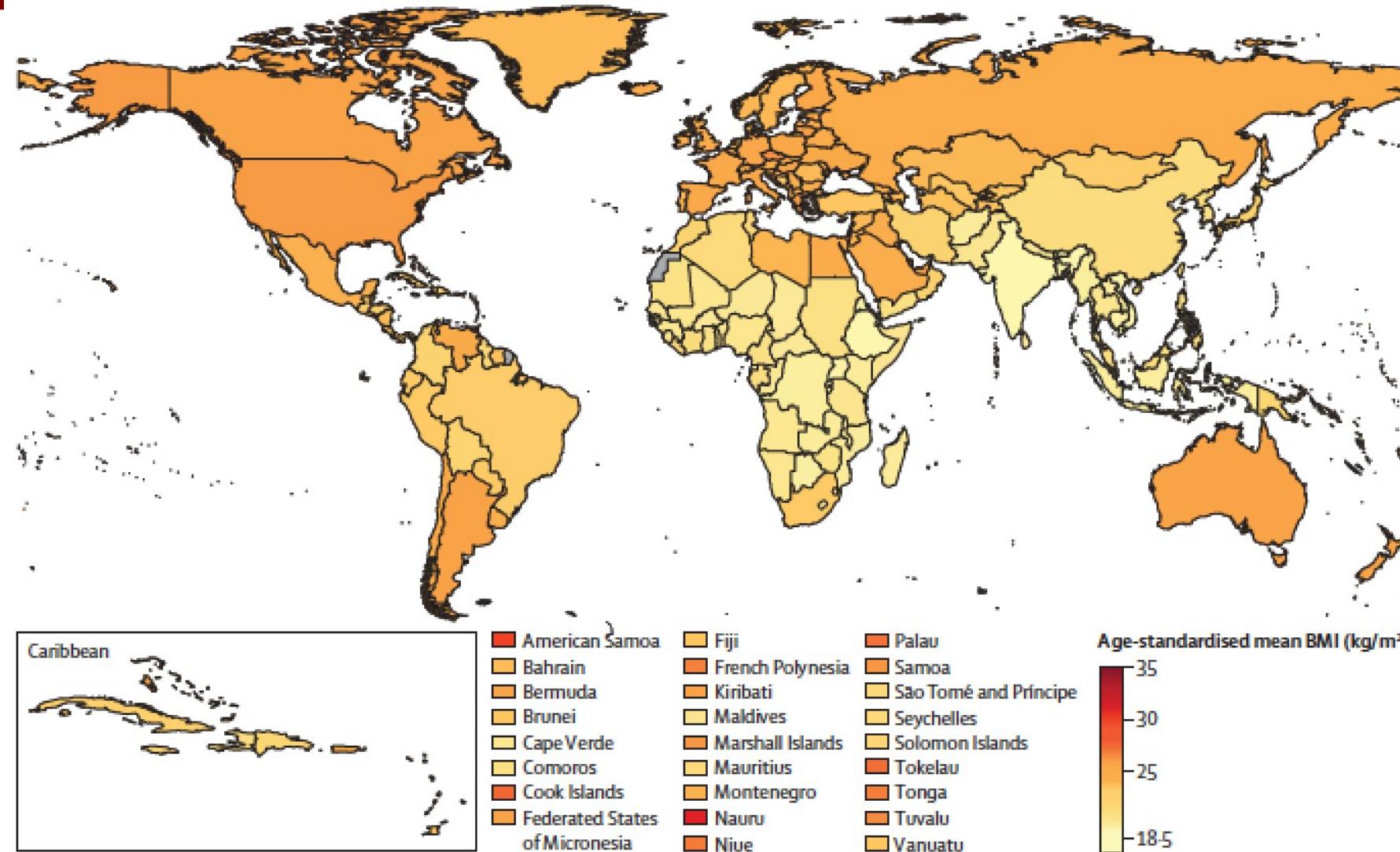
Obesity Trends* Among U.S. Adults BRFSS, 2010

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



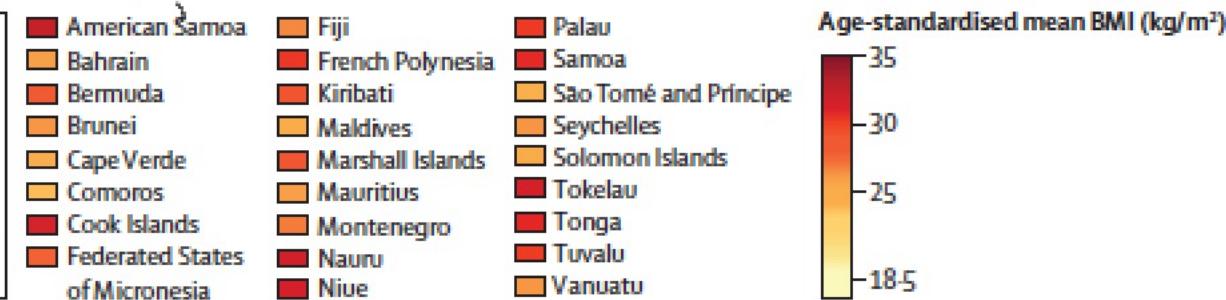
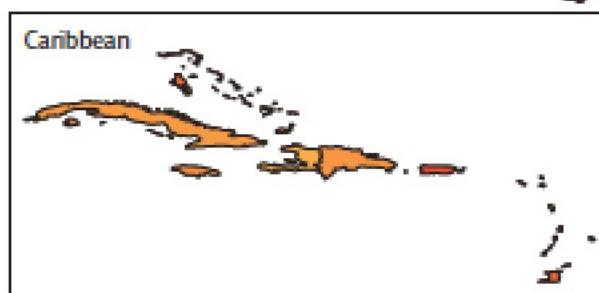
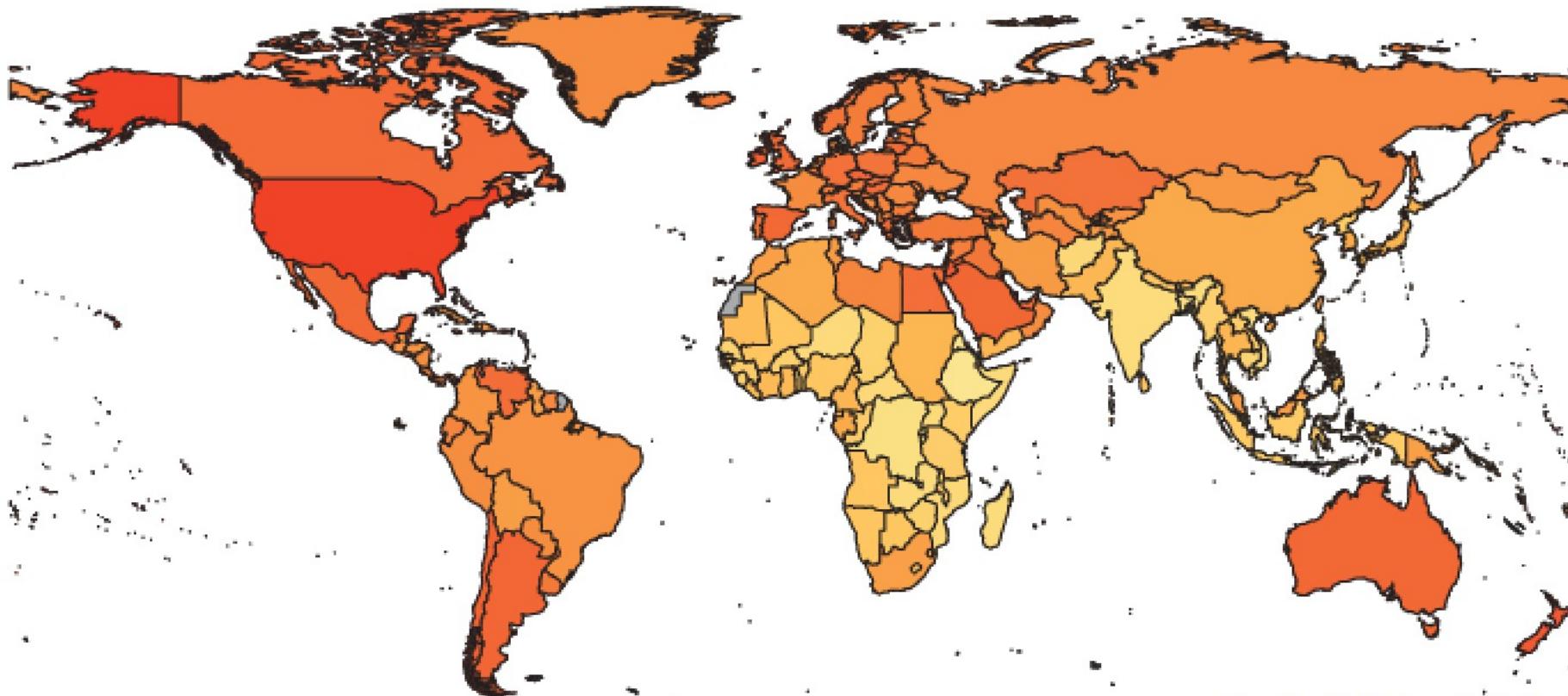
Age-Standardized mean BMI in Men by Country in 1975

1975



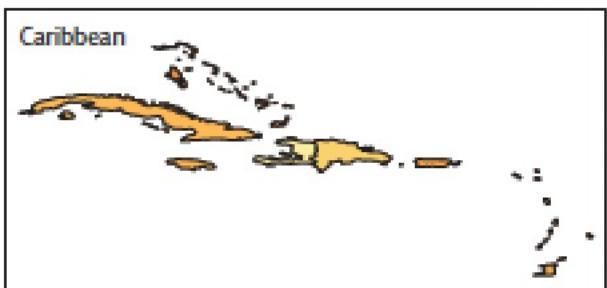
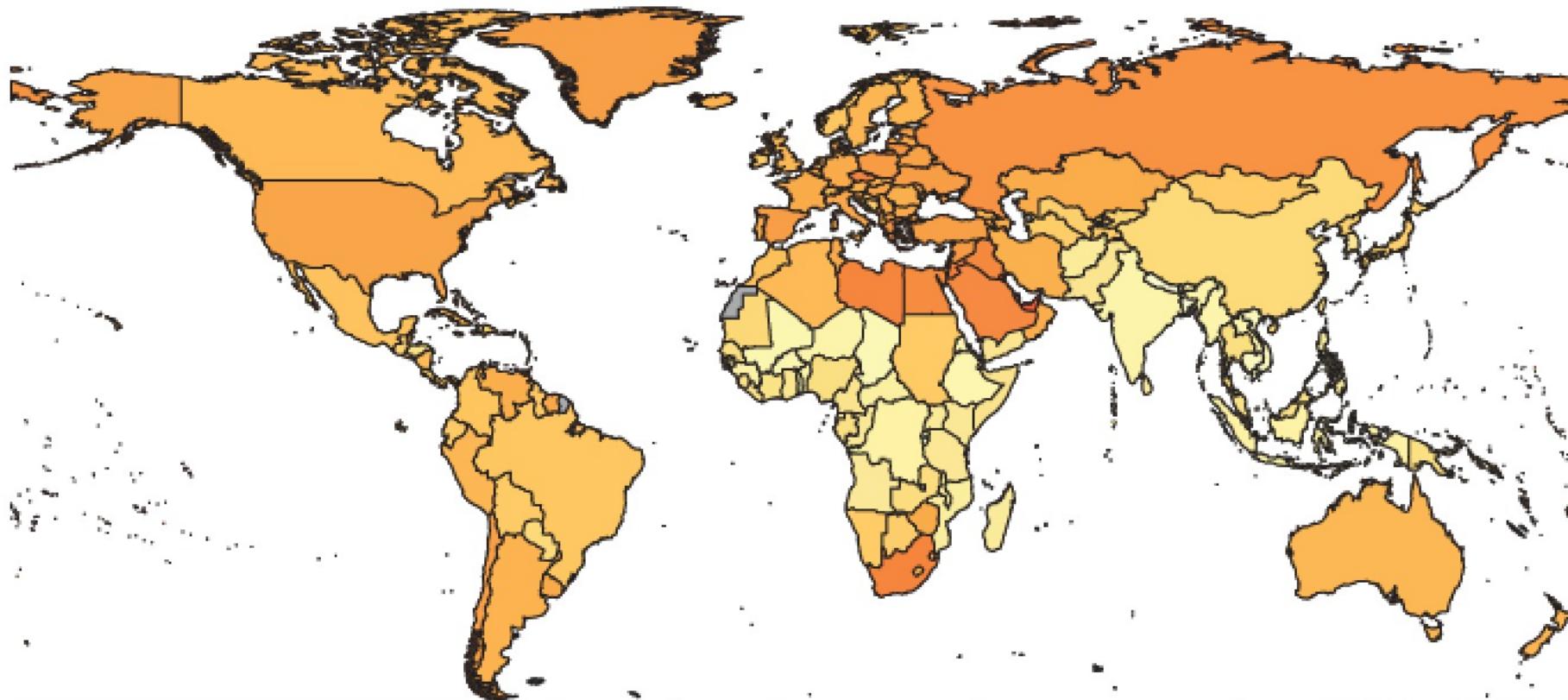
Age-Standardized mean BMI in Men by Country in 2014

2014



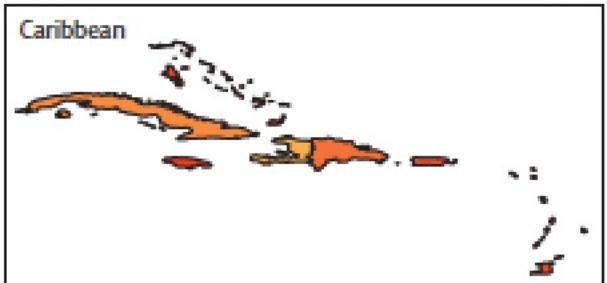
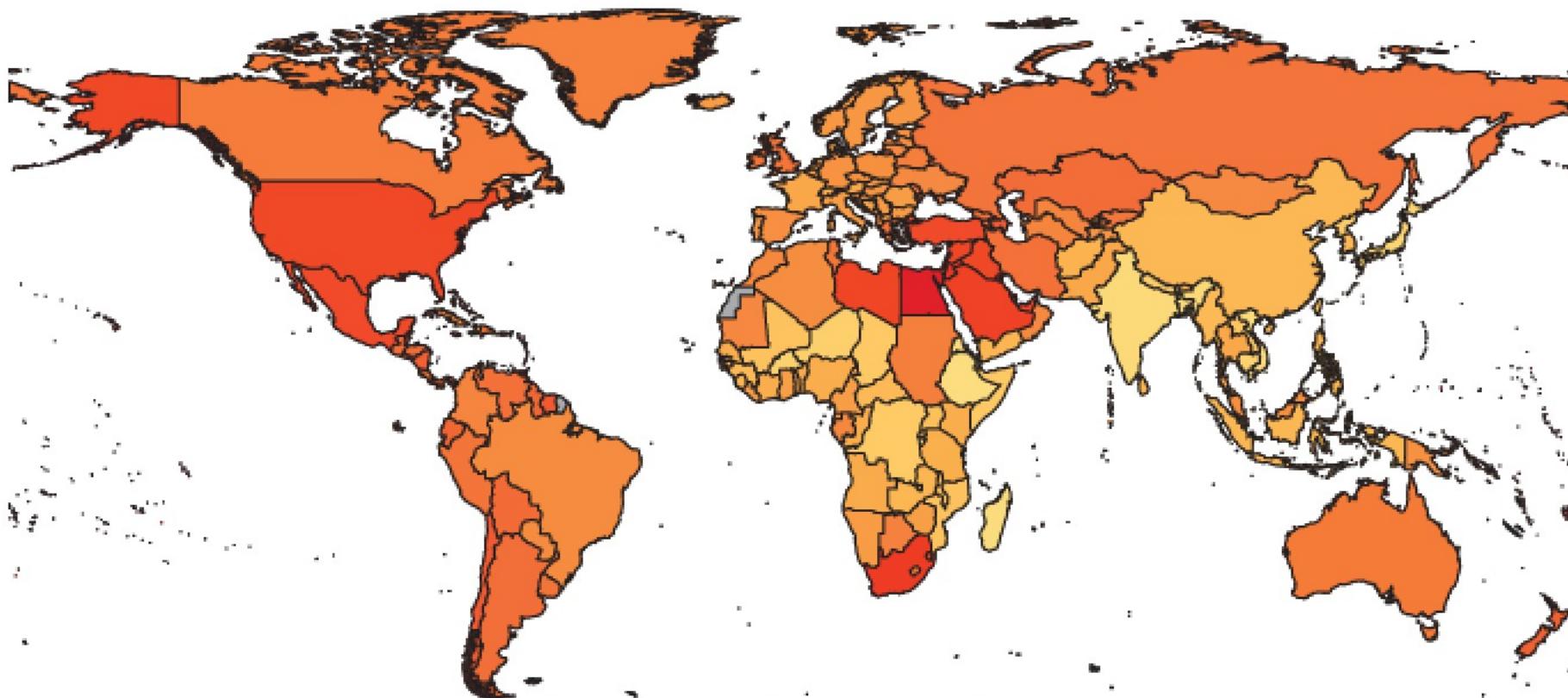
Age-Standardized mean BMI in Women by Country in 1975

1975

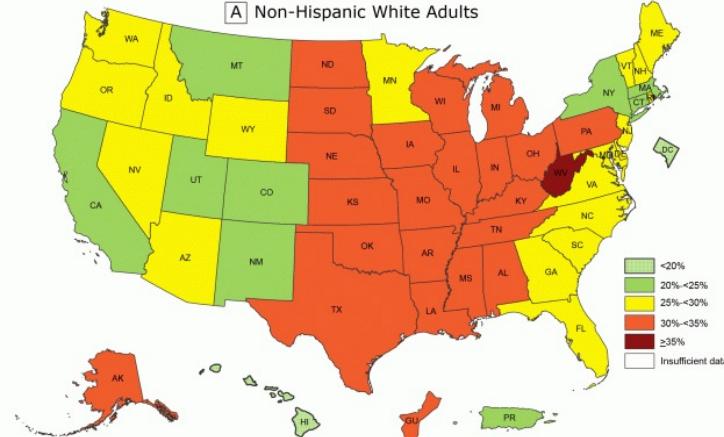


Age-Standardized mean BMI in Women by Country in 2014

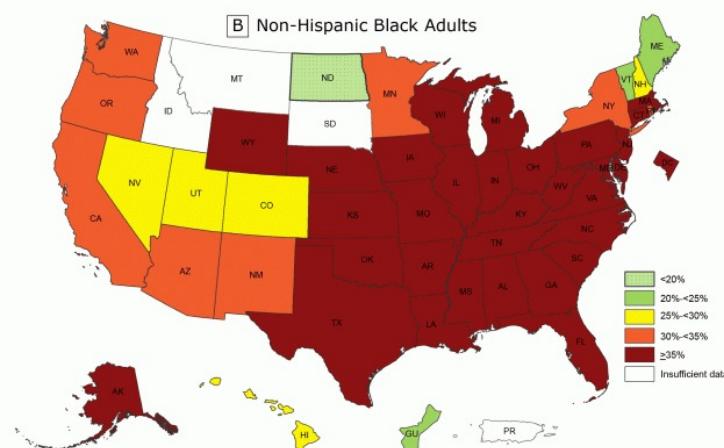
2014



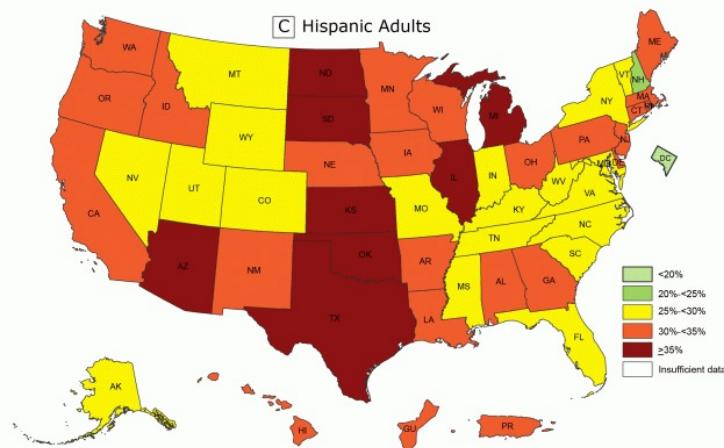
A Non-Hispanic White Adults



B Non-Hispanic Black Adults



C Hispanic Adults

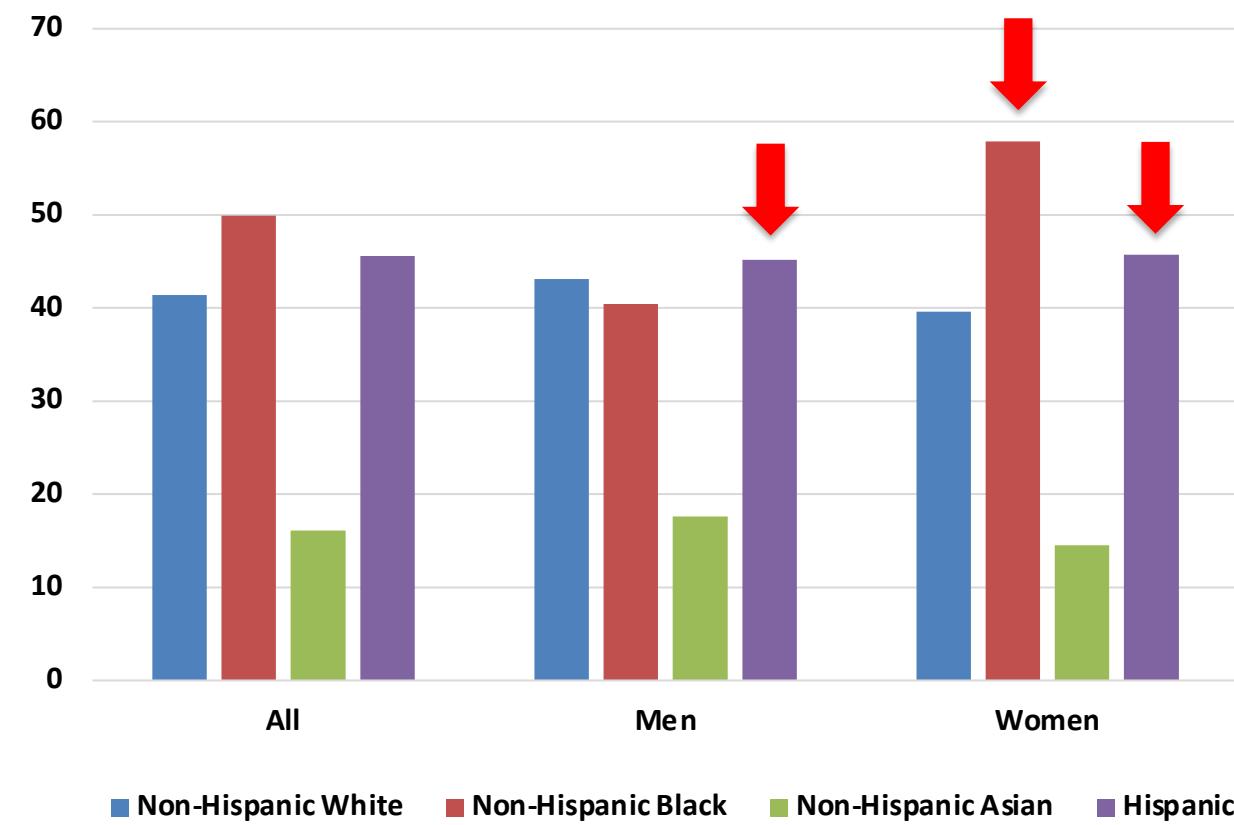


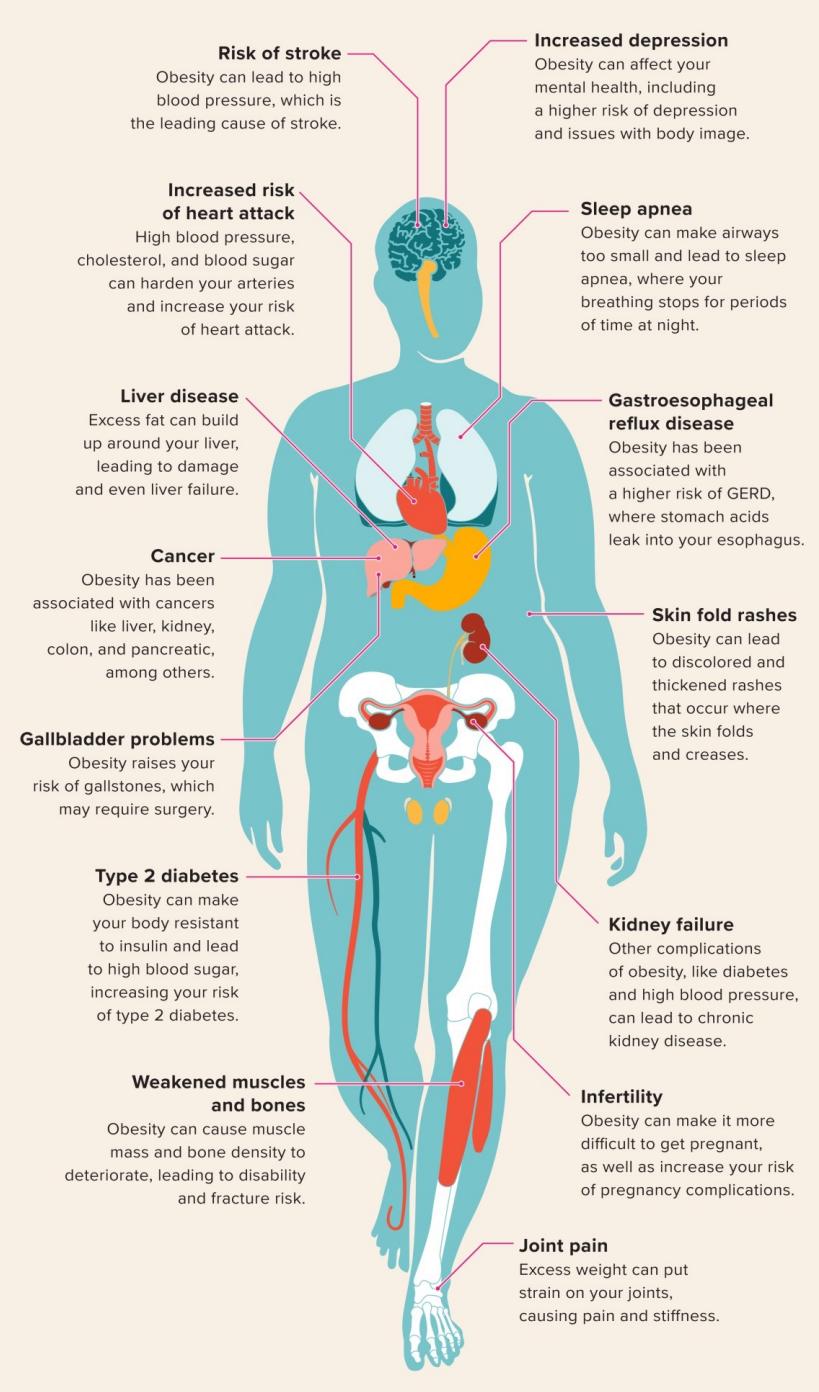
8 states

1 state

31 state

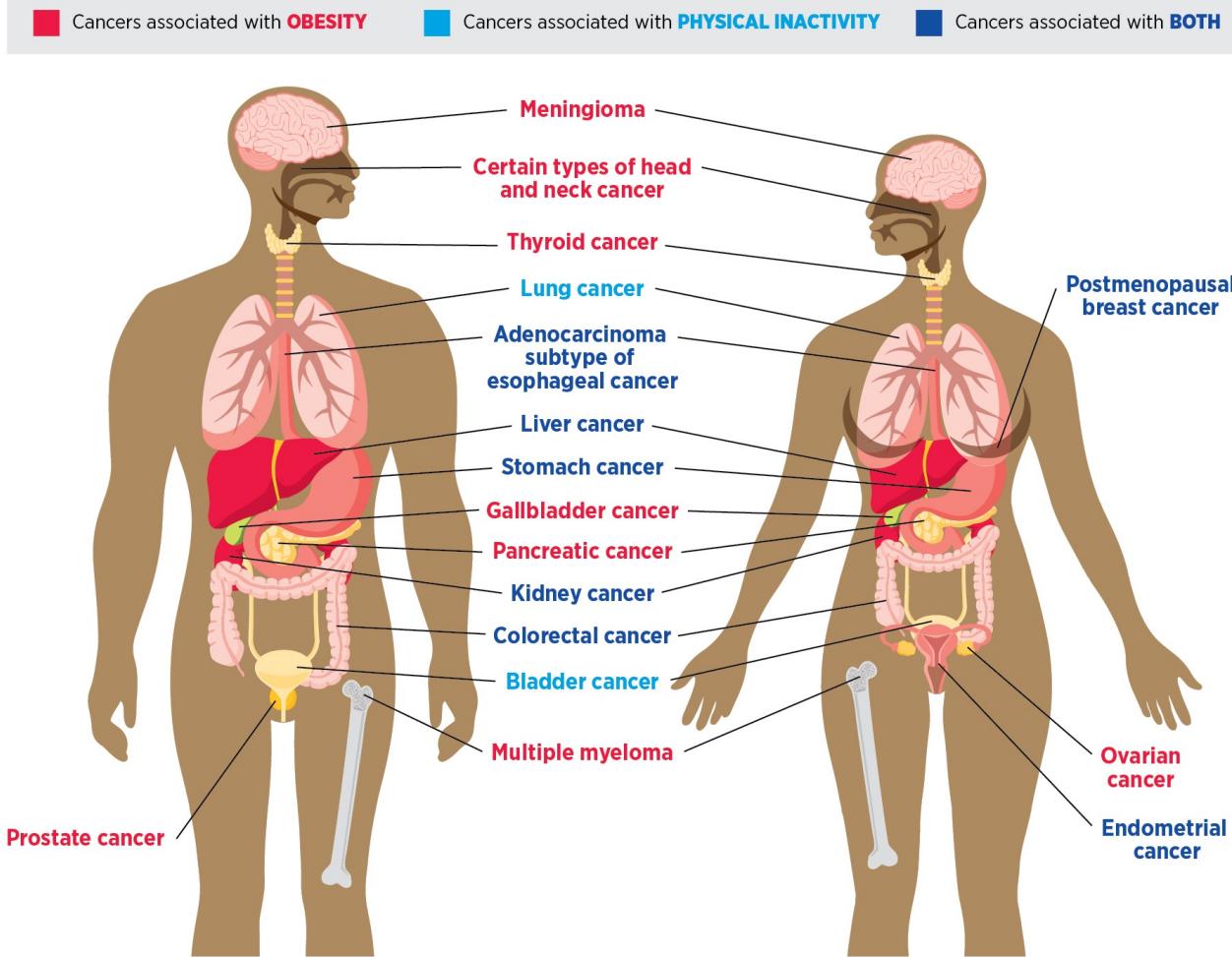
Obesity by race/ethnicity





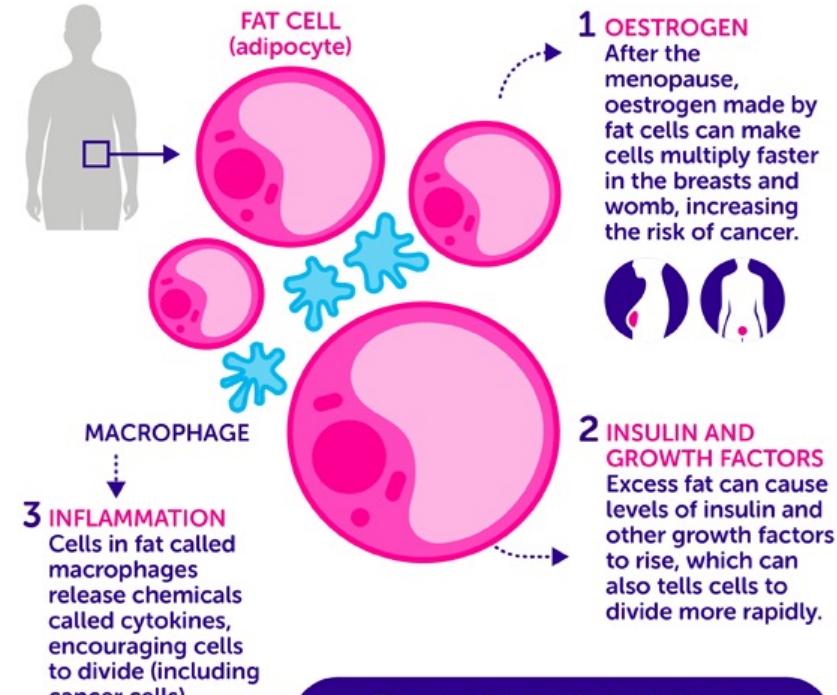
- **Strokes**
- **Heart attacks**
- **Liver disease**
- **Type 2 diabetes**
- **Gallbladder**
- **Muscles and bones issues**
- **Depression**
- **Sleep apnea**
- **Gastroesophageal reflux**
- **Skin rashes**
- **Kidney failure**
- **Infertility**
- **Joint pain**
- **Cancer**
- **MORTALITY**

Obesity and cancer



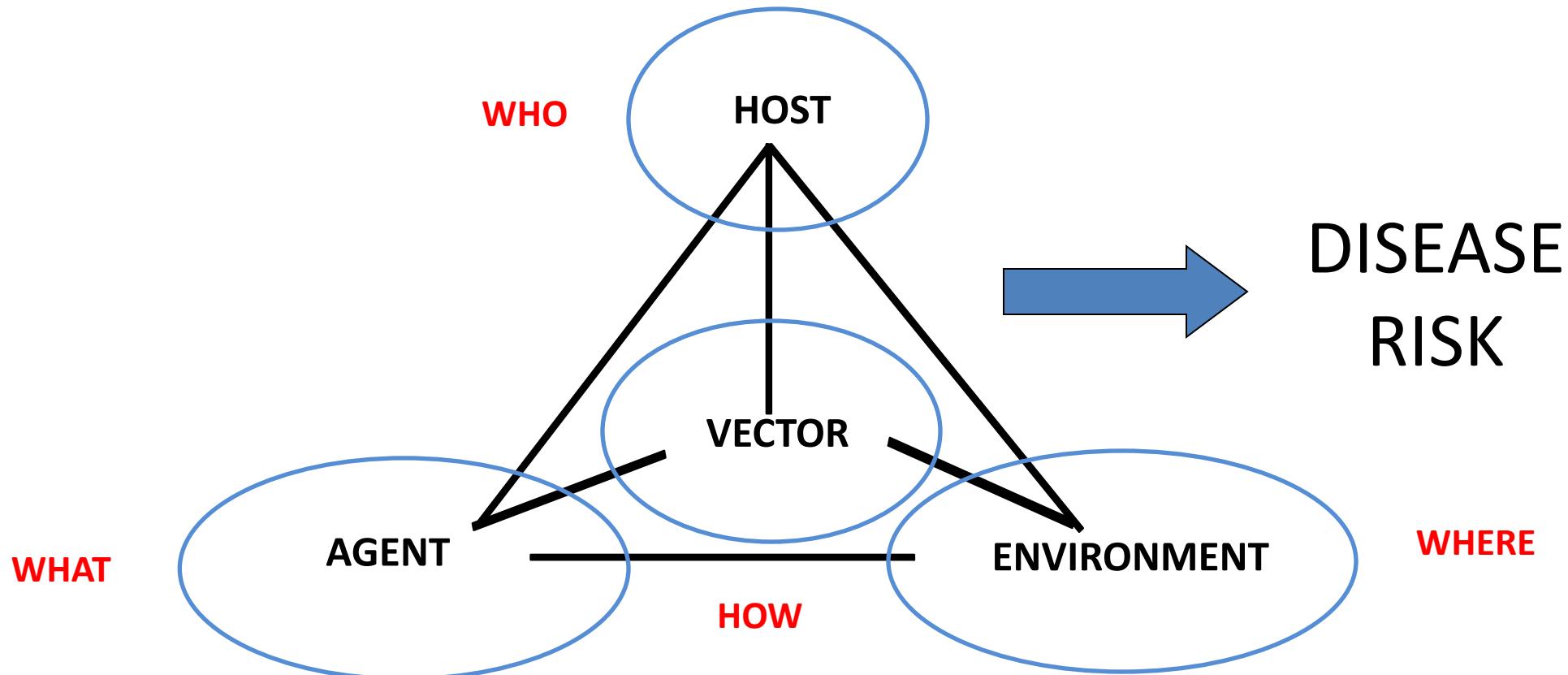
HOW COULD OBESITY LEAD TO CANCER?

Research has identified three main ways

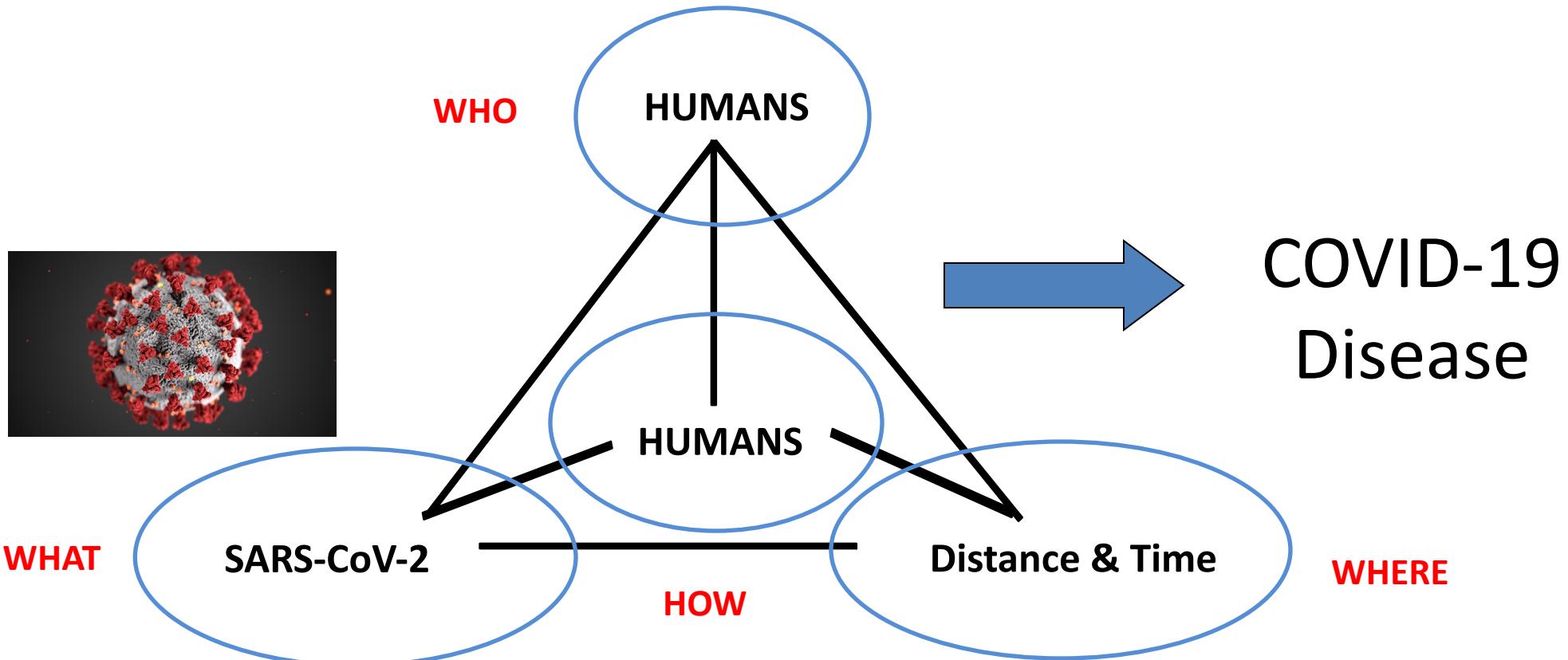


There are other theories too, but these are the main ideas being studied. More research is needed to understand this in more detail.

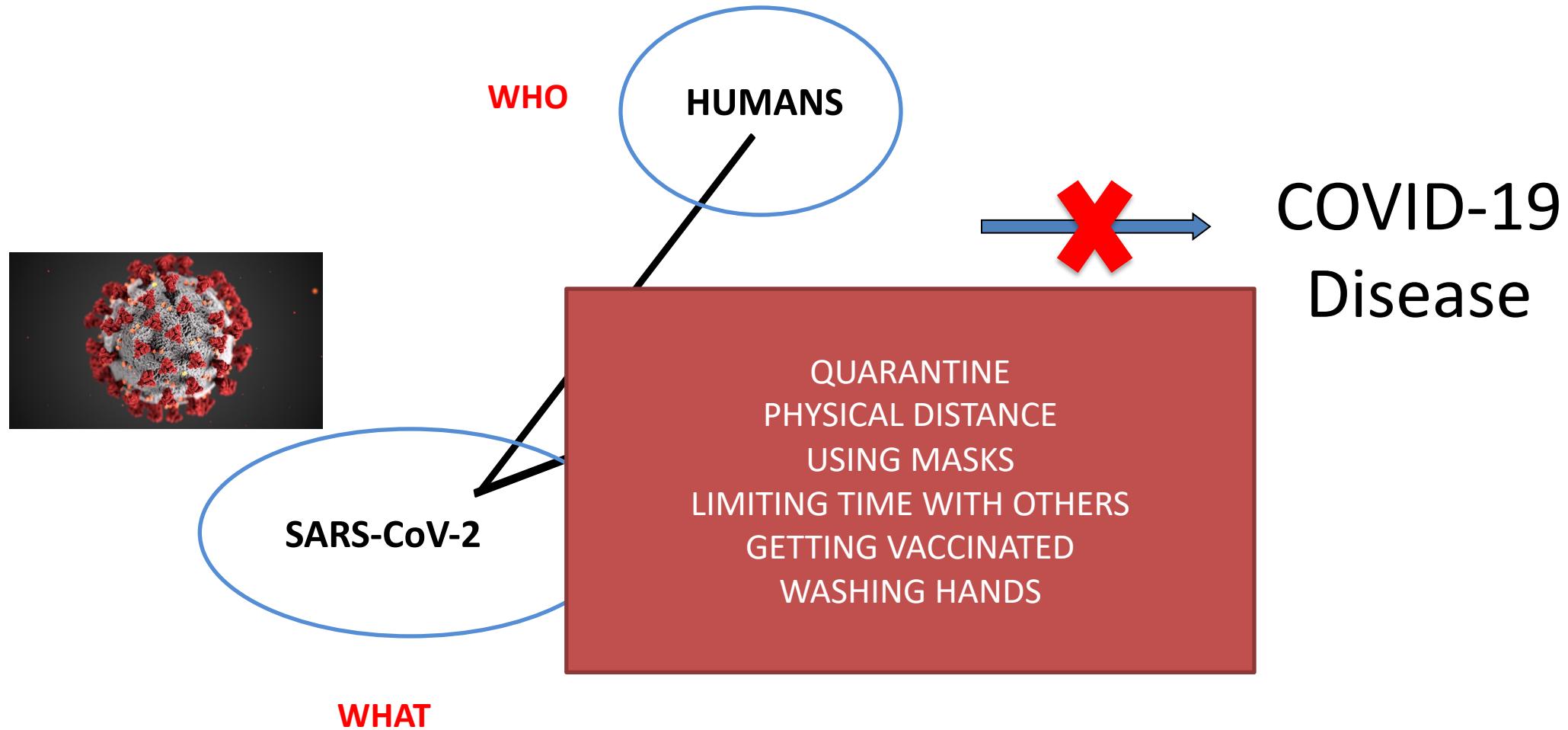
The Epidemiologic Triangle



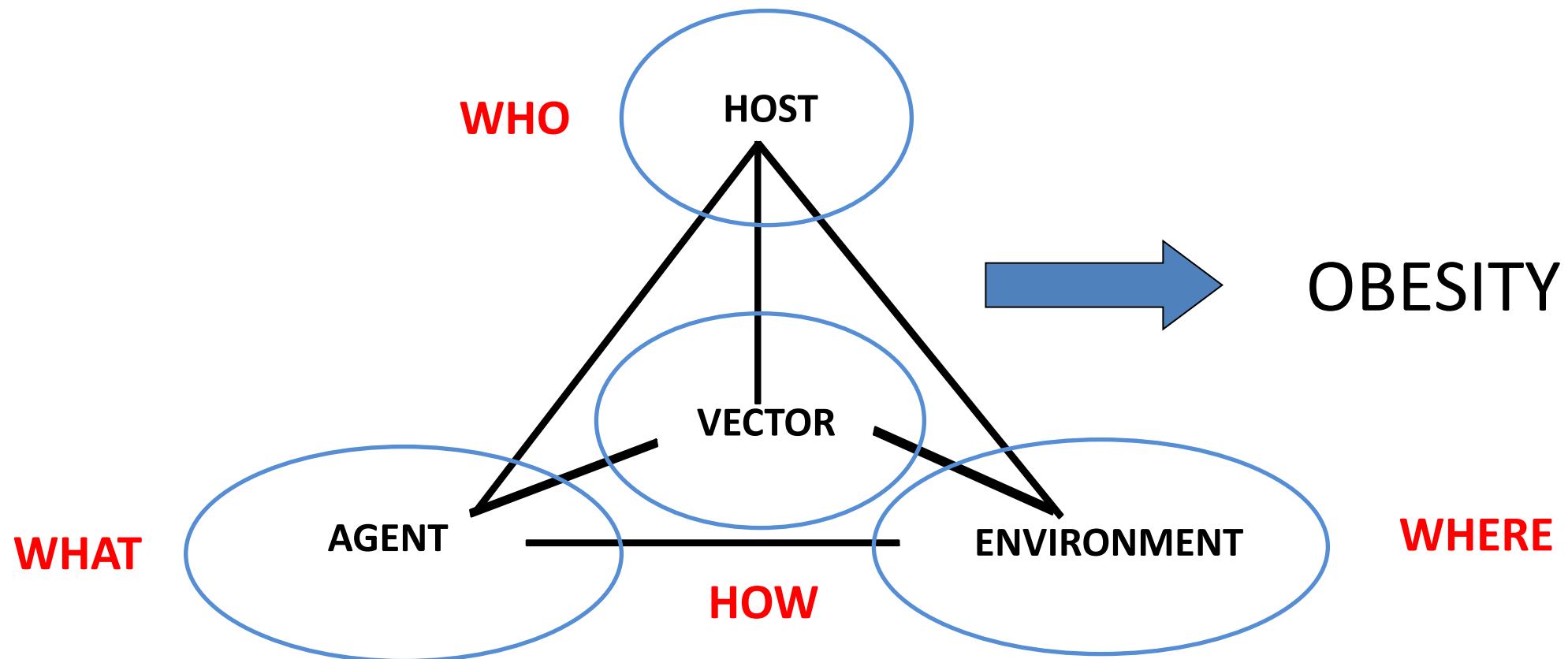
COVID-19



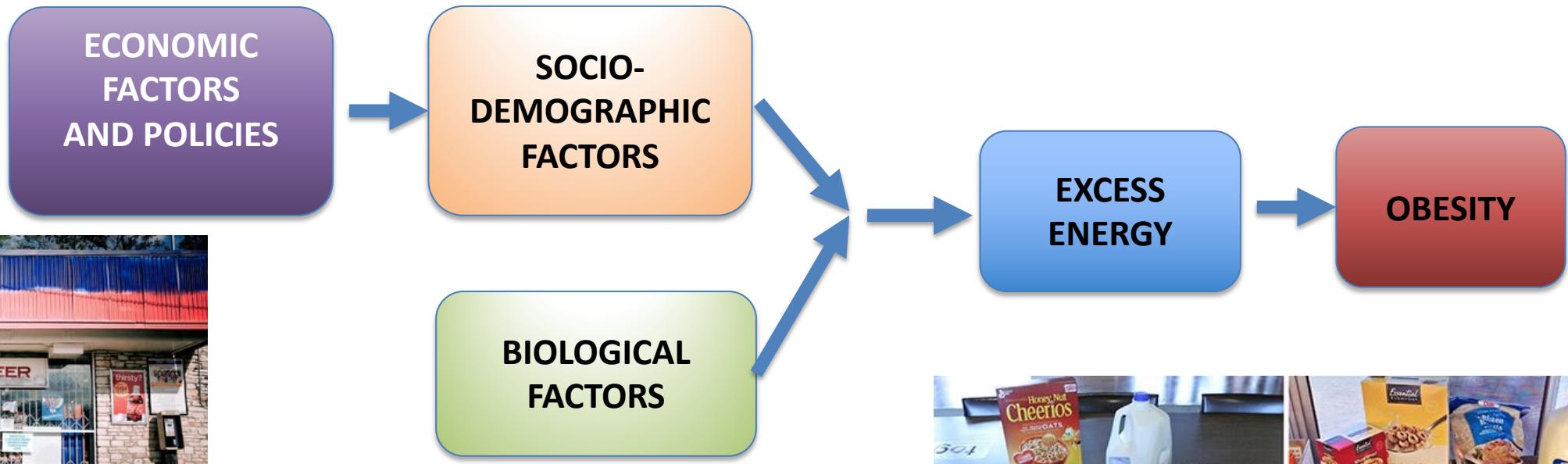
COVID-19



Obesity causes?



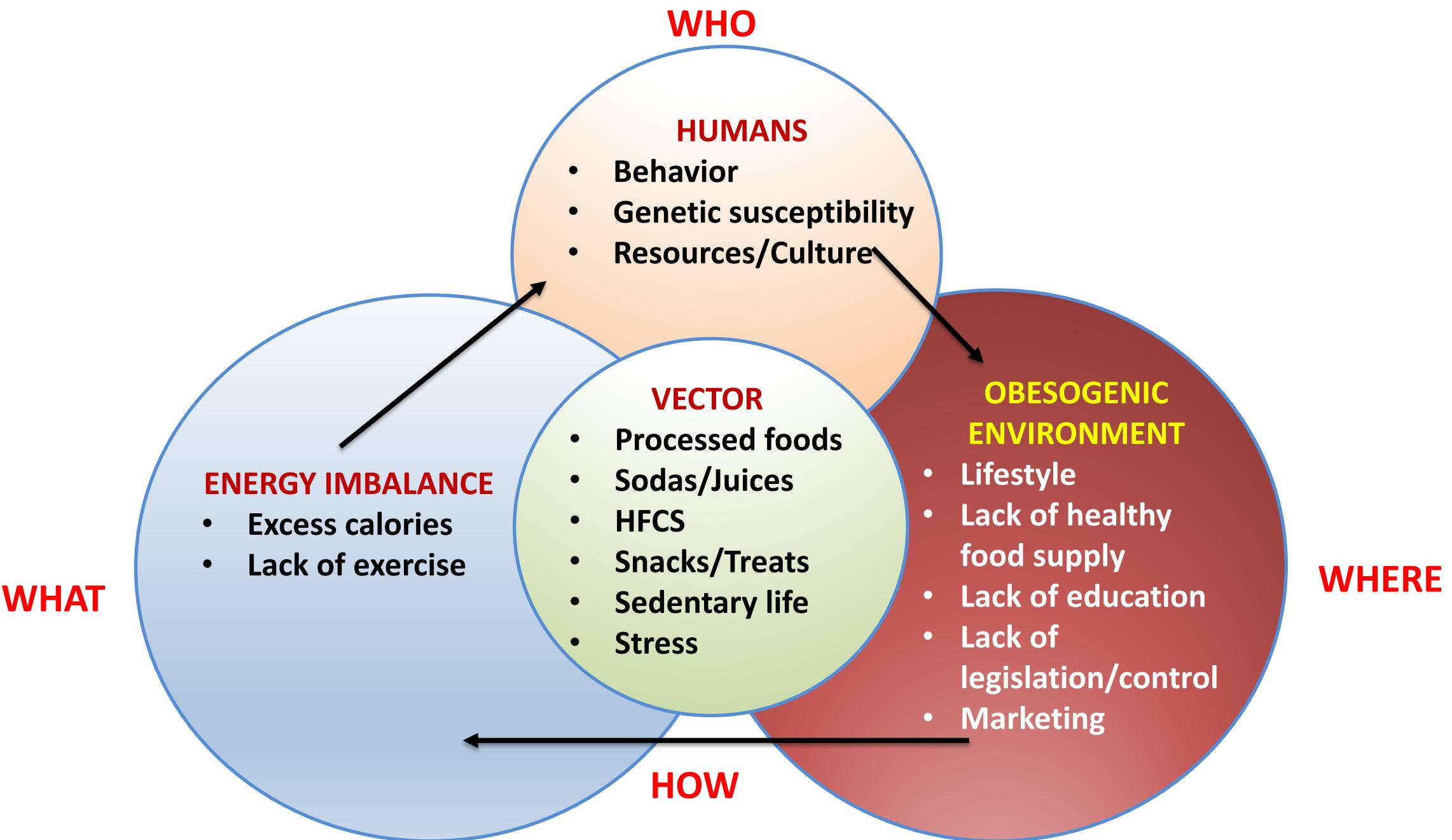
Causes of the obesity epidemic



This is what \$29 will get you at a convenience store.



This is what \$29 will get you at the Twin Cities Mobile Market.

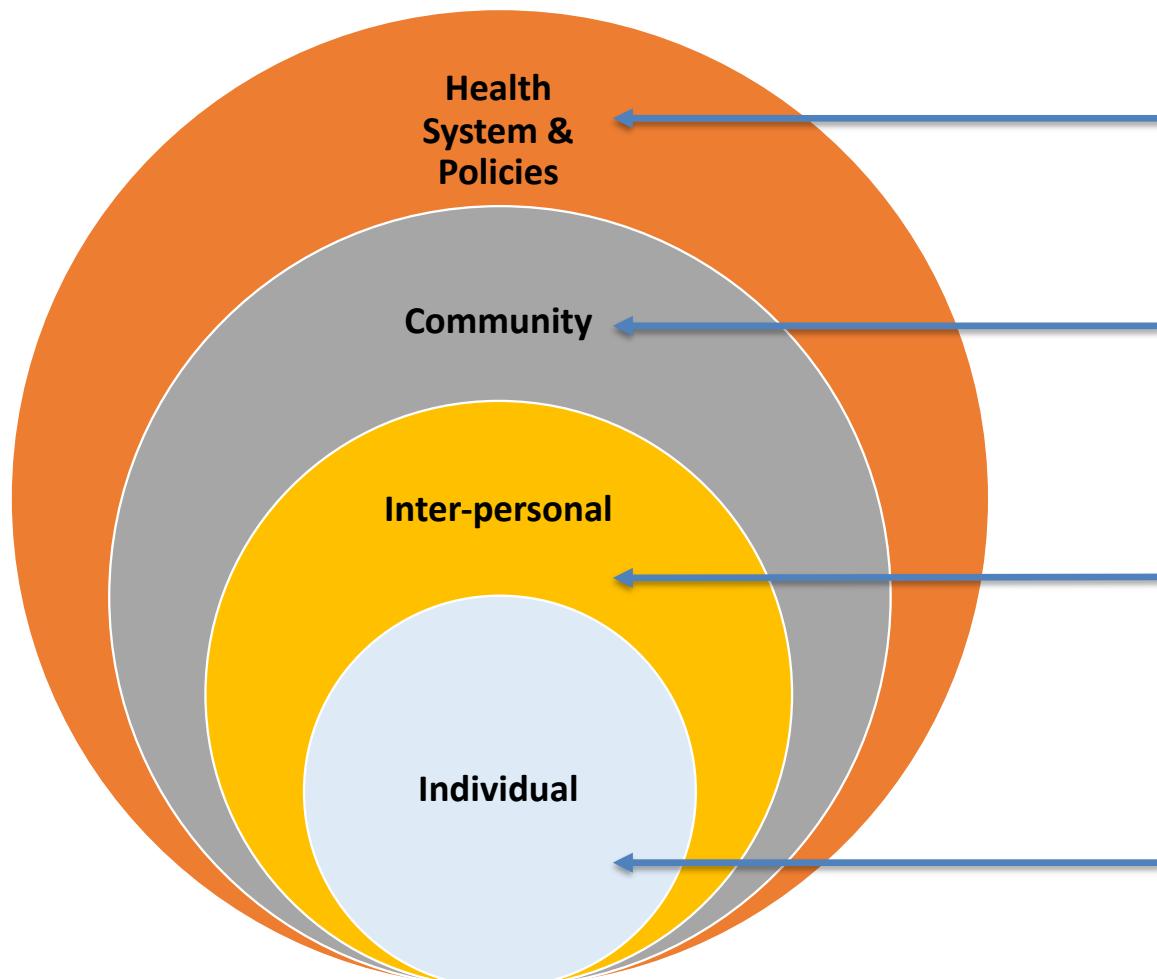


Theoretical Frameworks to Disentangle Causes of Disease

- A collection of interrelated concepts
- Informs what to measure and what relationships to test
- Helps organize thoughts about the determinants of disease/health in populations
- Helps plan effective interventions that will improve health

Socio-Ecological Model

Causal factors are embedded within different levels that influence health



- Stores with healthy foods
- Affordable foods
- Access to parks
- Safe neighborhoods

- Soda tax
- Affordable foods
- Guidelines
- Insurance coverage
- Healthy school lunches
- Benefit cards

- Navigators
- Coaches/sponsors
- Family support
- Community support

- Raise awareness
- Provide programs
- Access to health foods and information
- Exercise programs

**Root causes of cancer health disparities are
multidimensional and multifactorial**

Social Determinants of Health (SDOH)



Social, economic, and physical conditions that can affect individual's health, well-being, and quality of life

Interconnected

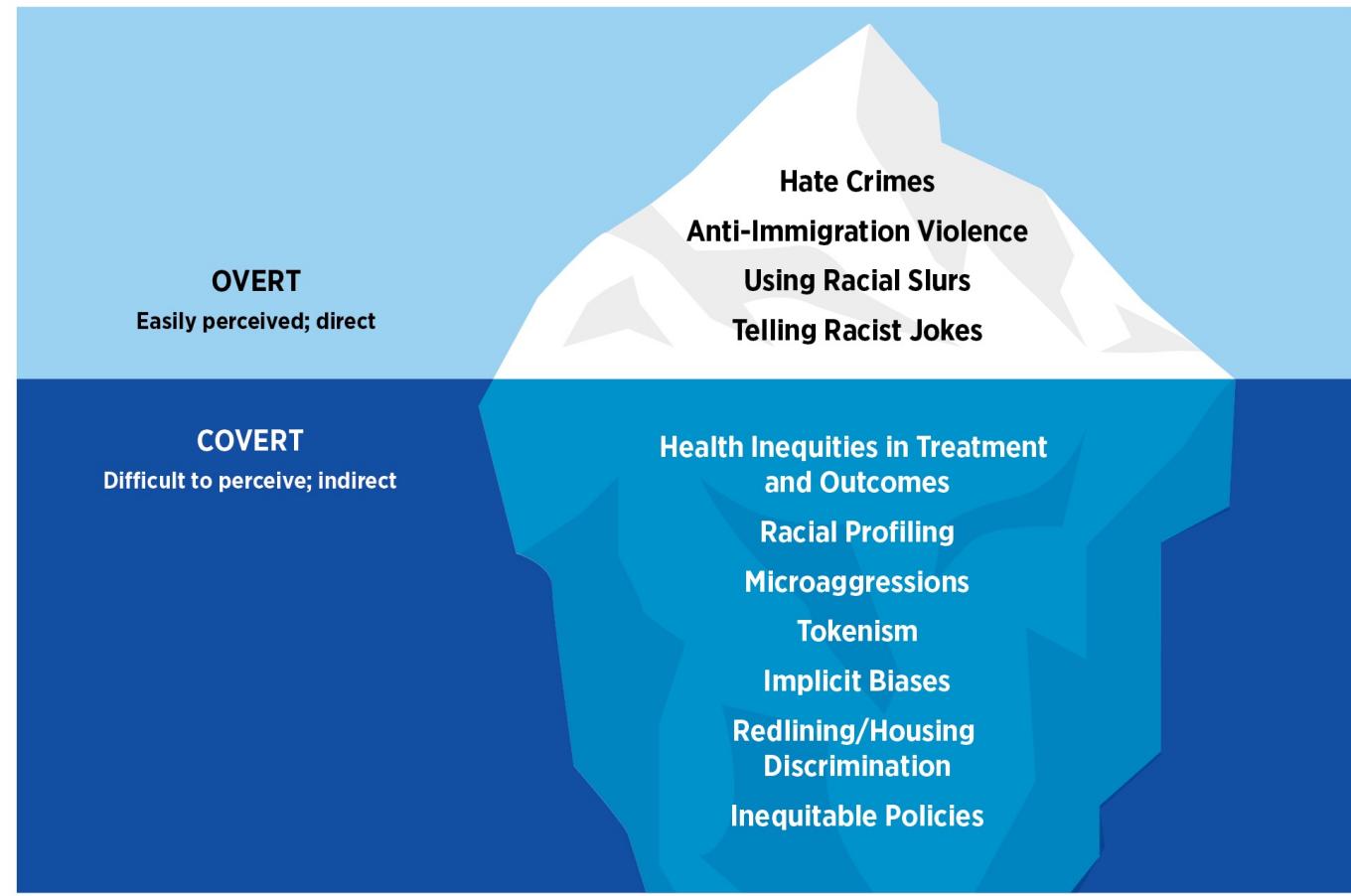
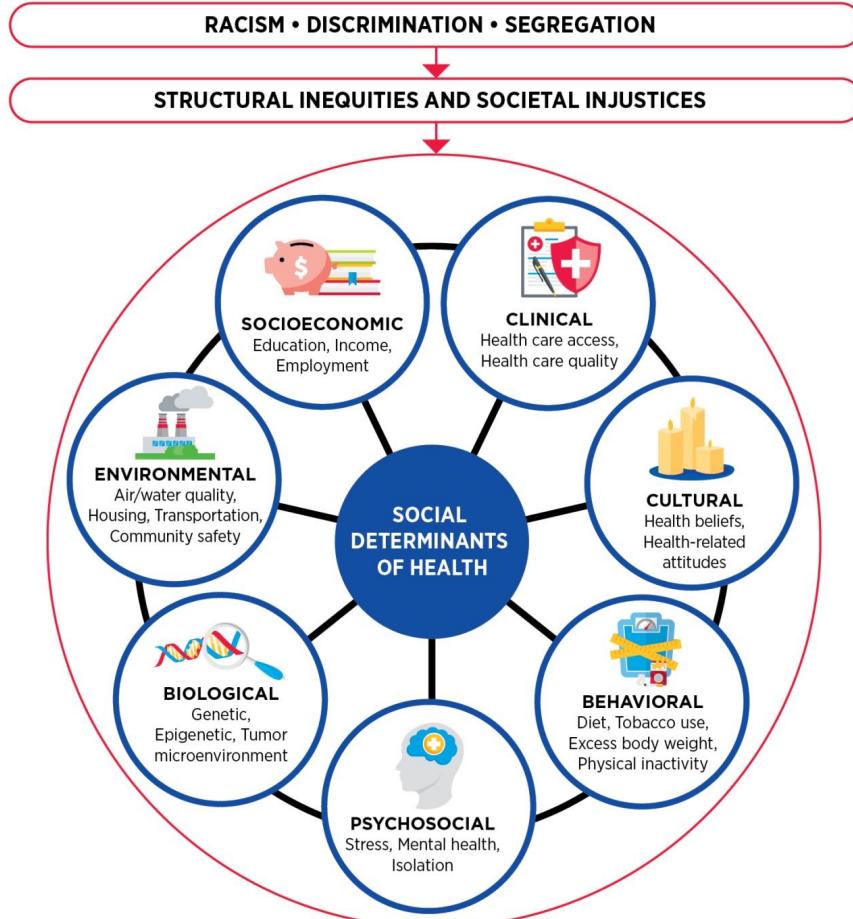
Health Behavior Characteristics in Persistent Poverty Neighborhoods in Los Angeles County

Domain	Description	% (unless otherwise indicated)
		All LAC
CRC Screening (>50-75 (2018))	Average FOBT, sigmoidoscopy or colonoscopy	63.1
	Median FOBT, sigmoidoscopy, or colonoscopy	63.4
Tobacco (>=18 years, 2019)	Average Current smoking	12.1
	Median Current smoking	11.7
Health Insurance	Any Medicaid/ public health insurance coverage	26.5
	No health insurance coverage	9.7
Obesity (>=18 years, 2019)	Average with obesity	27.1
	Median with obesity	26.7

Data was sourced from CDC Places (2021 Data Release) and were derived from the BRFSS Survey. Original measurement definitions and methodology are available at <https://www.cdc.gov/places/measure-definitions/index.html>.

FIGURE 22

Discrimination Iceberg



Discrimination exists at multiple social levels. Hate crimes and other overt acts are the tip of the discrimination iceberg as they are easily seen. More subtle acts of discrimination, such as stereotyping groups and treating

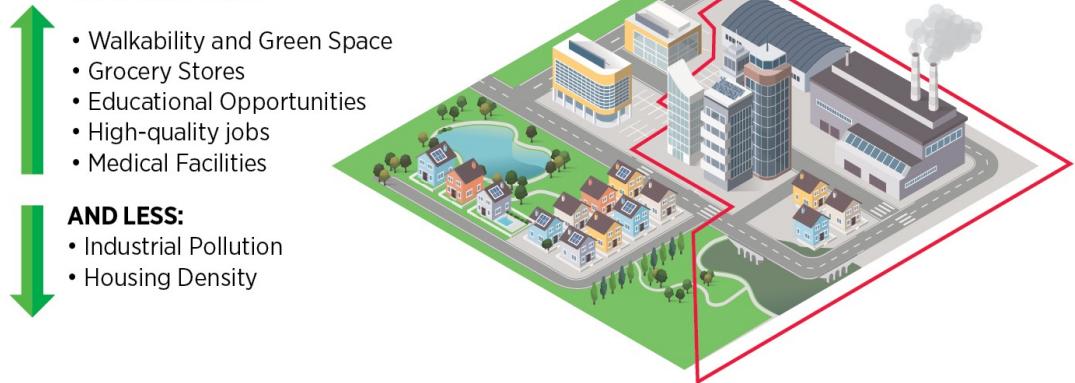
a particular group with less respect, are difficult to discern and are below the waterline. The base of the iceberg represents structural racism, which is an underlying cause of health disparities.

FIGURE 23

How Redlining Underlies Cancer Disparities

**"SAFEST"
NEIGHBORHOODS
NOW HAVE MORE:**

- Walkability and Green Space
- Grocery Stores
- Educational Opportunities
- High-quality jobs
- Medical Facilities



AND LESS:

- Industrial Pollution
- Housing Density

In the 1930's, neighborhoods were classified on how "safe" they were for investment based on the race and ethnicity of residents. This made it harder for racial

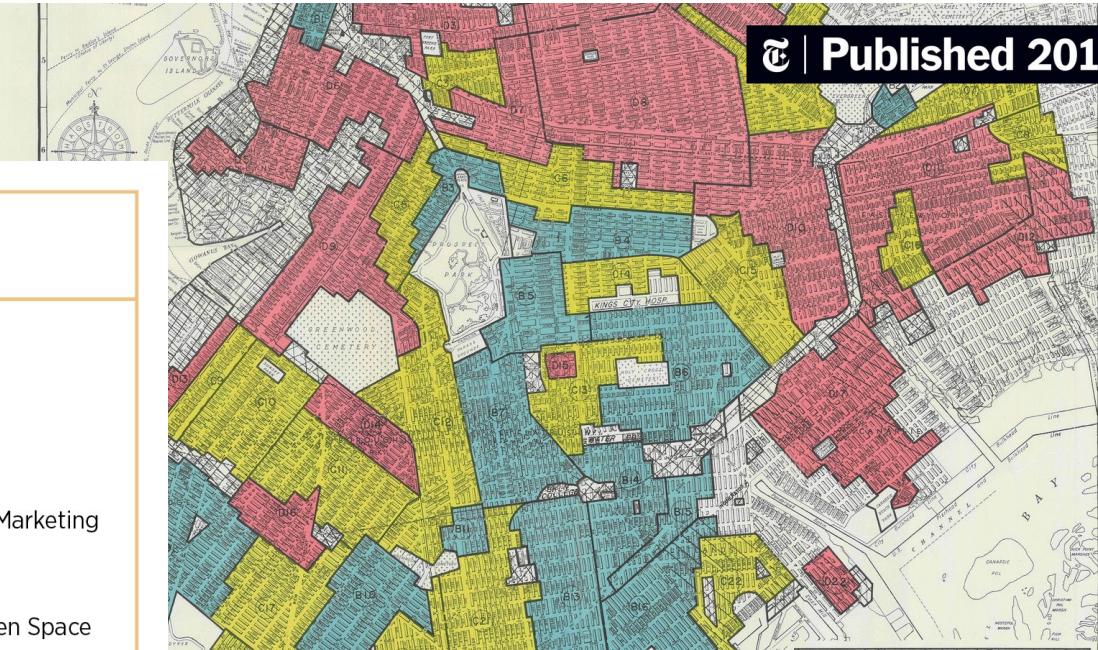
**"HAZARDOUS"
NEIGHBORHOODS
NOW HAVE MORE:**

- Industrial Pollution
- Predatory Tobacco Marketing
- Housing Density

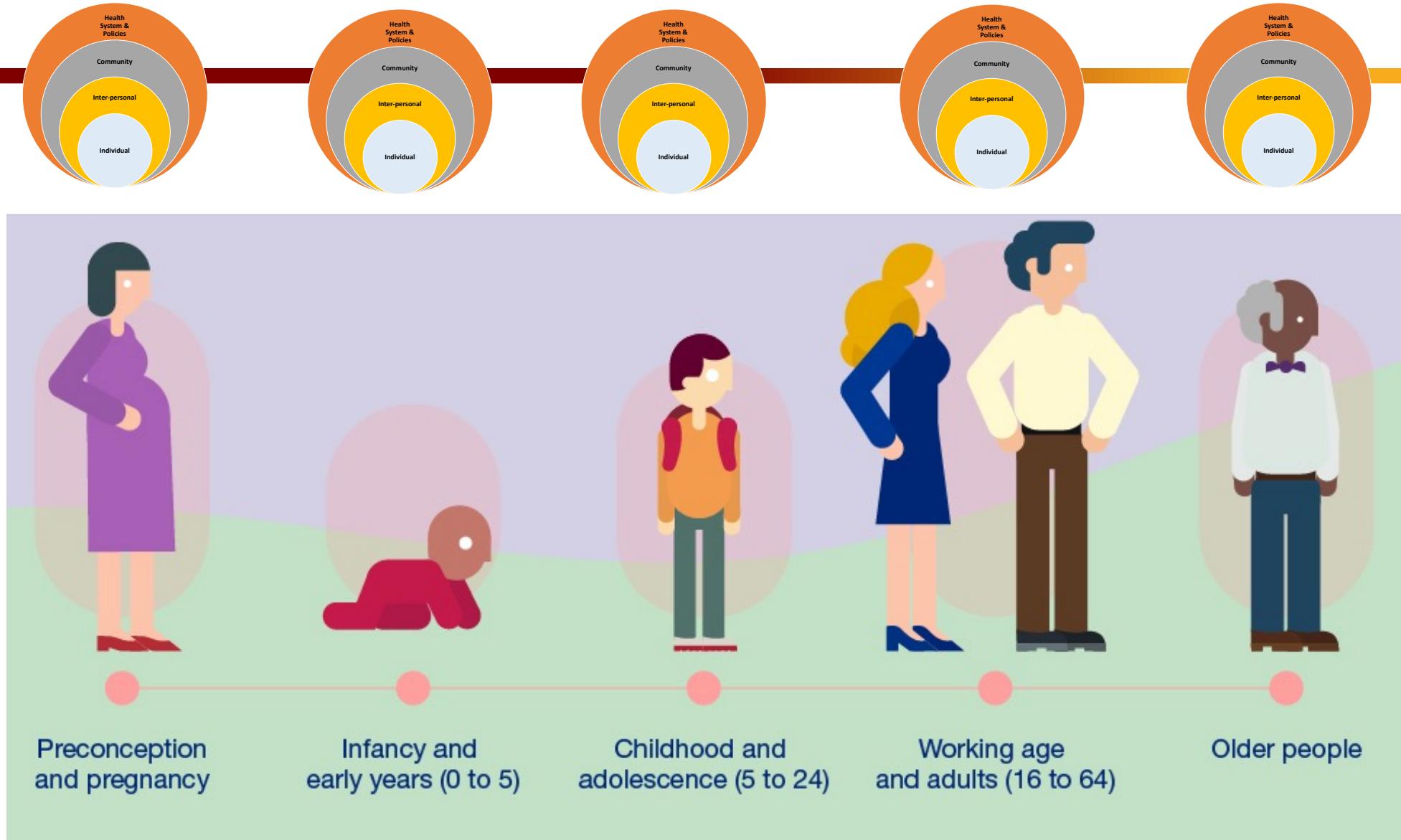
AND LESS:

- Walkability and Green Space
- Grocery Stores
- Educational Opportunities
- High-quality jobs
- Medical Facilities

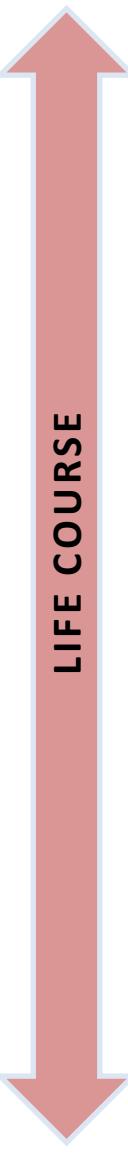
and ethnic minorities to receive mortgages in order to buy homes and has led to numerous inequalities in educational, economic, and health outcomes.



Lifecourse Framework



Interventions to reduce exposure to tobacco



Eco-Social Levels	Individual	Family	Social network	Neighborhood physicians/healthcare system	Neighborhood	City
Perinatal	Quit program & counseling (mother)	Smoke free homes/ family support	Pregnant women support group	Quit programs for pregnant smokers	Smoke free norms/spaces	City clean air acts/smoke free norms
Infancy & Childhood	Well-baby visits	Smoke free home	Healthy peer activities/Non-smoker network	Pediatric visits Smoking prevention	Smoke free norms/spaces	City clean air acts/smoke free norms
Adolescence/Young adult (15-24)	Health education Sales restrictions	Smoke free home /support	Peer support for healthy lifestyle/Quitting	Adolescent health visits; guidance on nonsmoking	Smoke free norms/spaces	+City supported cessation options
Adulthood (25+)	Health/lifestyle education Quit programs	Support to quit	Peer support to quit/health lifestyle	Guidance and referrals to quit programs	Community based cessation options	+City supported cessation options

National Institute on Minority Health and Health Disparities

Research Framework

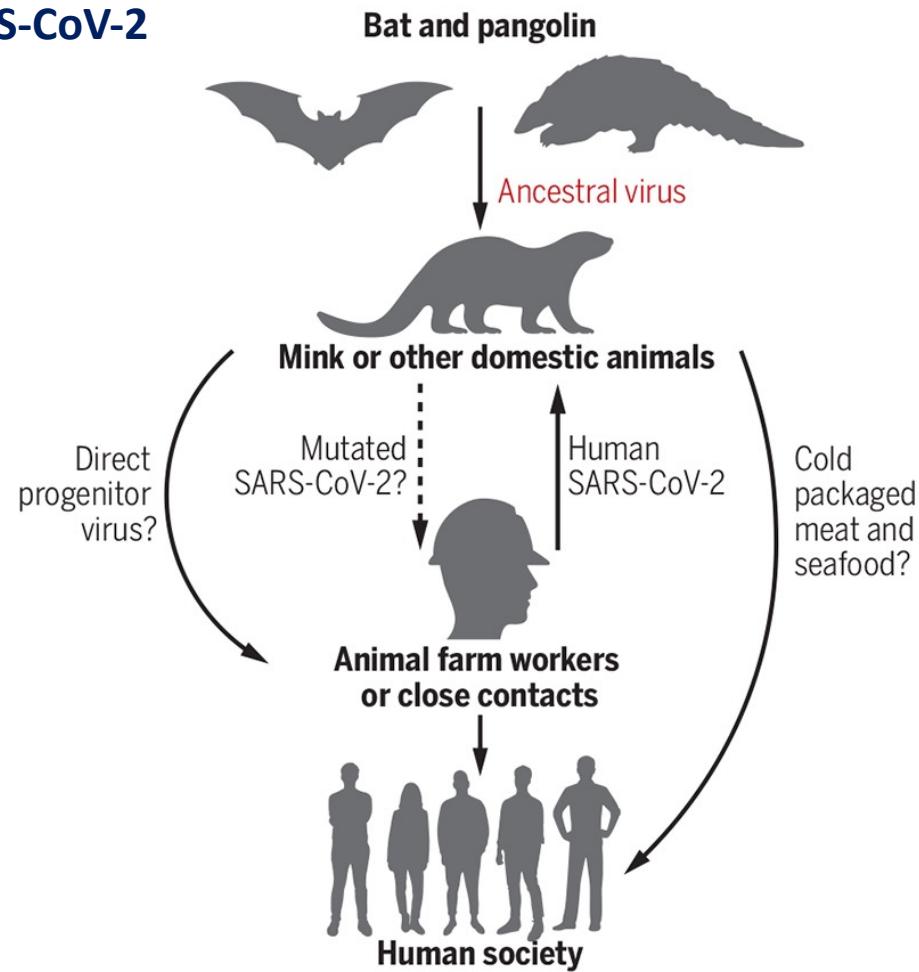
		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence <i>(Over the Lifecourse)</i>	Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient-Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
	Health Outcomes	 Individual Health	 Family/ Organizational Health	 Community Health	 Population Health

One Health

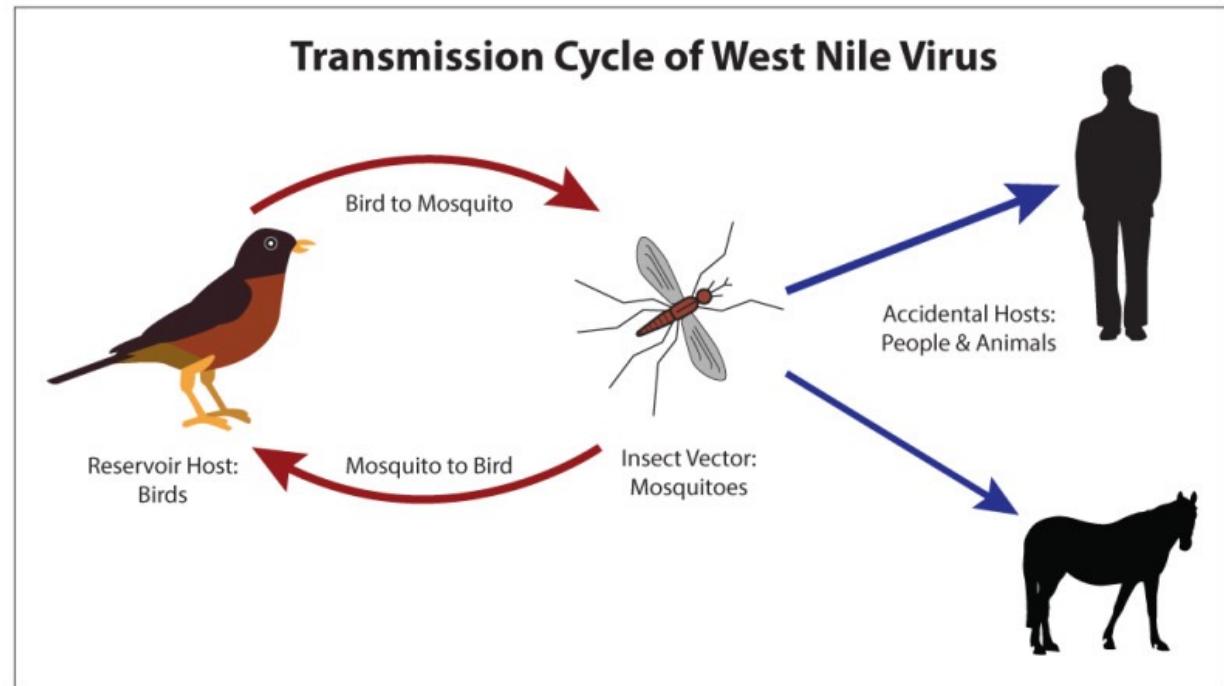


Zoonotic Transmission Chains

SARS-CoV-2



Transmission Cycle of West Nile Virus



CDC



National Institute on Minority Health and Health Disparities

Research Framework

	Levels of Influence*				
	Individual	Interpersonal	Community	Societal	
Domains of Influence (Over the Lifecourse)	Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient-Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes	Individual Health	Family/ Organizational Health	Community Health	Population Health	

Climate change impacts

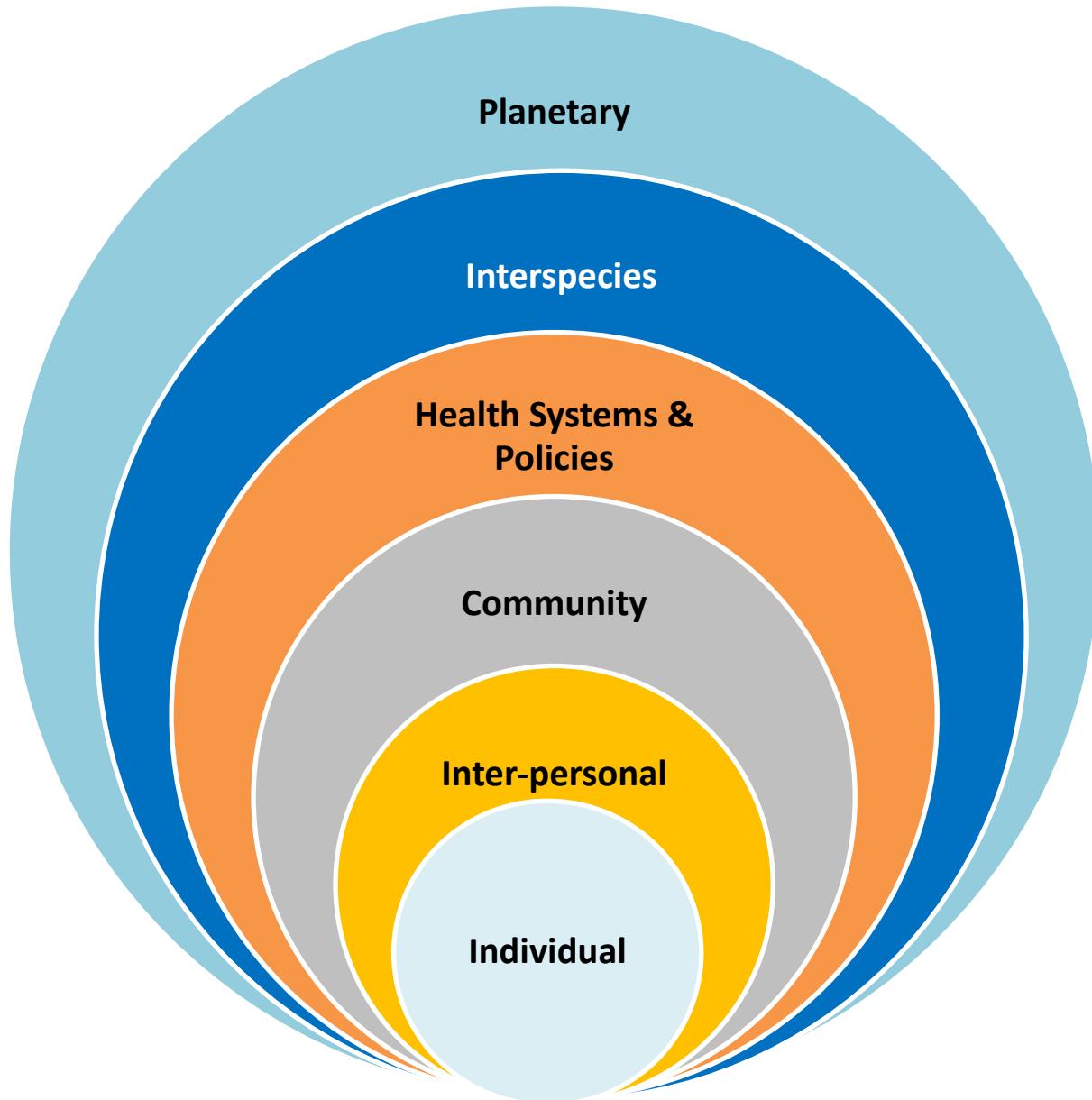
- Changes in temperature (pathogen growth, survival, virulence)
- Food scarcity diet shifts
- Water scarcity impacts on WASH

Environmental determinants

- Pharmaceutical waste
- Antibiotic residues and pathogen reservoirs
- Heavy metal & biocide use

Role of animals

- Shared bacteria
- Manure runoff & mgmt
- Food/Meat production



- Effects of global warming on wildfires
 - Higher smoke exposure
 - Displacement of individuals and animals
- Effects of global warming on disease agents
 - Mosquitos → viruses
 - Mycotoxins
- Exposure to wildlife and livestock
 - SARS transmission
- Antibiotic resistance
 - Sharing antibiotics among families
 - Prescribing practices
 - Occupational exposures

The Human Ecosystem*						
Domains of Influence	Levels of Influence					
	Individual	Interpersonal	Community	Societal	Interspecies	Planetary
Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure	Shared Pathogenic and Nonpathogenic Microbes	Pathogen Reservoirs Climate Change
Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws	Pet Ownership Dietary Practices	Policies and Laws Global Trade
Physical/Built Environment	Personal Environment	Household Environment School and Work Environment	Community Environment Community Resources	Societal Structure	Livestock/Wildlife Interactions Land Use/Distribution	Ambient Air Temperature and Pollution Extreme Weather Events Climate Change Effects on Land
Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Network Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination	Cultural Foods & Practices Food/Meat Production Practices	Migration and Mobility Globalization
Healthcare System	Insurance Coverage Health Literacy Treatment Preferences	Patient-Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies	Comparative Medicine Holistic Care Animals as Sentinels	Global Health Conservation Medicine Pharmaceutical Waste Medicine Production
Health Outcomes	Individual Health	Family/Organizational Health	Community Health	Population Health	One Health	

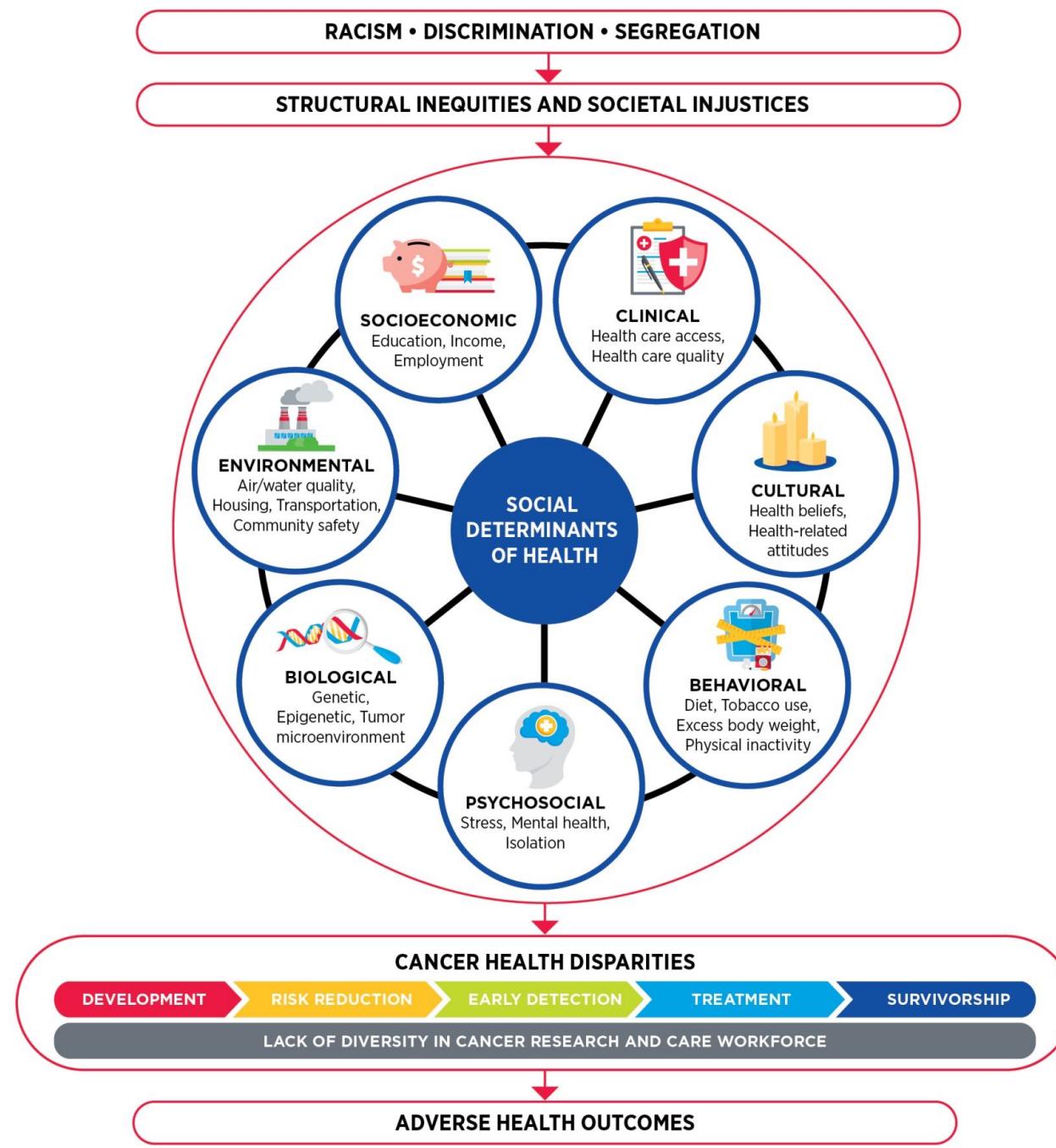


TABLE 1

Cancer Burden Disparities for Racial and Ethnic Minority Groups in the United States*

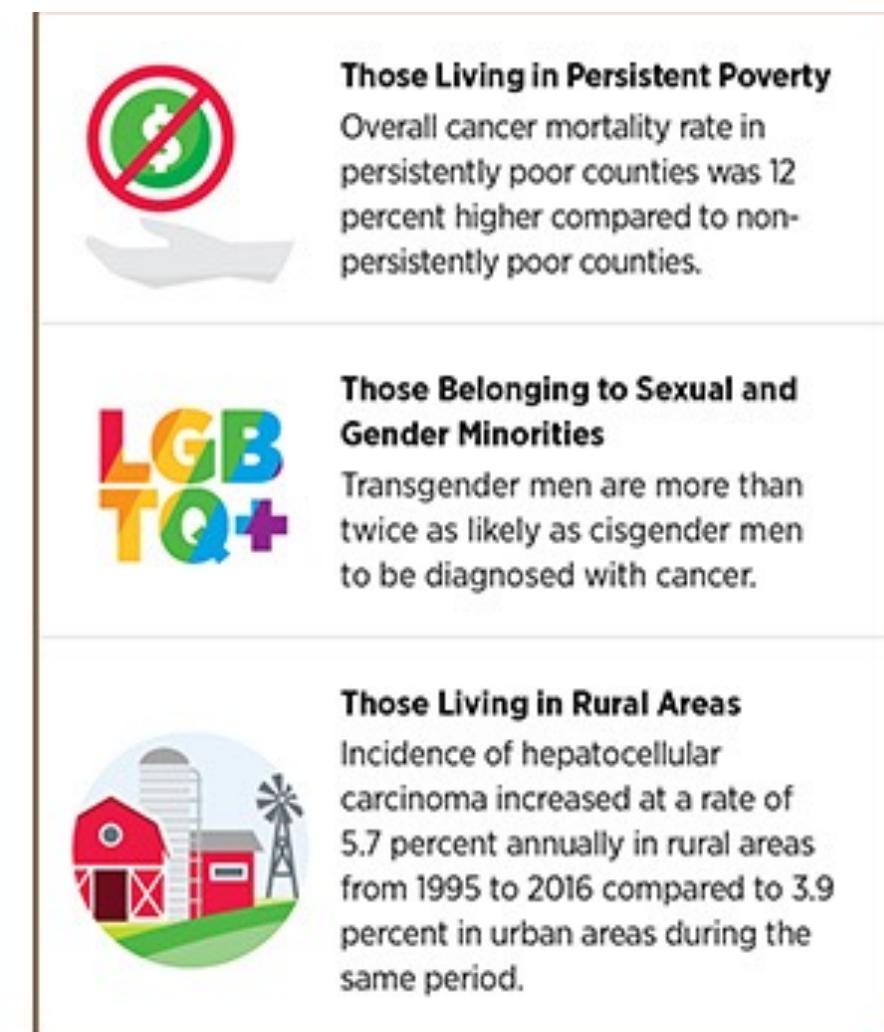
	AI/AN	API§	HISPANIC (ALL RACES)	NHB
Incidence Rate Ratio†				
All Sites	0.73	0.65	0.73	1.00
Breast	0.69	0.77	0.70	1.00
Cervix uteri	1.23	1.02	1.47	1.48
Colon and rectum	0.96	0.82	0.82	1.22
Kidney and renal pelvis	1.20	0.53	0.99	1.13
Liver and intrahepatic bile duct	2.14	2.22	2.03	1.57
Lung and bronchus	0.72	0.58	0.47	1.05
Myeloma	0.97	0.65	1.06	2.29
Prostate	0.55	0.53	0.80	1.50
Stomach	1.64	1.99	1.88	1.93
Thyroid	0.70	0.95	0.84	0.57
Mortality Rate Ratio#				
All Sites	0.90	0.64	0.78	1.22
Breast	0.82	0.53	0.71	1.39
Cervix uteri	1.45	1.05	1.20	2.26
Colon and rectum	1.03	0.72	0.81	1.37
Kidney and renal pelvis	1.46	0.50	1.02	1.22
Liver and intrahepatic bile duct	2.31	2.18	2.10	1.65
Lung and bronchus	0.77	0.56	0.47	1.10
Myeloma	1.07	0.64	1.10	2.35
Prostate	0.81	0.55	0.89	1.90
Stomach	1.86	1.90	1.91	2.01
Thyroid	1.10	1.02	1.13	1.03

* Source: NCI Surveillance Epidemiology, and End Results Program SEER*Stat Database. Incidence and mortality data were analyzed using the Surveillance Research Program, National Cancer Institute SEER*Stat software. Data are shown as rate ratios between the White population and population groups shown in columns. Rates are per 100,000 and age-adjusted to the 2000 U.S. population. Rows indicate all cancer sites combined or individual cancer types. NHB, non-Hispanic Black; AI/AN, American Indian or Alaska Native; API, Asian or Pacific Islander.

§ Aggregated cancer mortality and incidence data are shown for Asian and Pacific Islander population here. See Tables 2 and 3 for disaggregated data for the population groups.

† Incidence rate ratio data shown are for 2018, the most recent year for which such data are available.

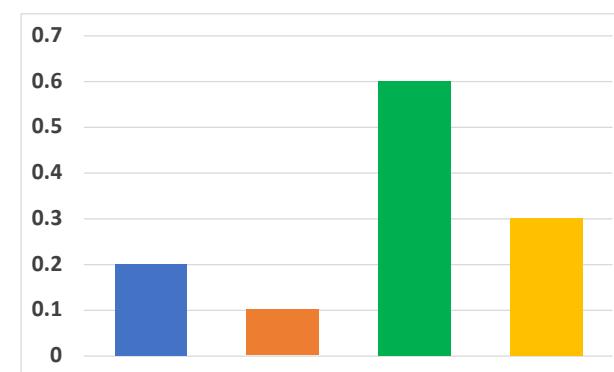
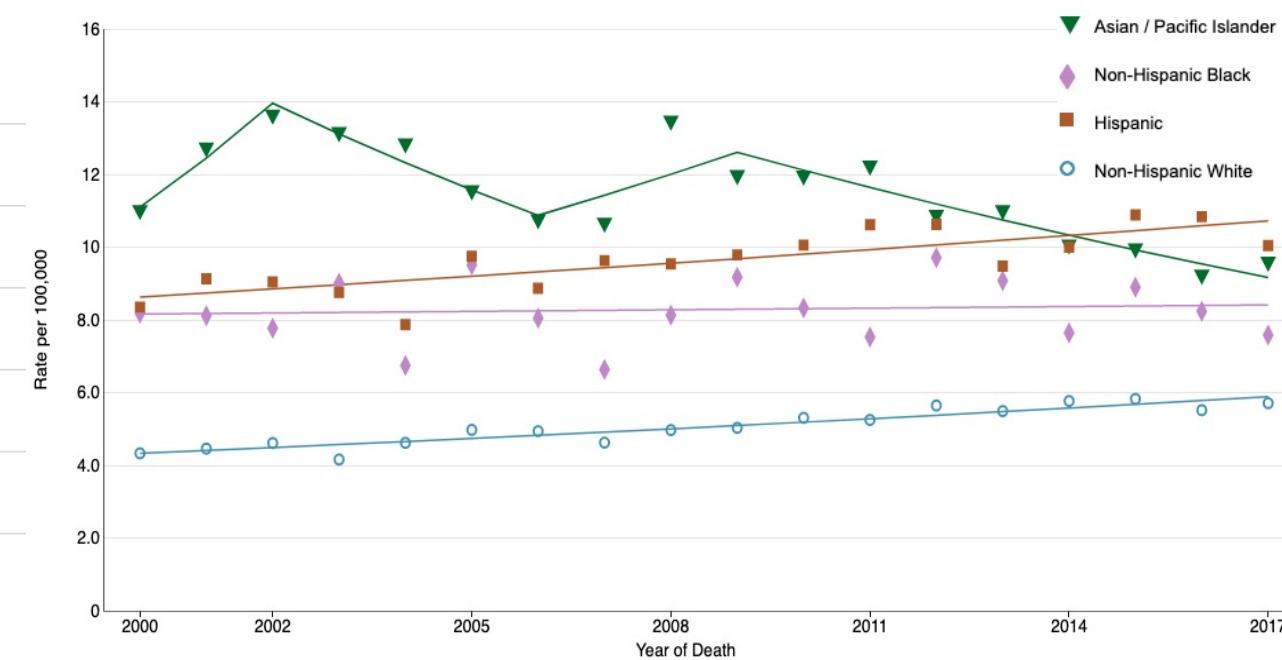
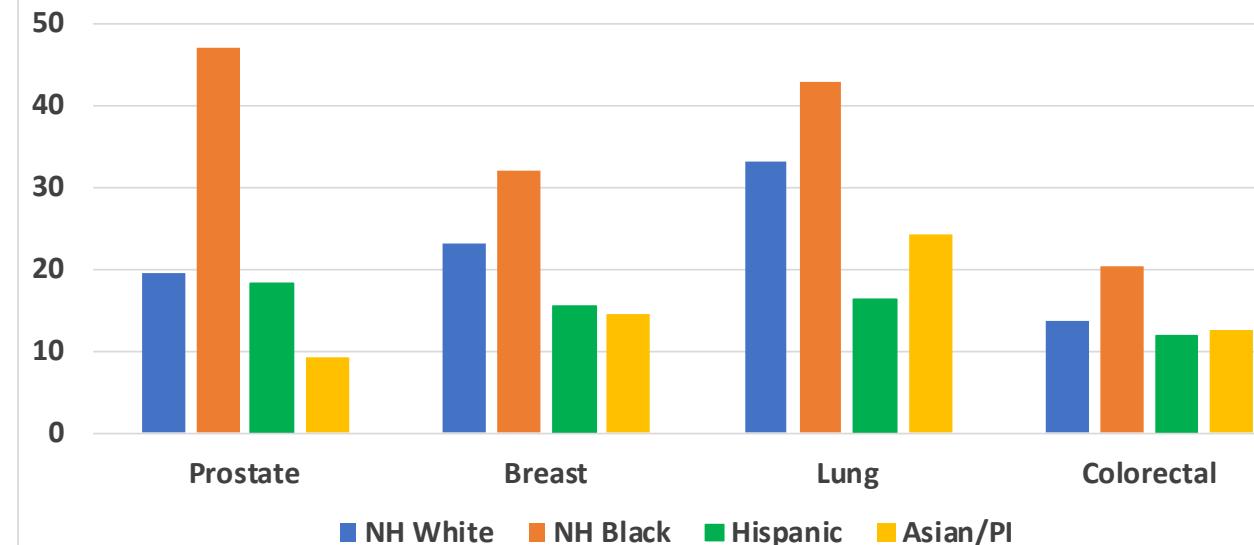
Mortality rate ratio data shown are for 2019, the most recent year for which such data are available.



American Association for Cancer Research® (AACR)
Cancer Disparities Progress Report 2022

Disparities in Los Angeles County

Age-adjusted Mortality Rates (per 100,000)
Cancer Surveillance Program, 2011-2017

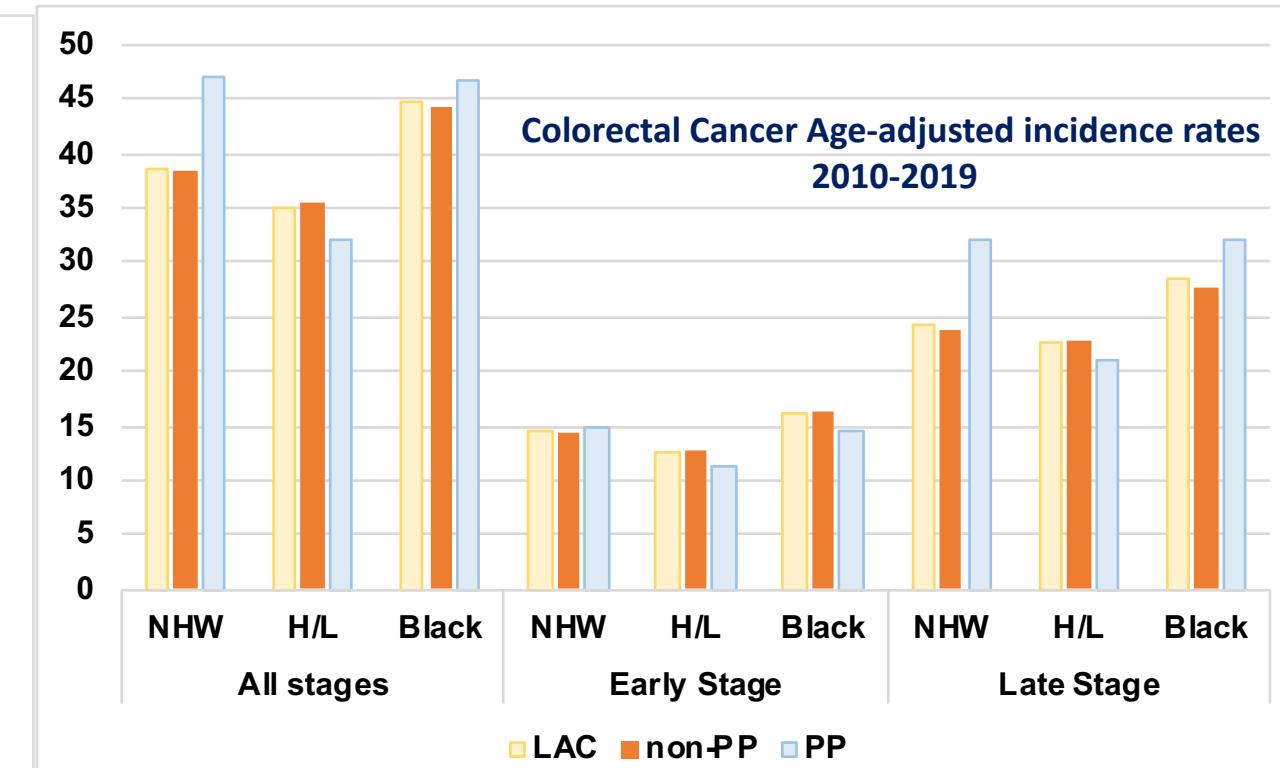
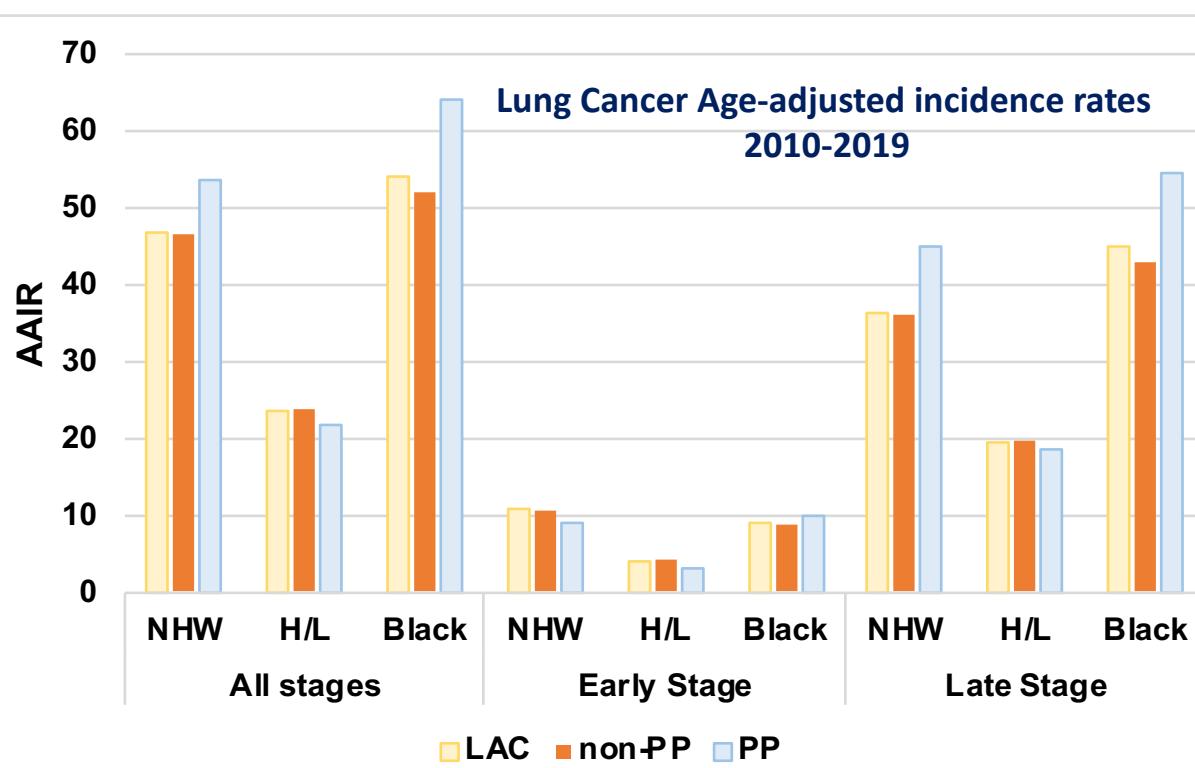


Higher mortality of
Acute Lymphoblastic
Leukemia among
Hispanics < 20 years old

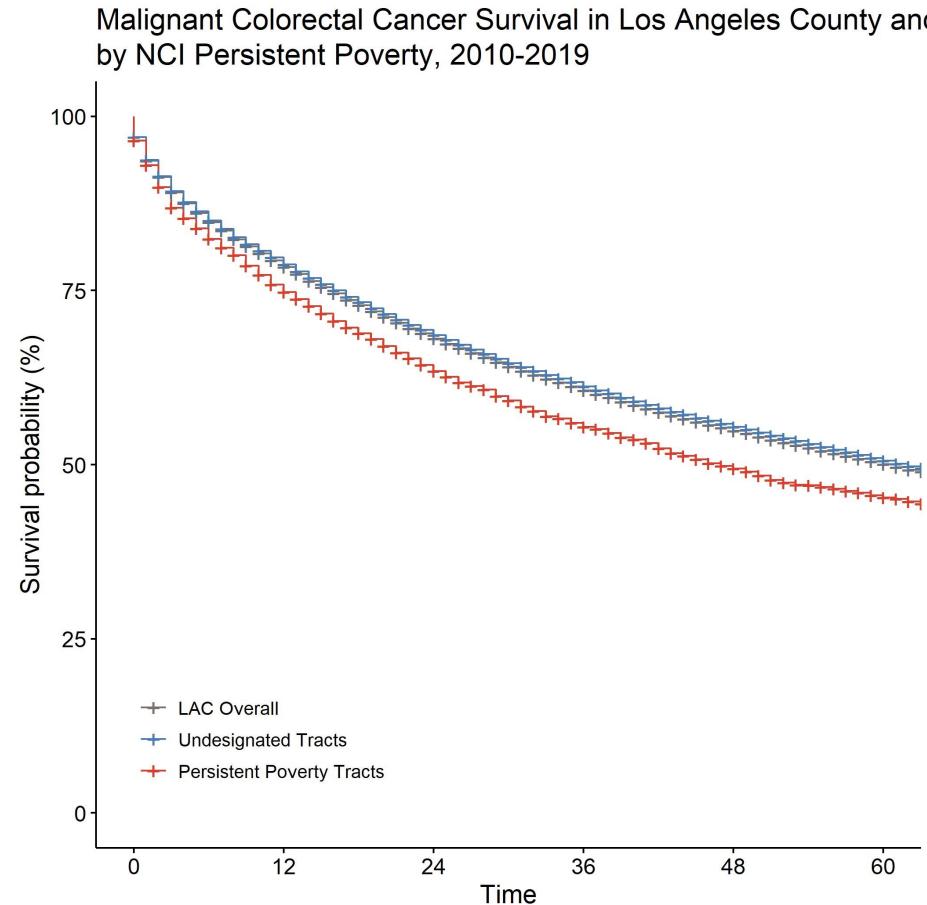
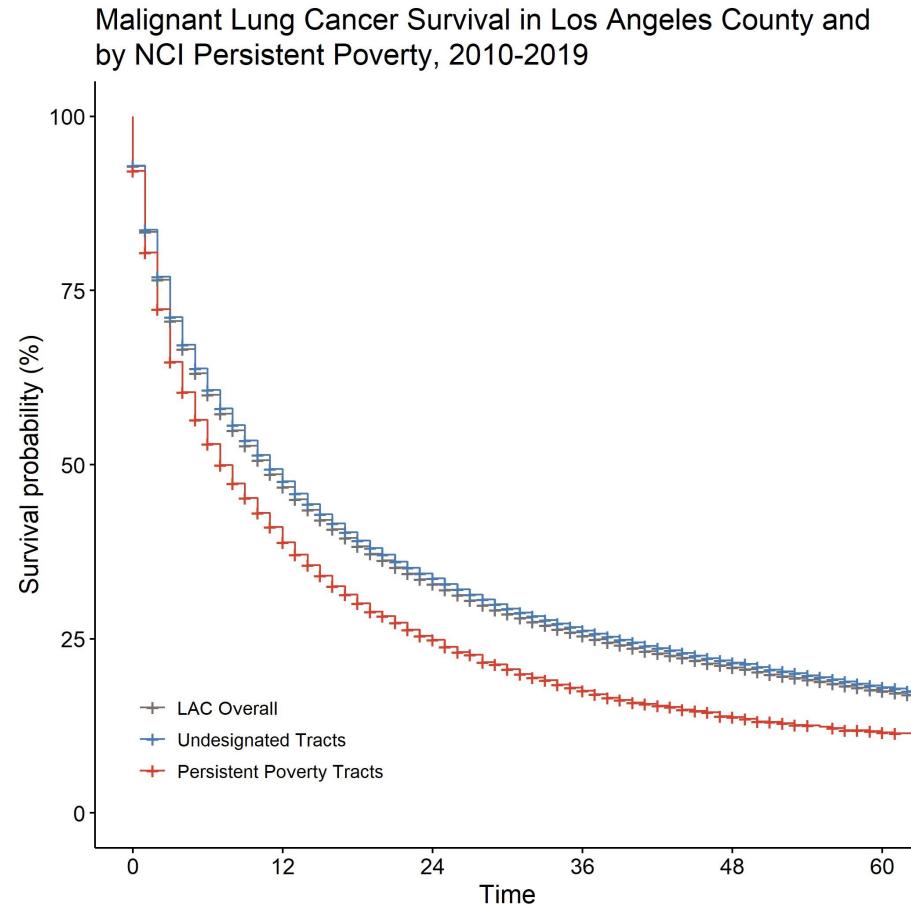
Increasing trend of liver cancer mortality among Hispanics



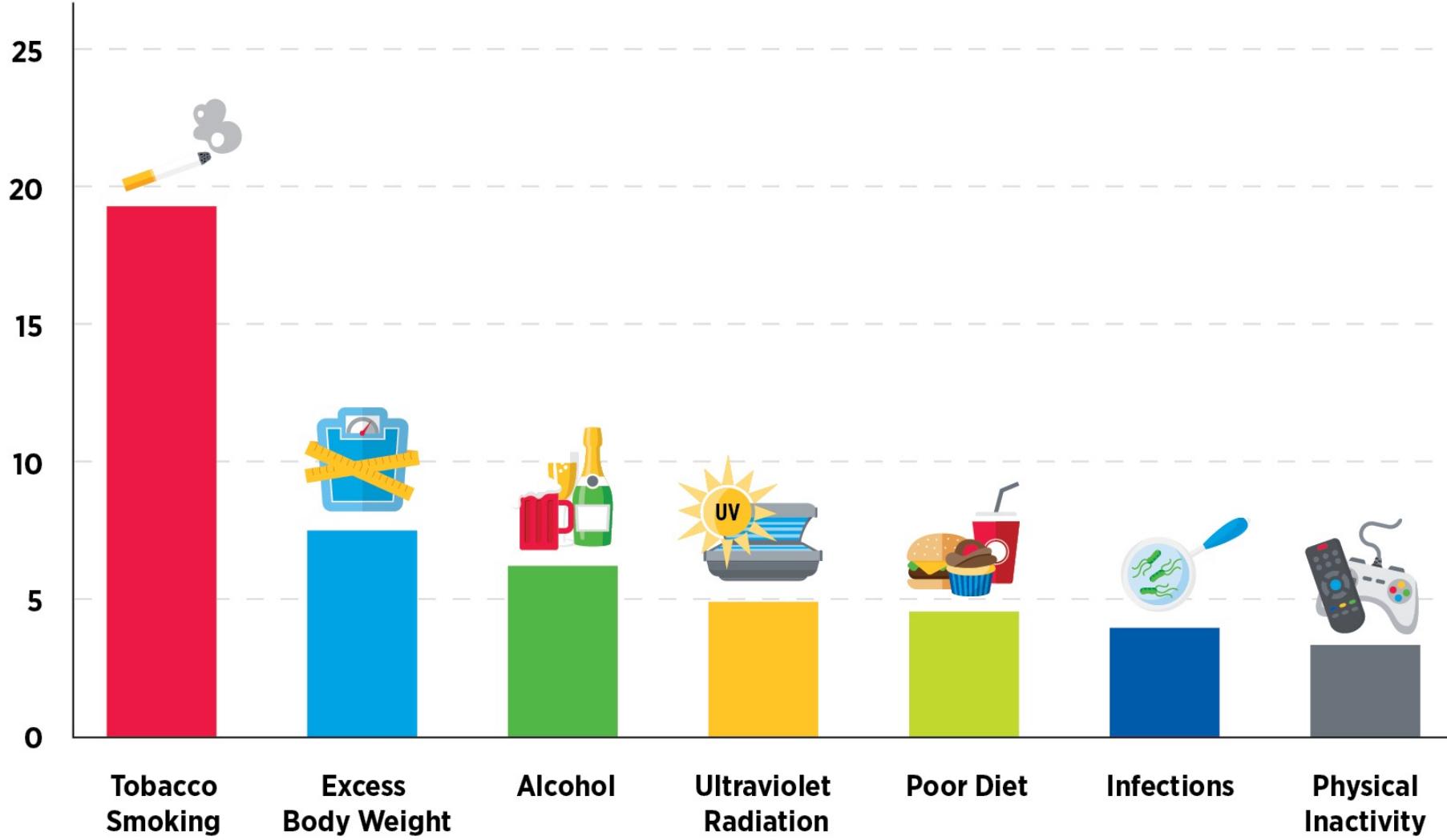
Cancer Incidence in Persistent Poverty Neighborhoods in Los Angeles County



Cancer Mortality in Persistent Poverty Neighborhoods in Los Angeles County



% U.S. CANCER CASES IN ADULTS AGE >30 ATTRIBUTABLE TO SELECTED FACTORS



Disparities in the Prevalence of Tobacco Use in the United States

There are striking disparities in the prevalence of tobacco use with significantly higher use among certain racial and ethnic minorities and other medically underserved populations:

35% vs 12%
vs **21%**

The **prevalence of tobacco product use is higher among American Indian/Alaska Native adults** (35 percent) and **lower among Asian* adults** (12 percent) compared to White adults (21 percent).

More than TWICE

Among adults who do not smoke, the **prevalence of secondhand smoke exposure is more than twice as high among Black people** compared to White people.

10% vs 3%

The **prevalence of smoking is more than twice as high among U.S.-born Hispanic women** (10 percent) compared to foreign-born Hispanic women (3 percent).

25% vs 9%

Cigarette smoking rates are higher in adults with less than a high school education (25 percent) compared to those with a graduate degree (9 percent).

29% vs 18%

Prevalence of cigarette smoking is highest among those living in rural areas (29 percent) and lowest among those living in large metropolitan areas (18 percent).

25% vs 19%

The **use of any tobacco product is higher among those who identify as lesbian, gay, or bisexual** (25 percent) compared to those who identify as heterosexual or straight (19 percent).

25% vs 14%

Cigarette smoking rates are 25 percent among those with less than \$35,000 annual household income compared to 14 percent among those with annual household income of \$100,000 or more.

* It should be noted that prevalence of tobacco use among subgroups of Asian Americans varies considerably.



© 2013 California Department of Public Health

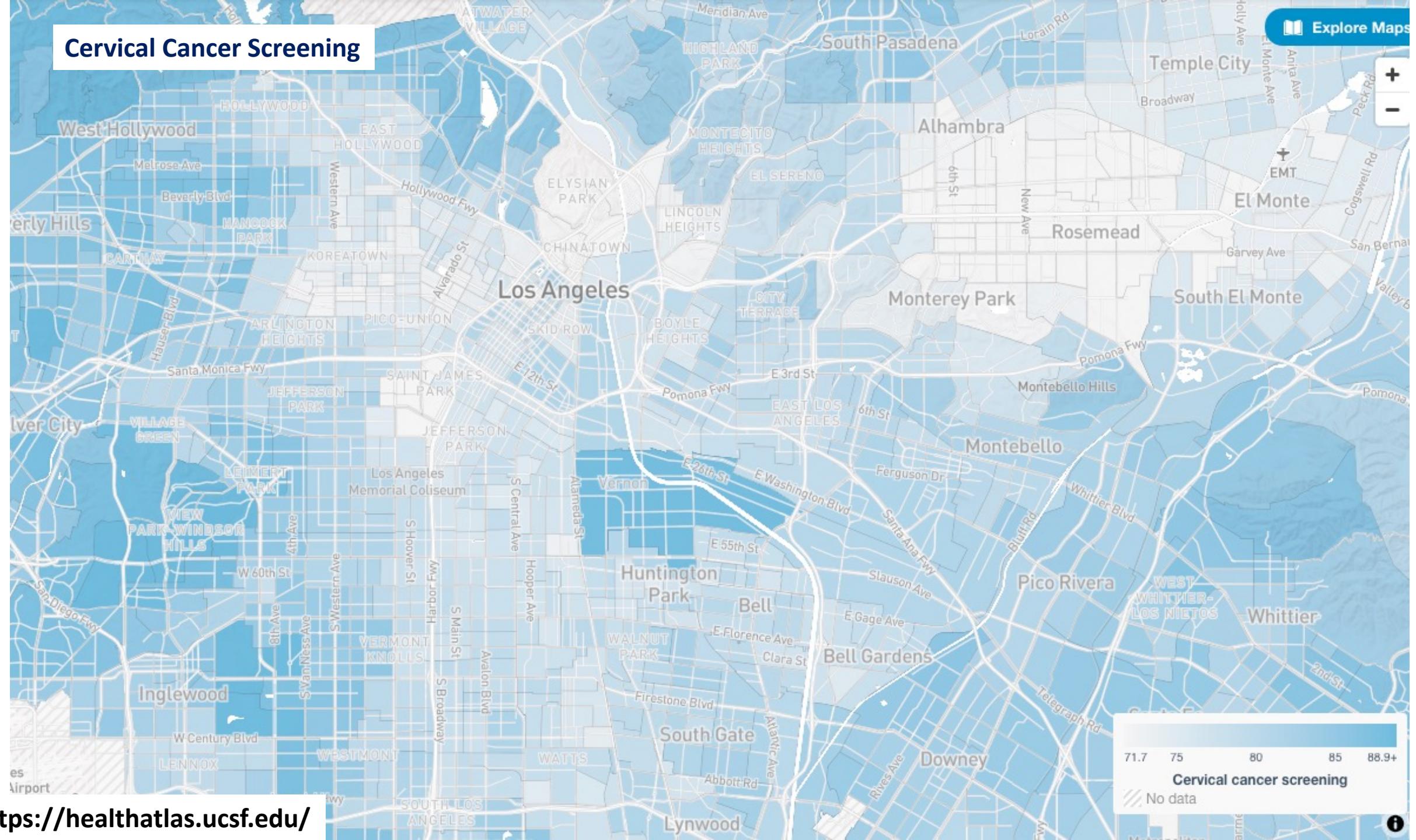
“Cancer health disparities were identified as among the most pressing issues in cancer prevention”

Lippman *et al.*, Cancer Prevention Research 2018

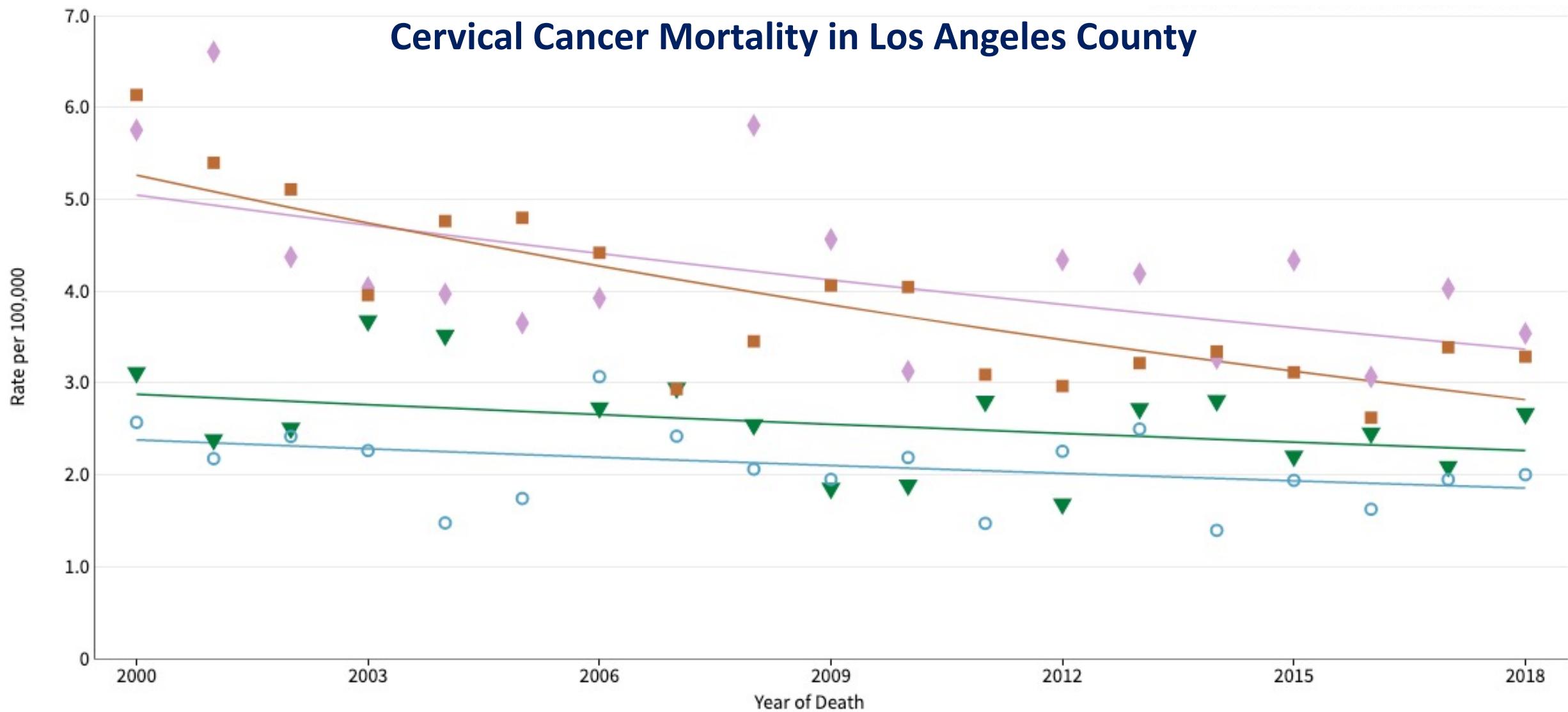


Cervical Cancer Screening

 Explore Maps



Cervical Cancer Mortality in Los Angeles County



Legend
(Race/Ethnicity)

▲ American Indian / Alaska
Native^b

■ Hispanic

▼ Asian / Pacific Islander^a

○ Non-Hispanic White

◆ Non-Hispanic Black^a

PERCENTAGE OF WOMEN OVERDUE FOR

CERVICAL CANCER SCREENINGS

2005

14%

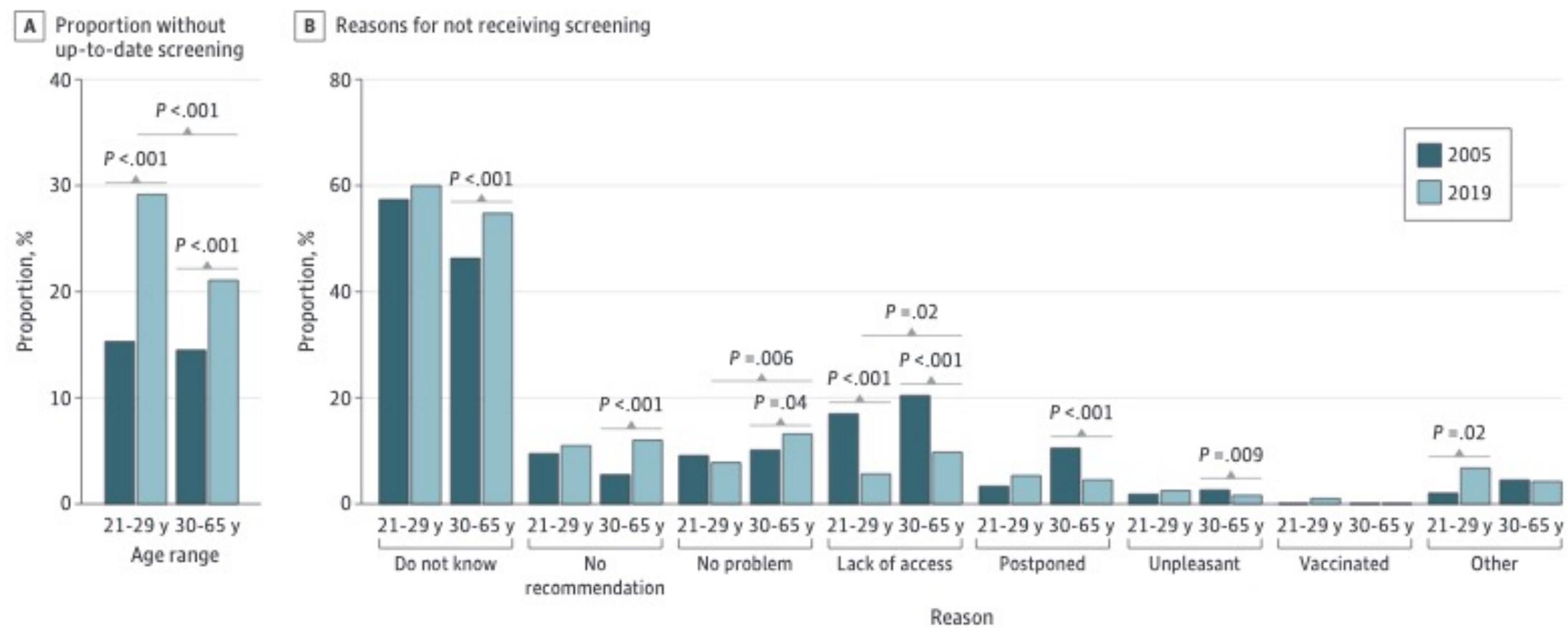


2019

23%

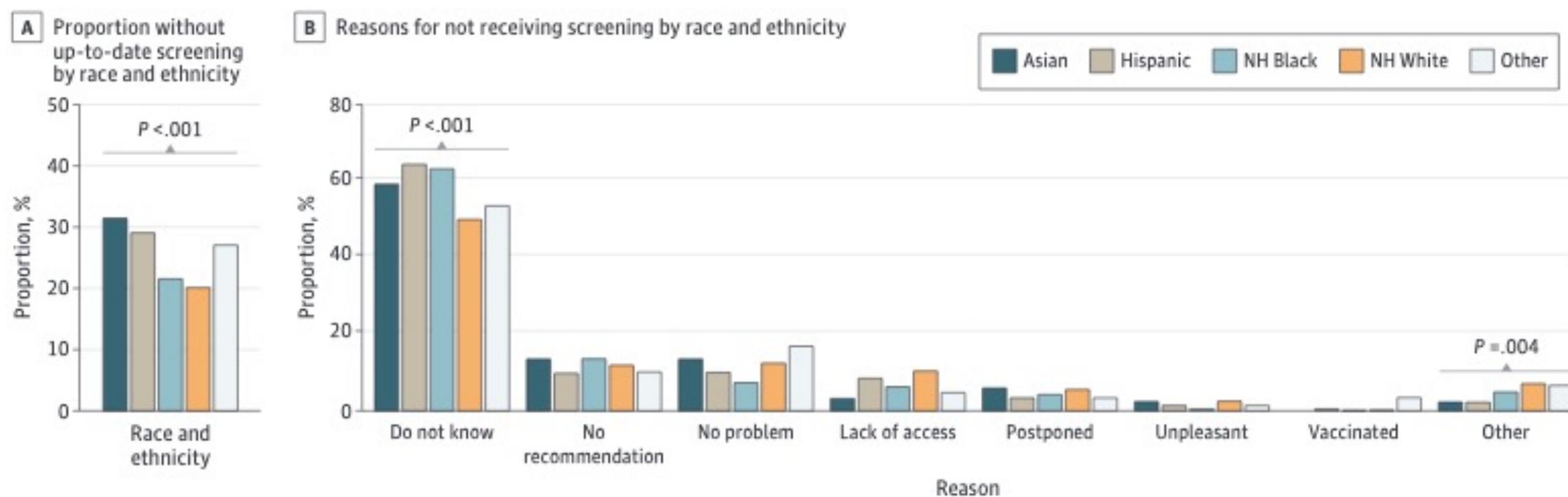
Source: Suk R, et al. doi:10.1001/jamanetworkopen.2021.43582

Figure 1. Proportion of Individuals Without Up-to-date Screening and Primary Reasons For Not Receiving Screening by Age Group, 2005 vs 2019



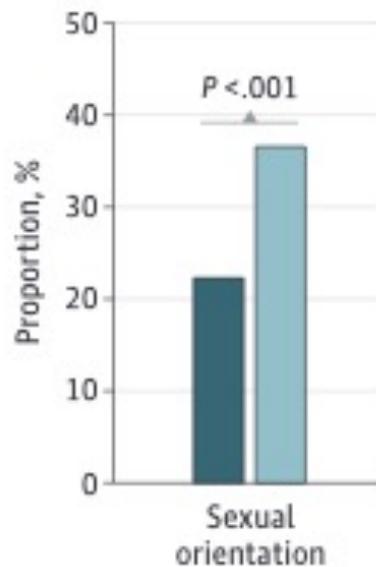
Cervical Cancer Screening

Figure 2. Proportion of Individuals Without Up-to-date Screening and Primary Reasons for Not Receiving Screening by Race and Ethnicity, Sexual Orientation, Rurality of Residence, and Insurance Type, 2019

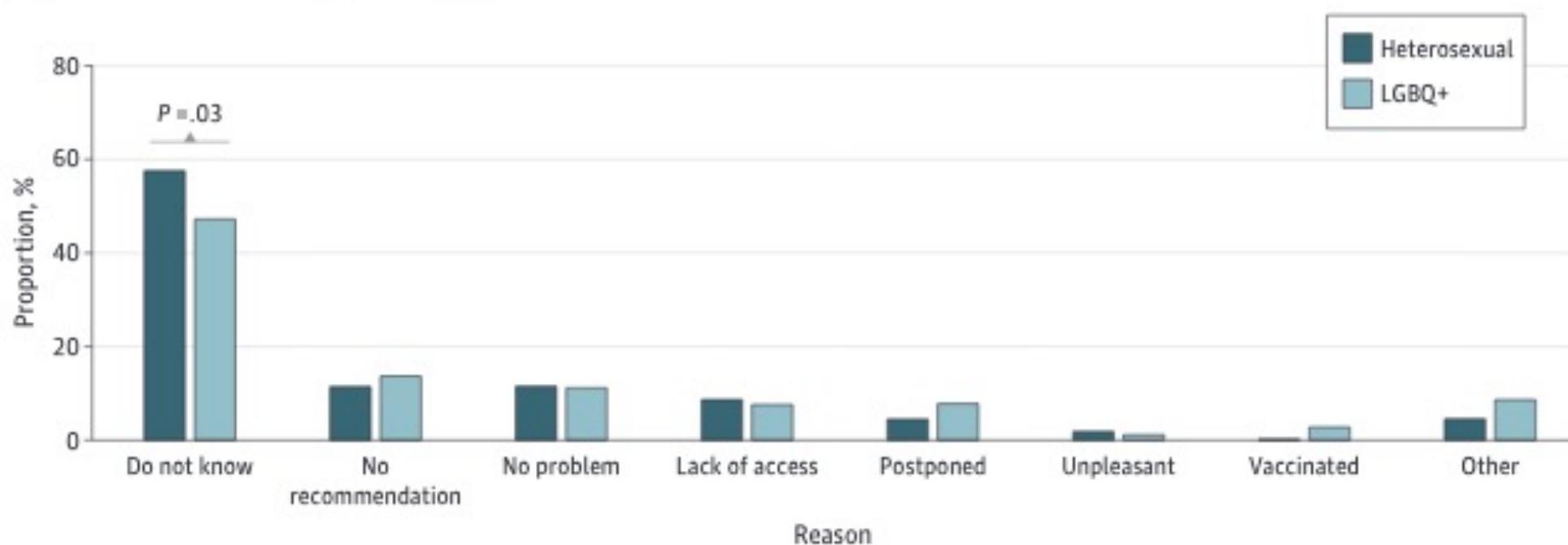


Cervical Cancer Screening

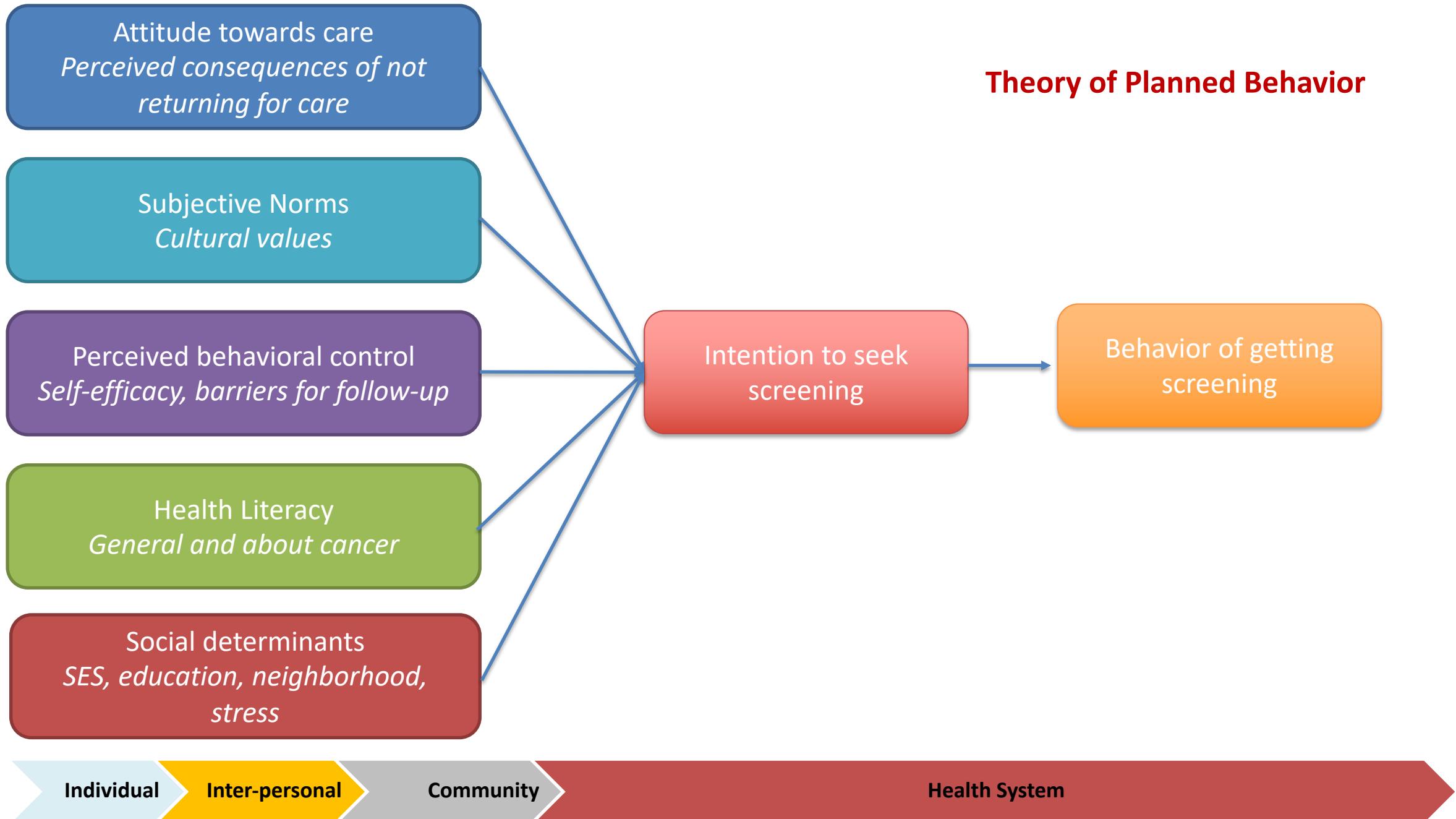
C Proportion without up-to-date screening by sexual orientation



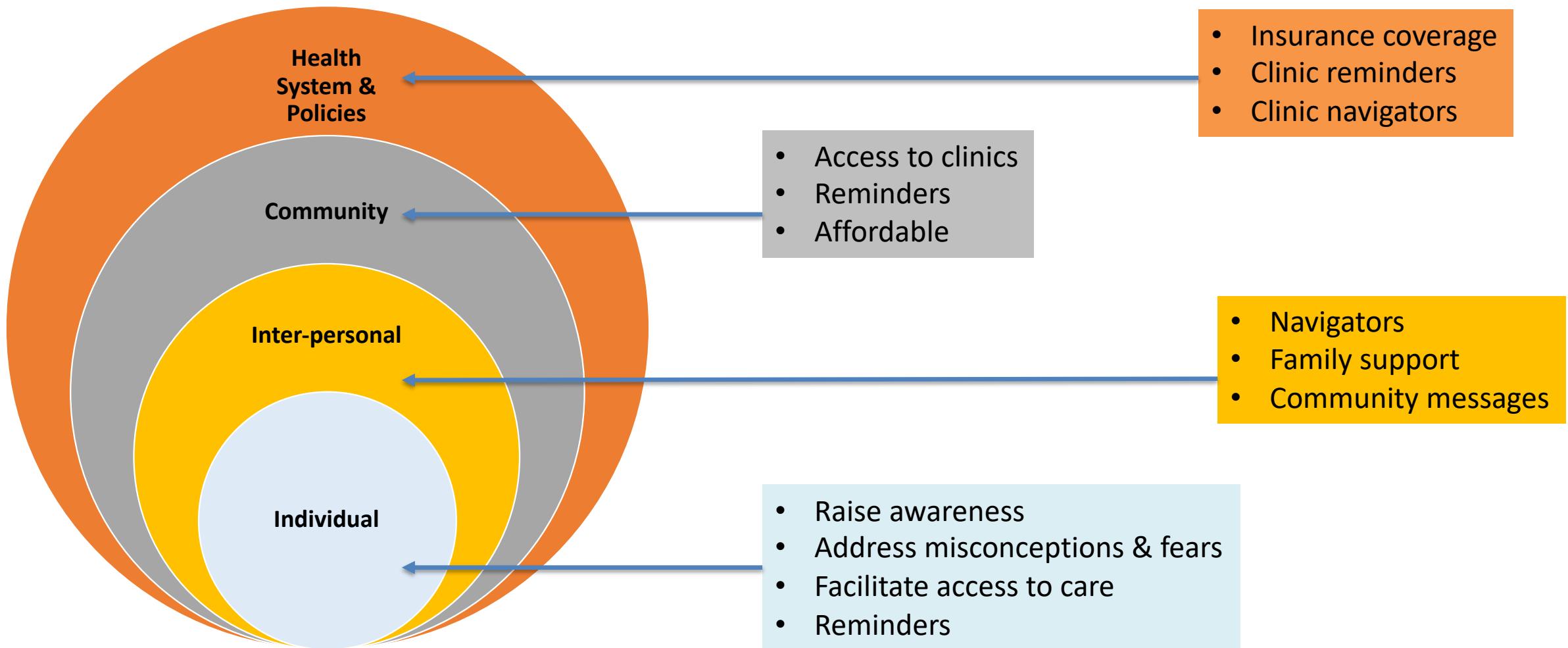
D Reasons for not receiving screening by sexual orientation



Theory of Planned Behavior



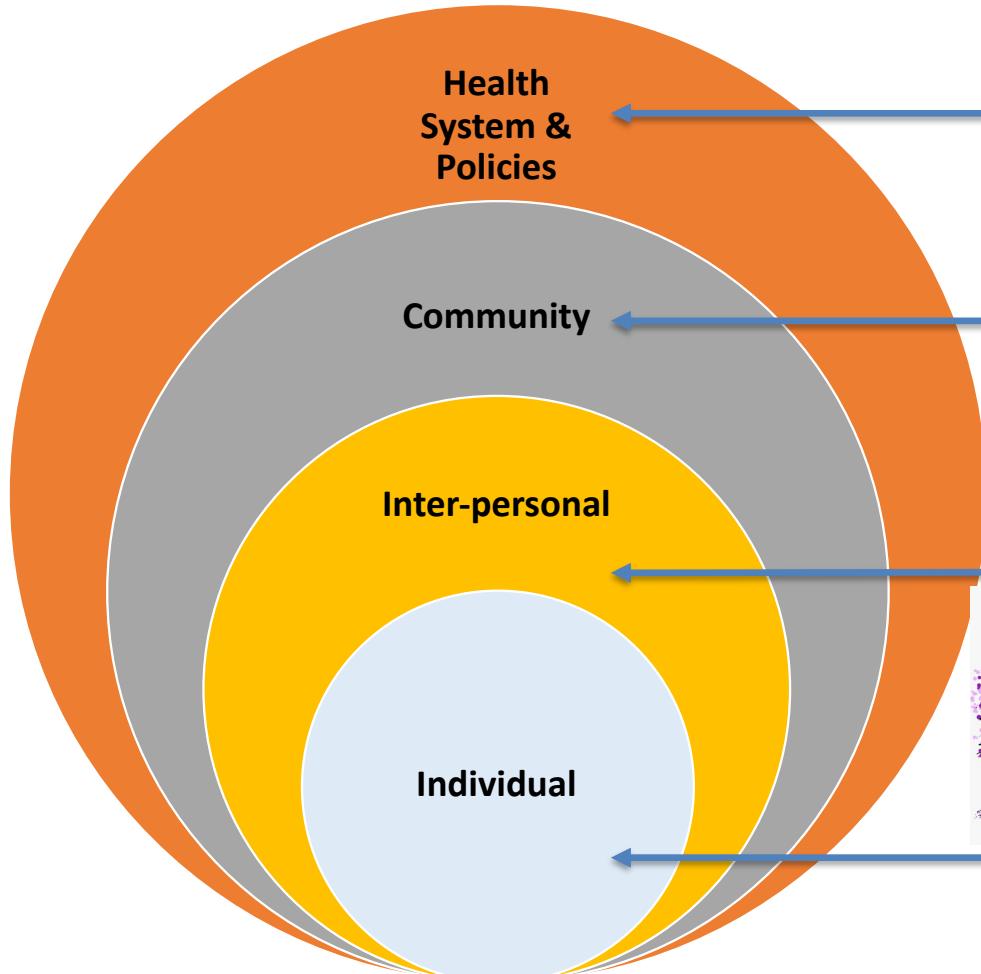
Socio-Ecological Model





Socio-Ecological Model

Dr. Lourdes Baezconde-Garbanati



USC - The Tamale Lesson: Narrative Education on Cervical Cancer



Manual sobre el Cáncer de Próstata

Concientizar sobre la Prevención del Cáncer de Próstata entre los hombres Latinos

Adaptación de la población hispana a la información y relevancia cultural por:
Carolina Aristizabal, Eduardo Ibarra, Mariana Stern y
Lourdes Baezconde-Garbanati.
U54 Grant CA233444-01

Versión en español adaptada de materiales originales en el Handbook for Prostate Cancer Advocacy producido y editado por:
Folakemi Odedina, Brandon Otto, Lauren R. Gilbert, Mary J. Seroggia, Virgil H. Simons, Angela D. Adams, Ernest Kanjinjing, Antony C. Hills, Jenn Nguyen, Richard Segal.
U54 Grant CA233465
April 2019

USC Norris Comprehensive
Cancer Center

Keck Medicine of USC

FLORIDA A&M UNIVERSITY **UF** **UNIVERSITY of FLORIDA**

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY

FLORIDA A&M UNIVERSITY **UF** **UNIVERSITY of FLORIDA**



F. Odedina L. Baezconde C. Aristizabal E. Ibarra
Garbanati

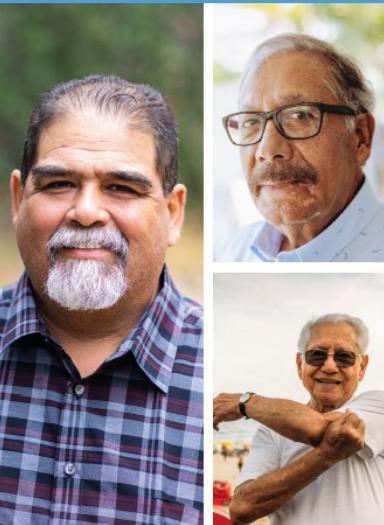
En Esta Edición	
Módulo 1.....	2
Módulo 2.....	6
Módulo 3.....	9
Módulo 4.....	10
Módulo 5.....	12
Módulo 6.....	14
Recursos.....	15
Referencias	17

Los Ensayos Clínicos: ¿Qué son y cómo puedo participar?



Asiste a un taller a través de Zoom.
Regístrate aquí: <https://tinyurl.com/5n8yfucv>

Entendiendo el **CÁNCER DE PRÓSTATA**



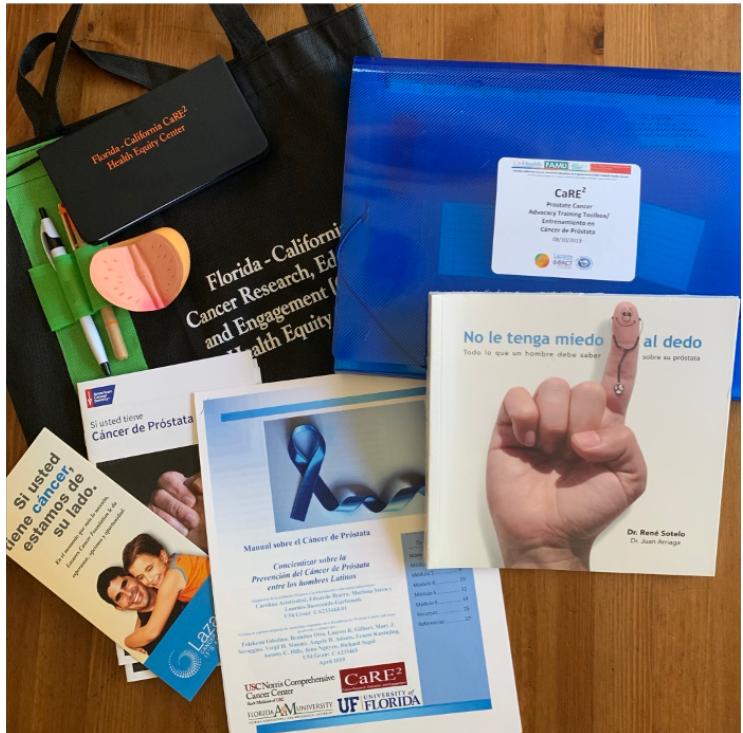
USC Norris Comprehensive
Cancer Center

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Advocacy Training in Prostate Cancer

Reach & impact of cancer advocacy training



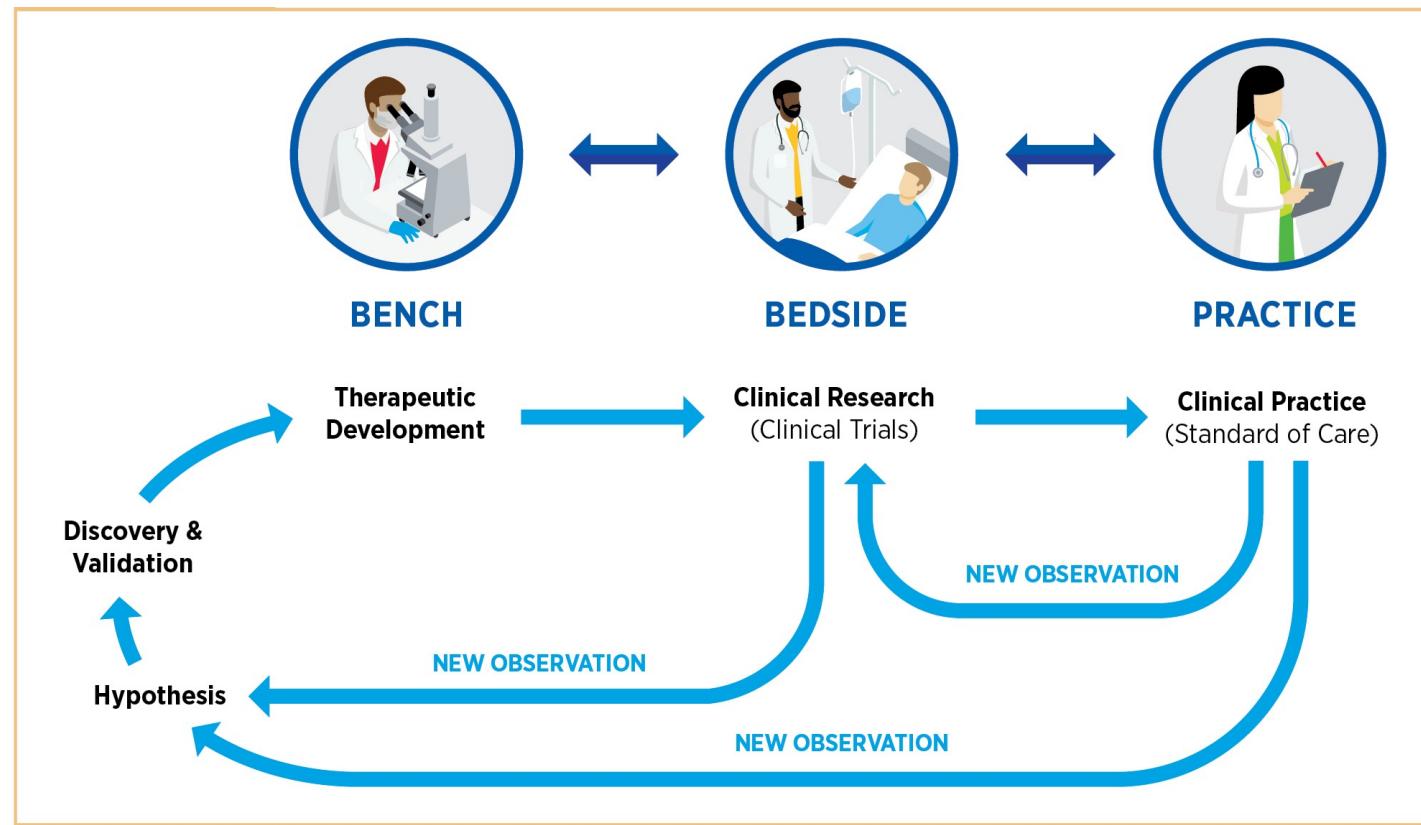
Demographics (N = 38/50 completed responses)

- 80% Female
- 53% Hispanic
- 32% African American
- 15% Unknown
- 32% High school or less education

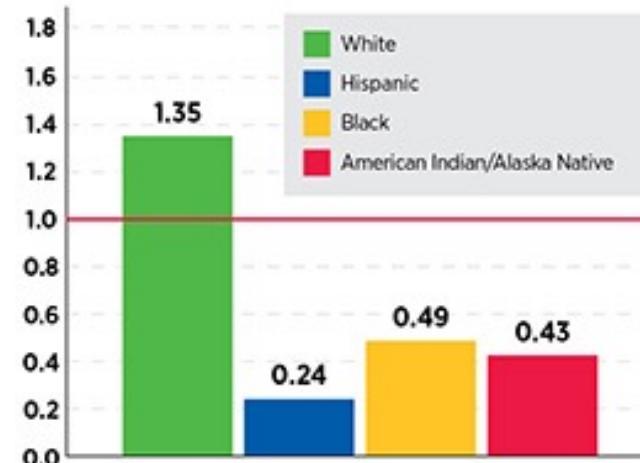
Variable	Pretest	Posttest	p	p (adjusted)
Knowledge	5 (1.6)	6.3 (1.1)	<0.001	<0.001
Advocacy	3.9 (0.9)	4.3 (0.8)	<0.001	<0.001

Survey Items		
Which of the following is a warning sign of PCa?		
Pretest	Posttest	p (adjusted)
50%	87%	≤ 0.017
I will inform and educate cancer patients, family members and friends about PCa within the next three months.		
69%	95%	≤ 0.018
I will work to ensure that high quality research is sensitive to the priorities of cancer patients within the next three months.		
62%	84%	≤ 0.018
I will assist with strategies to increase patient recruitment, compliance and retention for clinical trials within the next month.		
62%	84%	≤ 0.018
I will engage in PCa patient education within the next three months.		
67%	92%	≤ 0.042
I will engage in PCa community outreach within the next three months.		
67%	94%	≤ 0.018

Disparities in Cancer Treatment



In a recent analysis of 93 precision oncology clinical trials with 5,867 participants, representation of racial and ethnic minorities was calculated using the ratio of the actual number of enrolled cases to the expected number of cases based on their corresponding U.S. population.



Ratio >1 signifies overrepresentation
Ratio <1 signifies underrepresentation

Disparities in Cancer Treatment

According to a recent systematic review and meta-analysis, **cancer patients irrespective of race and ethnicity do participate in clinical trials more than half the time when they are offered the opportunity.** Black patients participate at similar rates (58 percent) compared to White patients (55 percent).



New NCI Cancer Moonshot Initiative

- Patient Engagement in Cancer Genomic Sequencing (PE-CGS) Network
- Promote and support direct engagement of cancer patients and cancer survivors as participants in cancer research
- To engage such patients in rigorous cancer genome sequencing programs **addressing knowledge gaps in the genomic characterizations of tumors**



CENTER FOR OPTIMIZATION OF PARTICIPANT ENGAGEMENT FOR CANCER CHARACTERIZATION (COPECC)

Funded in September 2021



J. Carpten



H.J. Lenz



Participant Engagement and Cancer Genome Sequencing



www.pecgs.org

Patient Navigation



Patient Navigation Addresses Barriers

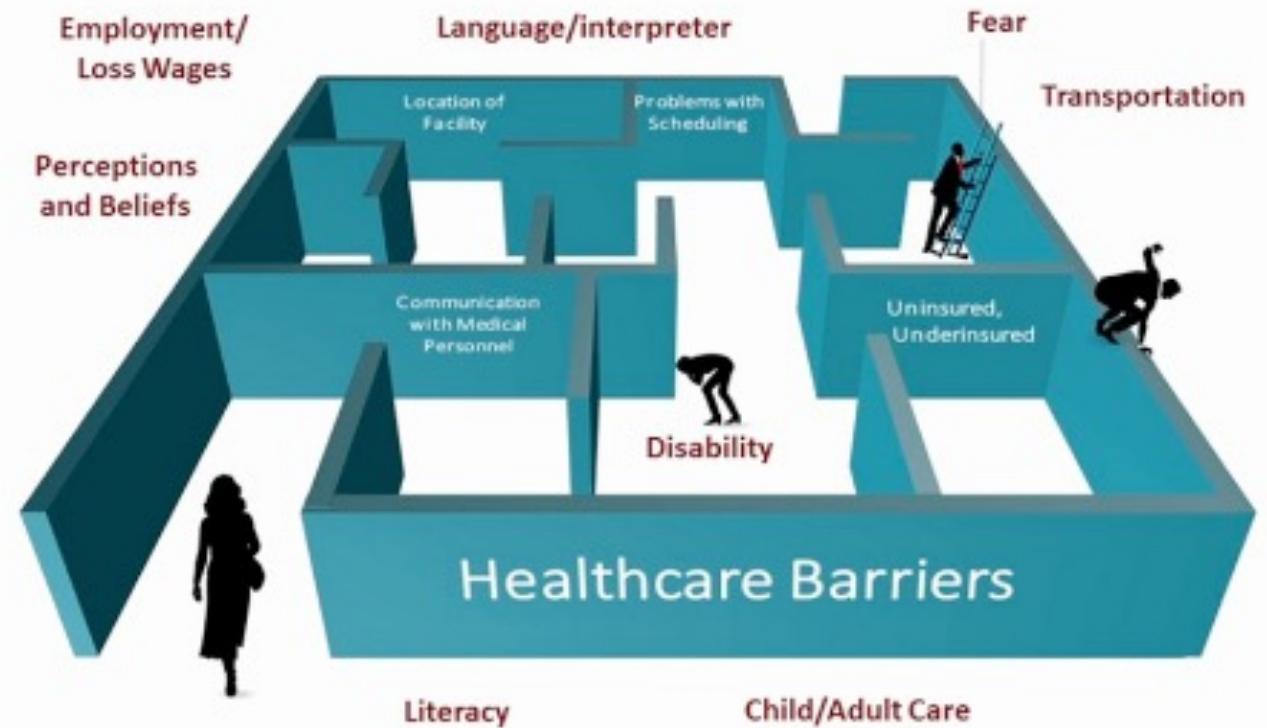


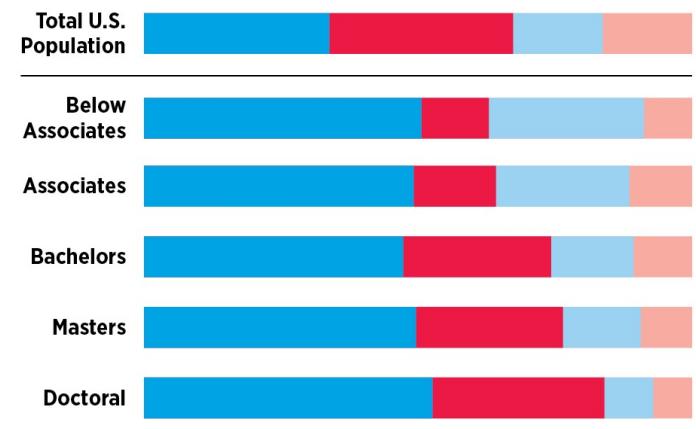


FIGURE 19

Representation in the Biomedical Sciences

COMPARISON OF TOTAL U.S. POPULATION WITH PERCENT OF STEM DEGREES CONFERRED (2019-2020)

0% 20% 40% 60% 80% 100%



Legend:
 Well-represented Men Well-represented Women
 Underrepresented Men Underrepresented Women

PERCENT OF NIH RESEARCH GRANTS AWARDED BY RACE, ETHNICITY, OR GENDER (FY 2020)

0% 20% 40% 60% 80% 100%



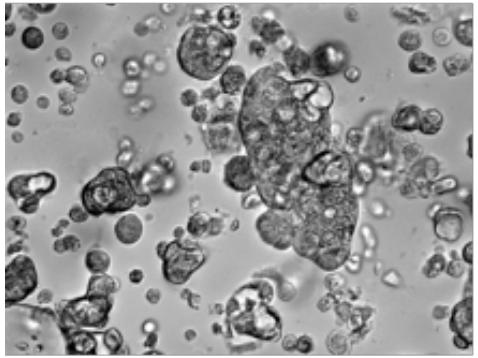
Legend:
 AI/AN Black Non-Hispanic White
 Asian Hispanic Other

Men Women

(Left) Bar graphs indicate percent of the U.S. population and postsecondary degree graduates in the 2019-2020 academic year from Well-represented or Underrepresented races and ethnicities among men and women. Well-represented groups include non-Hispanic White and Asian individuals; Underrepresented groups include Black/African American, Hispanic, Native American and Alaska Native, Pacific Islander, and multiracial individuals. Degree award data were

compiled from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System. Total U.S. population data were compiled from the 2020 Census.

(Right) Bar graphs indicate the percent of principal investigators awarded NIH research grants in FY 2020 who self-identified as the indicated races, ethnicities, and genders. Data were compiled from the *NIH Research Portfolio Online Reporting Tools, NIH Data Book*.



Florida-California Cancer Research Education & Engagement (CaRE²) Health Equity Center

6 Disparities Translational Projects



125 URM Scientists
From undergraduates to ESIs



CENTER TO REDUCE
CANCER HEALTH DISPARITIES



Wilkie & Odedina



Redda & Reams



Stern & Carpten



Train & Reach
120 Cancer Advocates
2000 Patients & Survivors
10,000 Adults

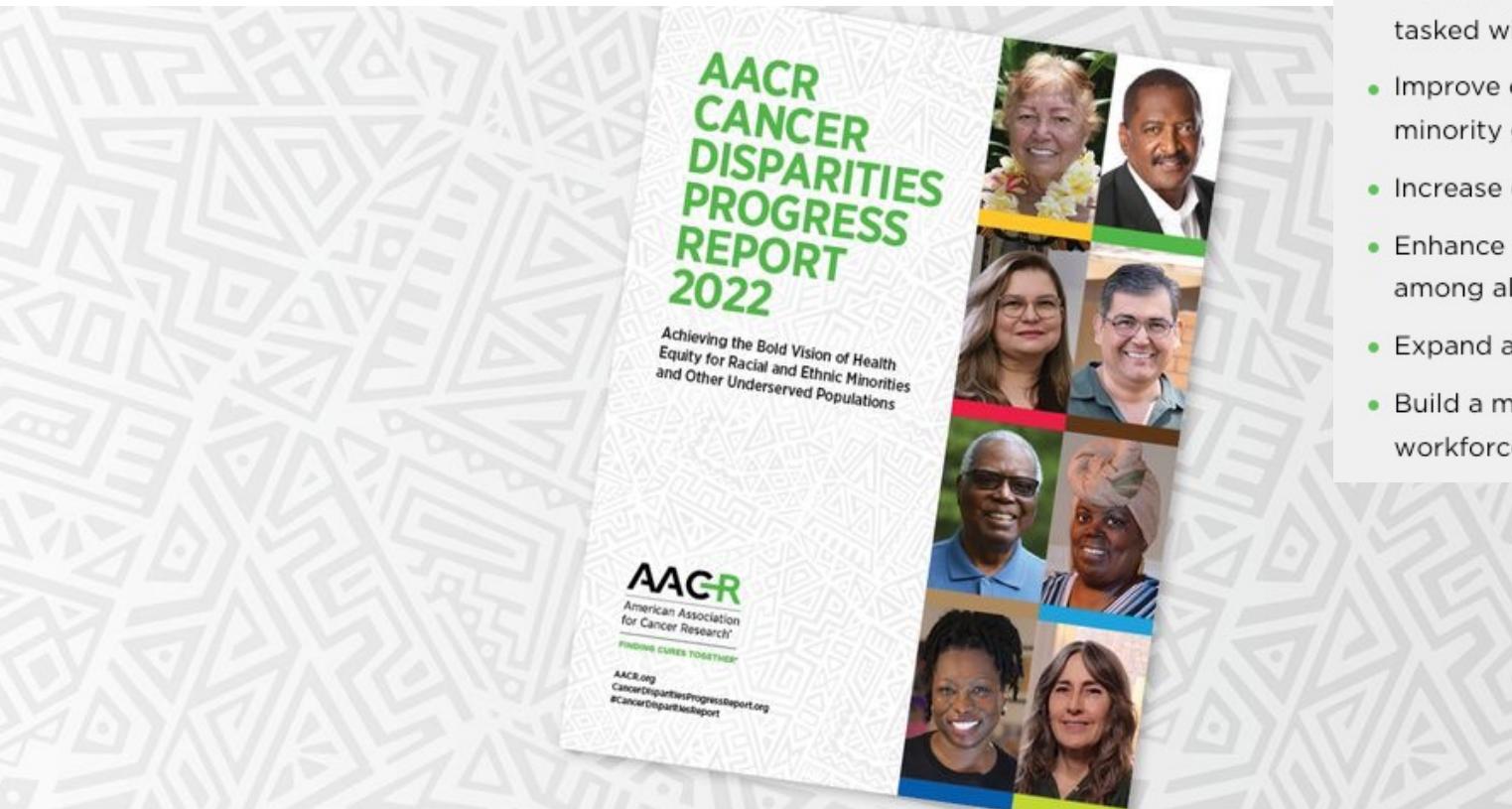
NIH/NCI U54CA233465 (Carpten & Stern)

Addressing Health Disparities





American Association
for Cancer Research®



AACR CALL TO ACTION

To reduce cancer health disparities, AACR calls upon policy makers to immediately address the following:

- Increase federal funding for medical research and public health initiatives that are tasked with reducing cancer health disparities.
- Improve collection of disaggregated data for racial, ethnic, sexual, and gender minority groups.
- Increase diversity in clinical trial participation.
- Enhance cancer prevention and screening efforts to reduce the burden of cancer among all medically underserved populations.
- Expand access to equitable and affordable quality health care.
- Build a more diverse STEMM trainee pipeline and cancer research and health care workforce.



<https://cancerprogressreport.aacr.org/disparities/>

Thank you!

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