

The Wealth and Health of the Delta

**Arthur G. Cosby
Professor and Director**

**Social Science Research Center
Mississippi State University
May 27, 2005**



In 1992

*A Social and Economic Portrait of
the Mississippi Delta*

Edited by:

Arthur G. Cosby

Mitchell W. Brackin

T. David Mason

Eunice R. McCulloch

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The Project had a Substantial Delta State University Presence

Mr. Hugh Smith

Dr. Kent Wyatt

Dr. Frank Allen Dennis

Dr. Reid Jones

Dr. John Thornell

Dr. Gene Hamon

Dr. Larry Hailey

Dr. W. Ross Story



Chapter 1

My Delta and Yours?

Willie Morris

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“No matter what the future brings, it will always be a place where the land, the soil, with all that this implies in human intercourse, are prized over all else. The Mississippi Delta will be the last place on earth to be paved over.”

Willie Morris

A Social and Economic Portrait of the Mississippi Delta 1992

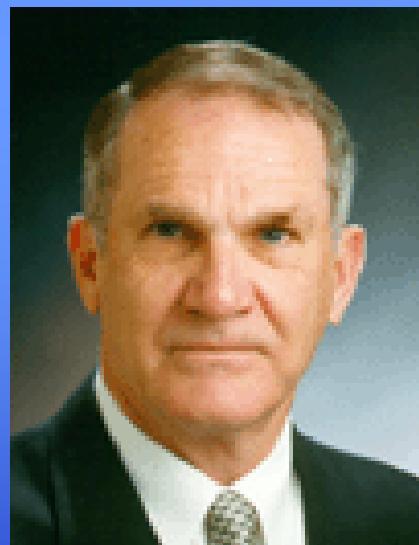
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Chapter 19

Framing the Future: Views on the Future of the Mississippi Delta

Arthur G. Cosby



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Major Themes

- Global trend toward free market, decentralization and democratic solutions
- Increasing international/global competition
- Market based approaches to social based problems – awareness of the limits of government
- Increased concern for environmental quality
- A national shift from a biracial to multi-ethnic society



A Sixth Theme to be Added Tonight:

The Wealth and Health
of the Delta

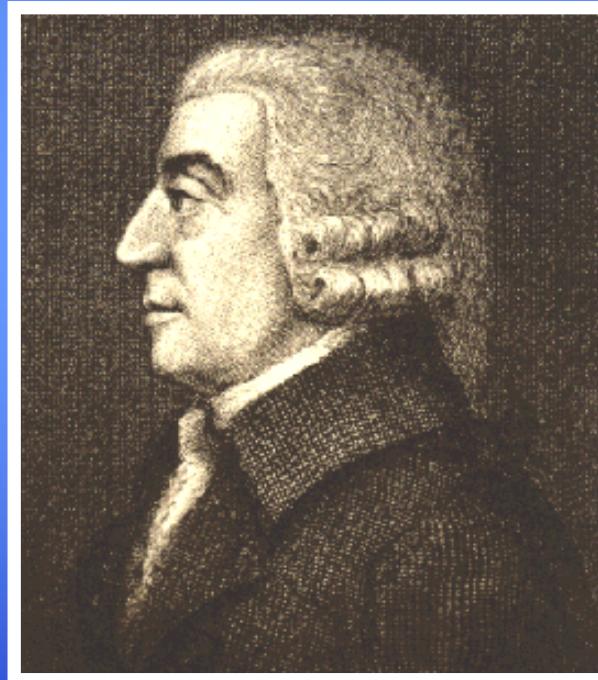
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*An Inquiry into the Nature and Causes of the
Wealth of Nations*

1776

Adam Smith



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My Nominee for the Noble Prize in Economics (if I could)

David E. Bloom, Ph.D.

Clarence James Gamble Professor of Economics
and Demography

Department of Population and International Health
Harvard University

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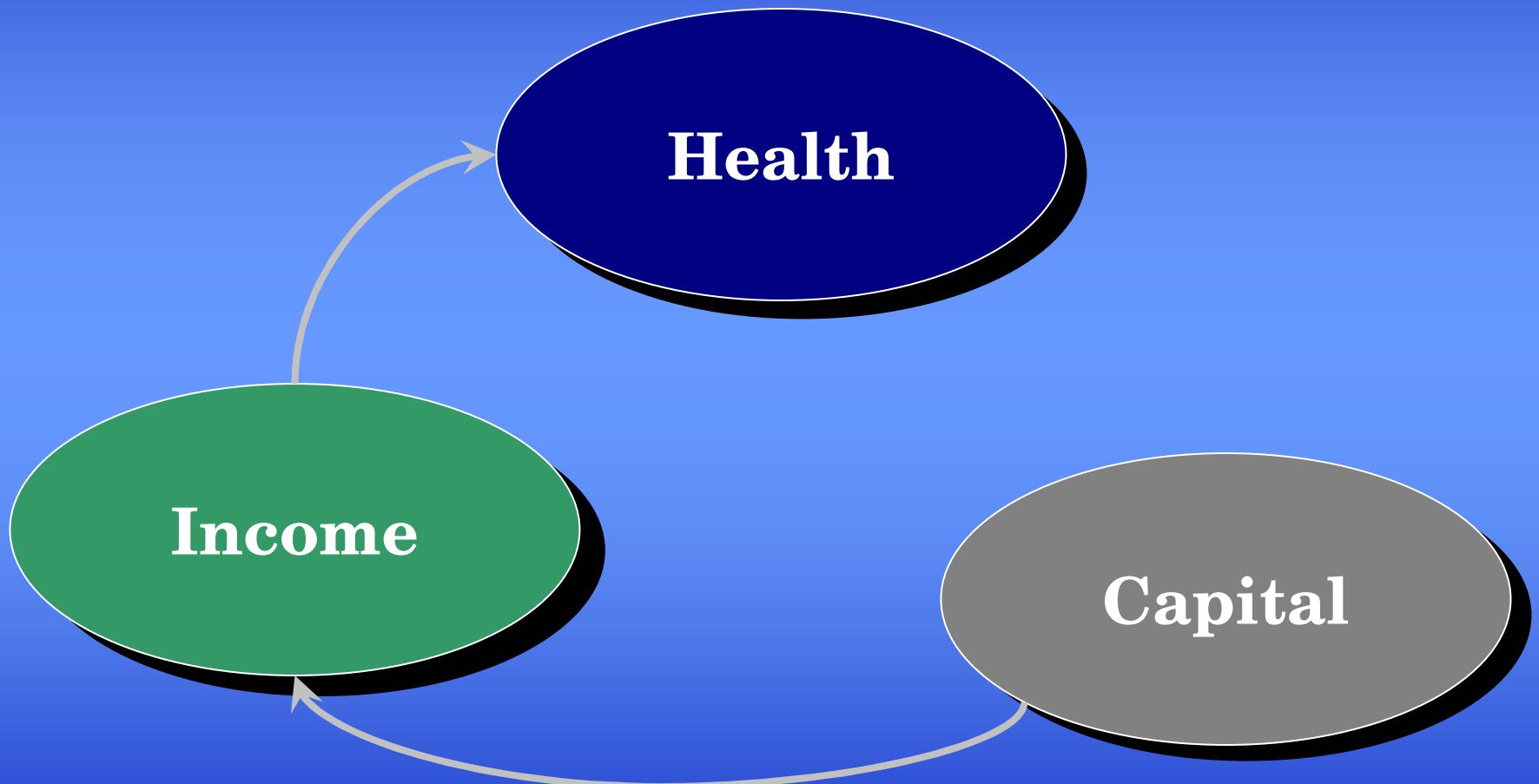


The Wealth and Health of Nations

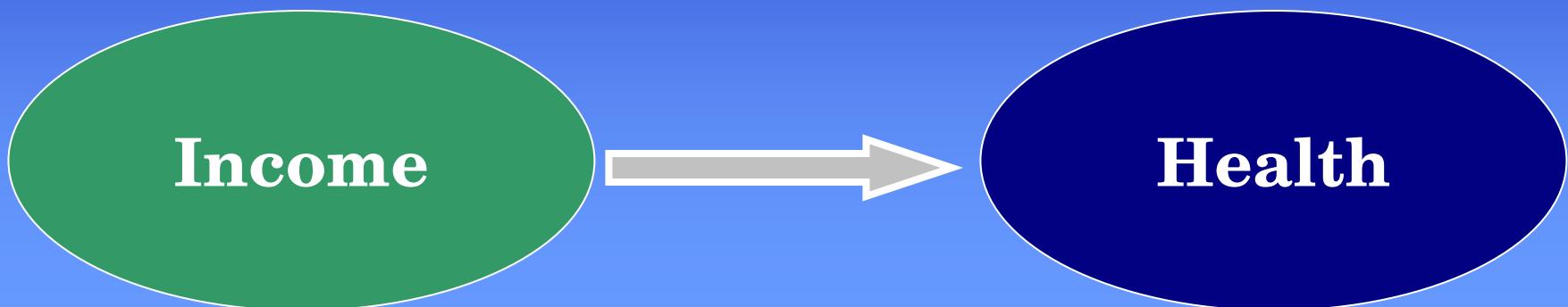
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Health and Income: Traditional View



From Wealth to Health: One Part of the Story



- Better nutrition
- Better access to clean water
- Better sanitation
- More access to better health care
- Better psycho-social resources

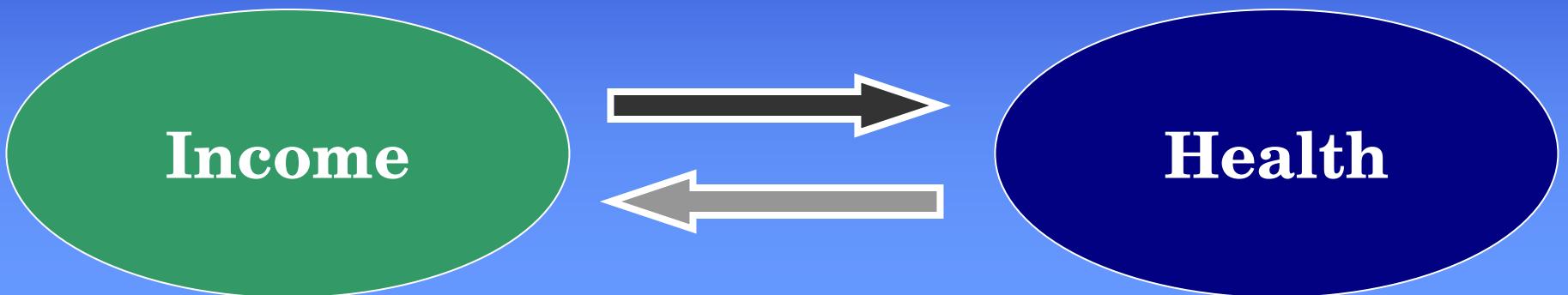


Factors Affecting the Growth of Per Capita Income Include:

- Education
- Natural resource endowments
- Policy and institutional environment
- Stock of physical capital and infrastructure
- Geography
- Initial level of income per capita
- To these factors we can add health



Health to Wealth – Lots of Oomph!



A 10-year gain in life expectancy translates into nearly 1 additional percentage point of annual income growth



Bloom's Research Leads to Two Additional Questions

Can the Wealth, Health of Nations be expanded to:

- 1) The Wealth of Regions (sub-national)
- 2) The Wealth of Communities



Healthy and Unhealthy Places

An Ongoing Program of Research at
the
Social Science Research Center

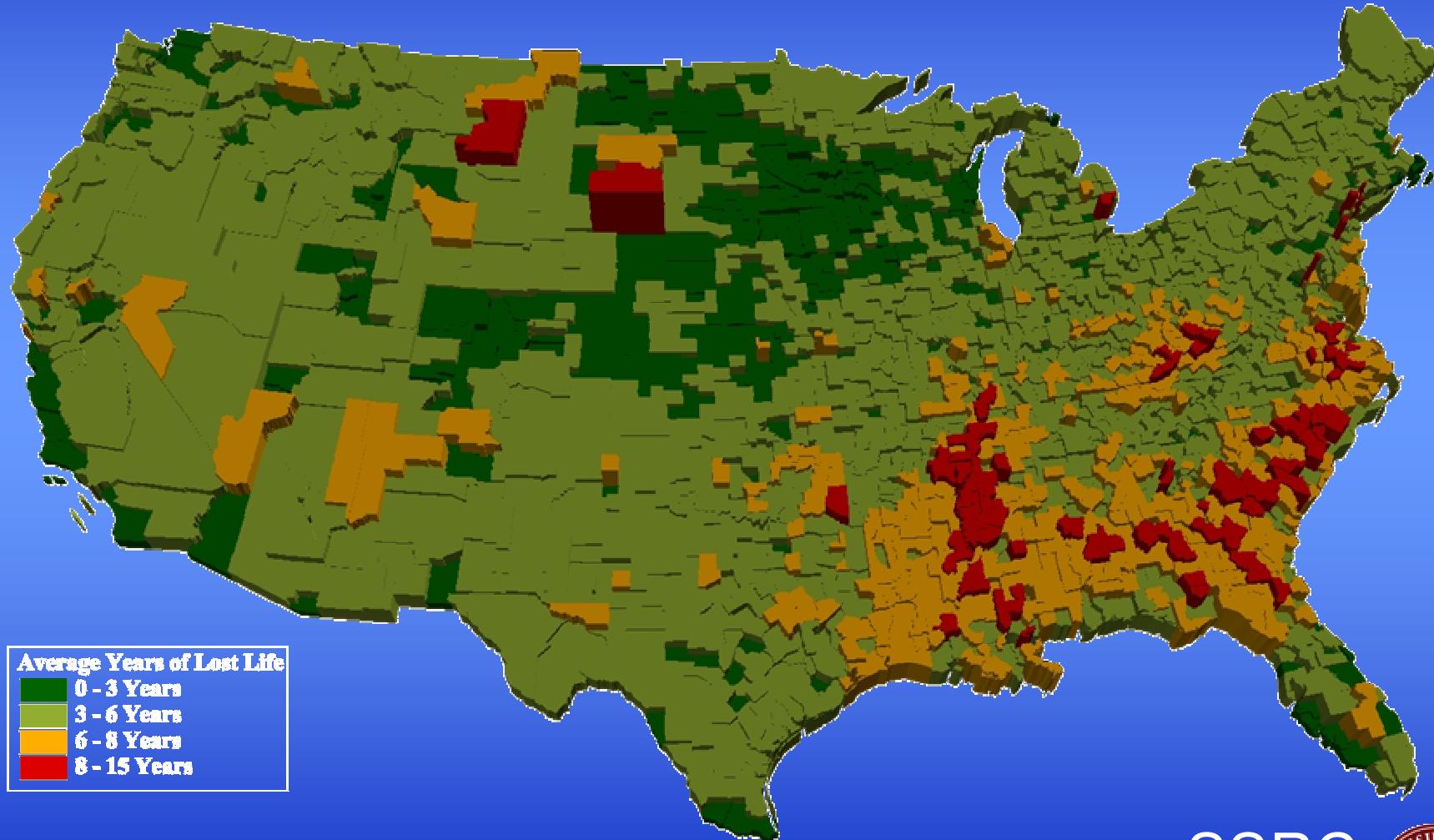
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Healthy and Unhealthy Places in America:

Average Years of Lost Life

(80 – Average Life Expectancy, 1990)



Source: U.S. Department of Health and Human Resources, HRSA
Community Health Status Indicator Project

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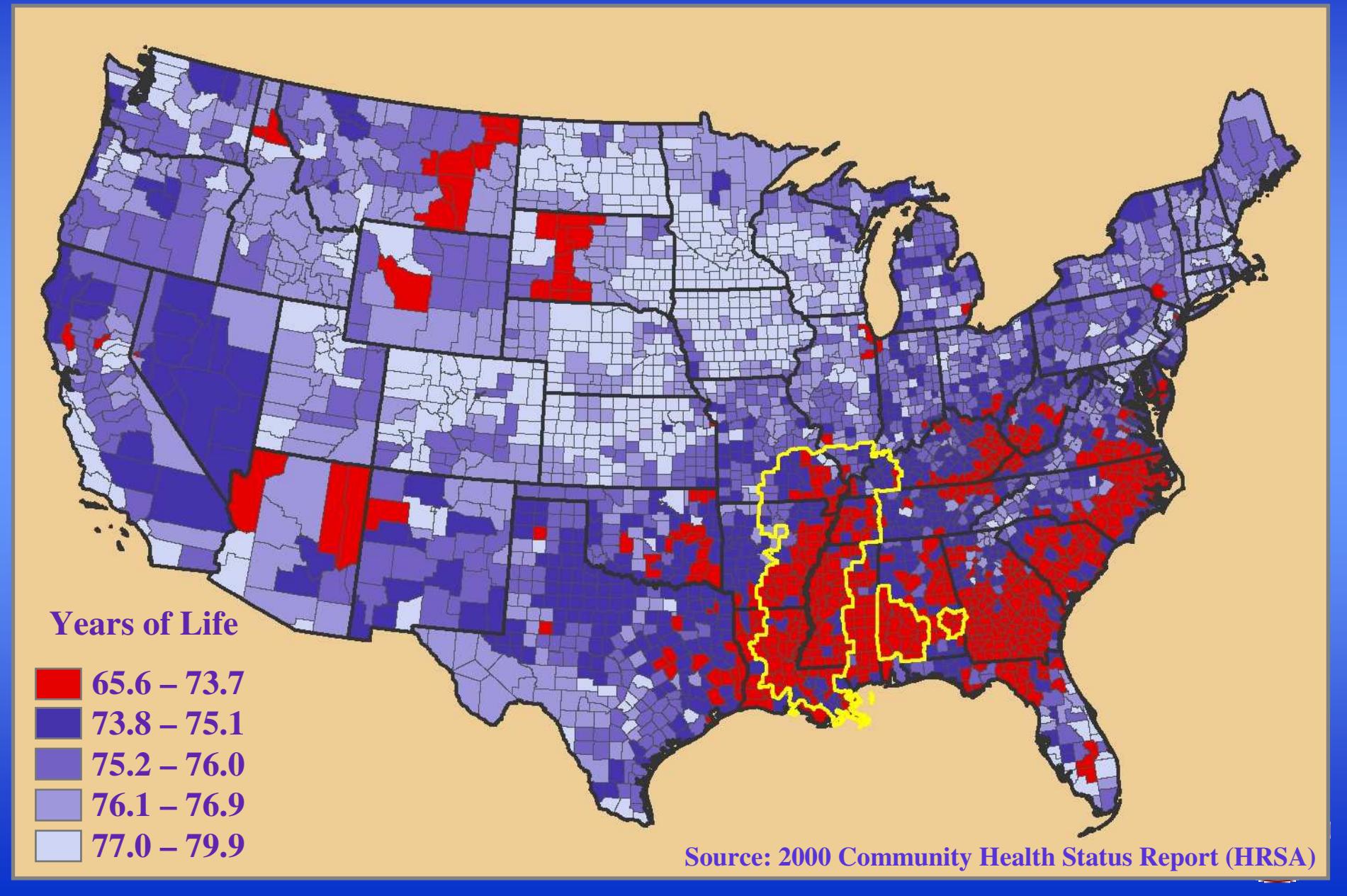


Persistence of Healthy and Unhealthy Places

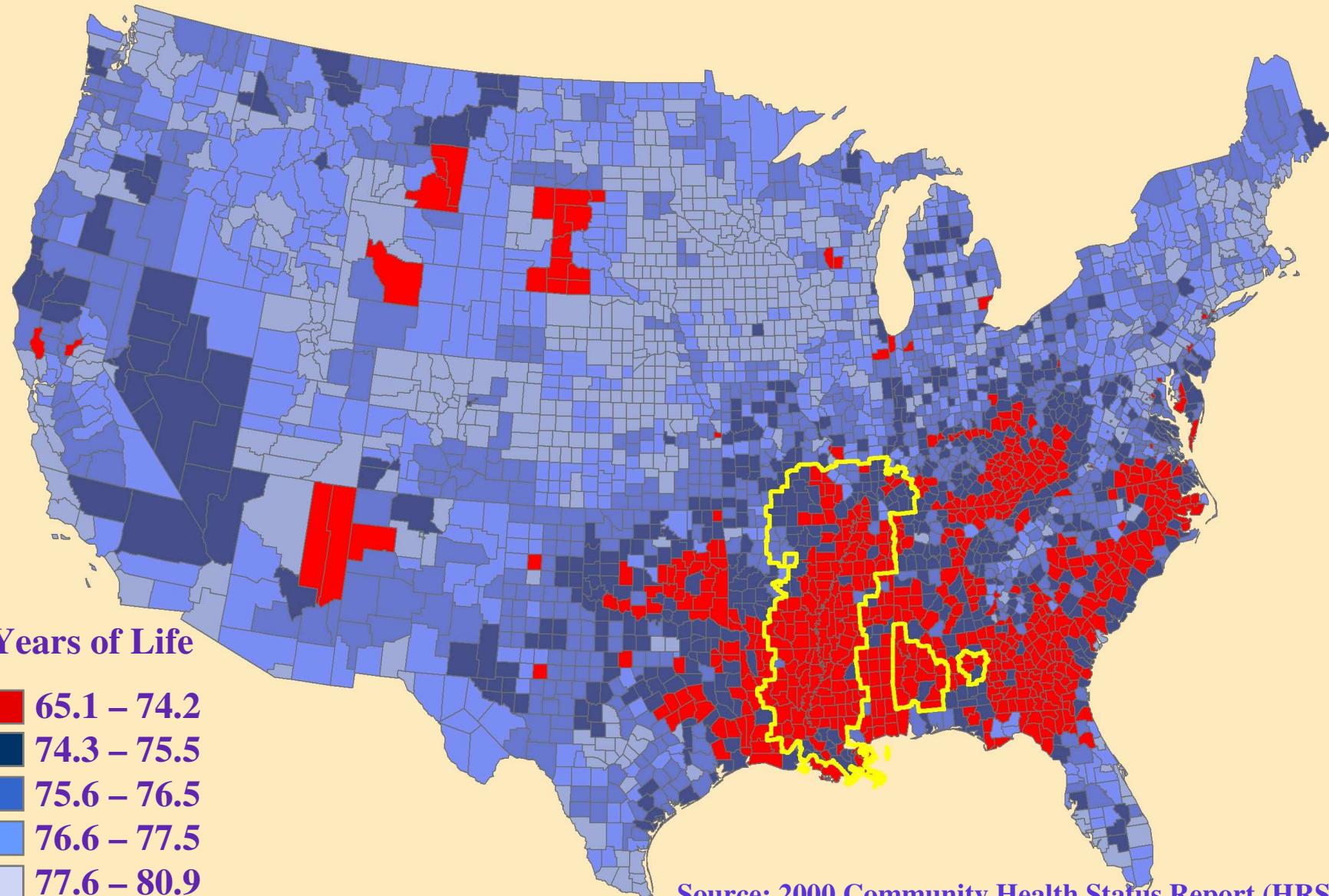
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1990 Average Life Expectancy



1997 Average Life Expectancy



2000 Average Life Expectancy

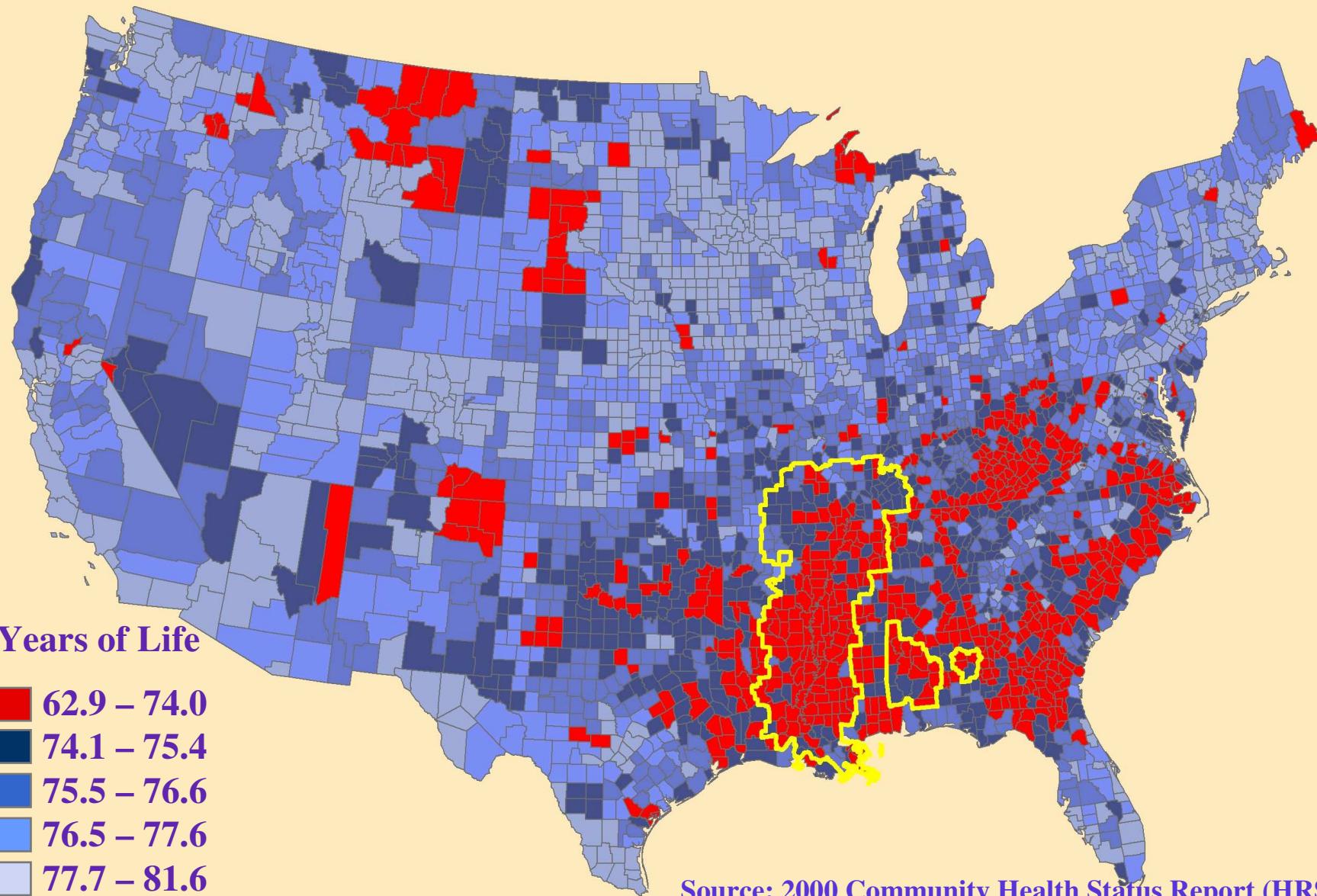
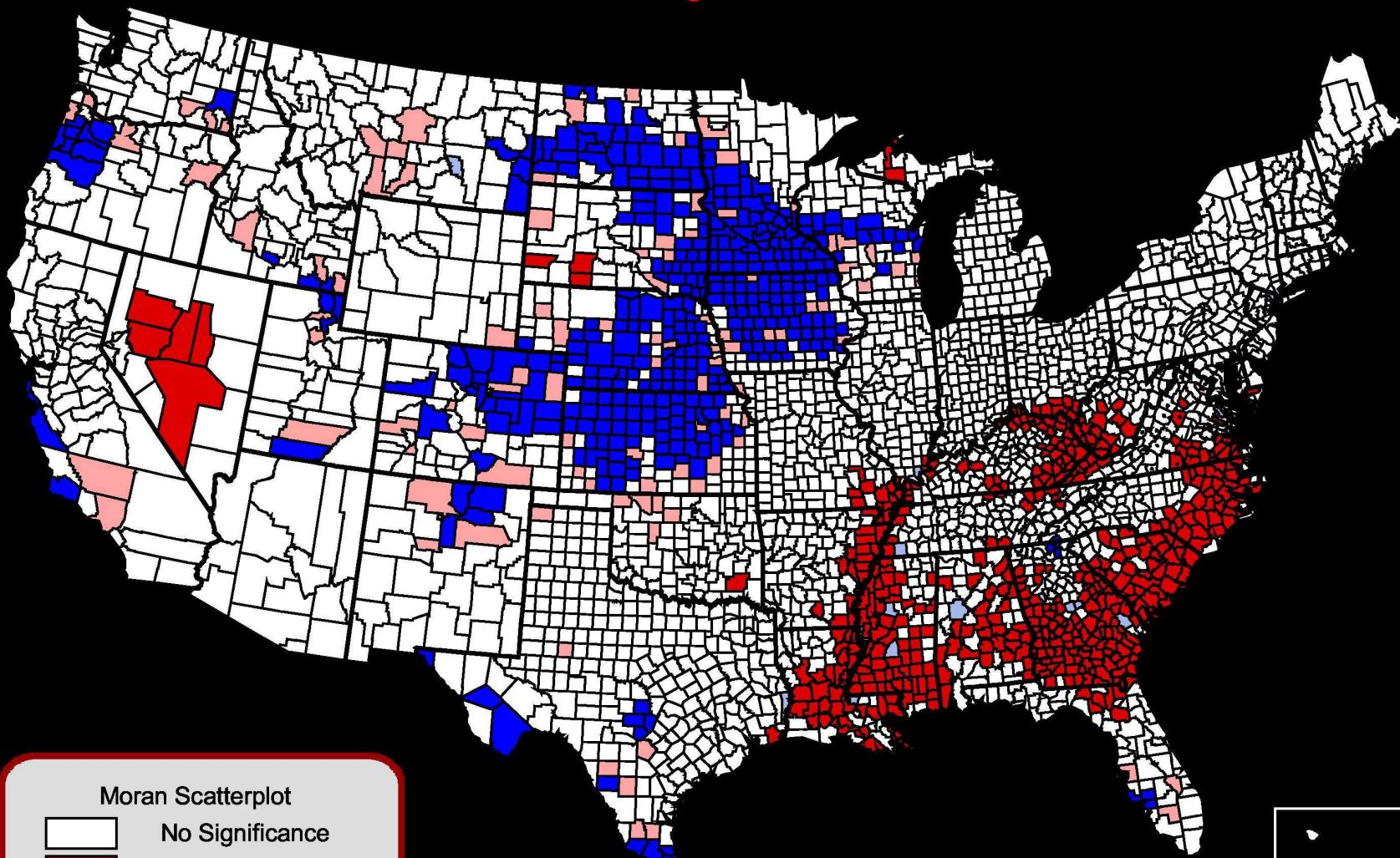


Figure 8. Local Moran's I Scatterplot of Persistent Mortality in the US: 1968-97



Moran Scatterplot

- No Significance
- High Cnty-High Cnty
- Low Cnty-Low Cnty
- High Cnty-Low Cnty
- Low Cnty-High Cnty

Produced by: Troy Blanchard, Wes James
Social Science Research Center
Mississippi State University
Source: CDC Compressed Mortality File



Healthy & Unhealthy Places

Migration Effects

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Research by Cossman et al.

- **Unhealthy places have low in-migration**
- **Unhealthy places have low out-migration**



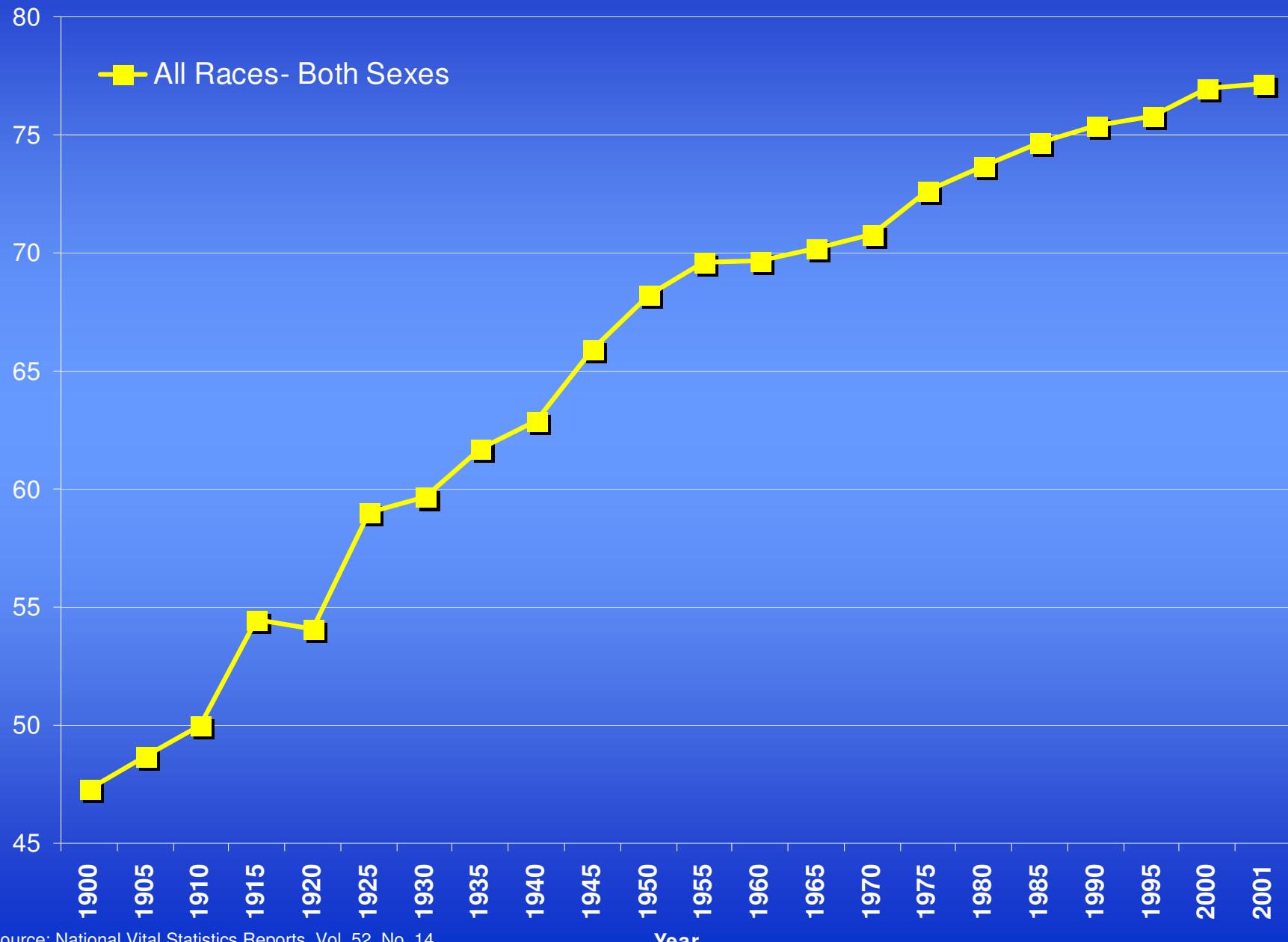
Divergence

(National versus Unhealthy Places)

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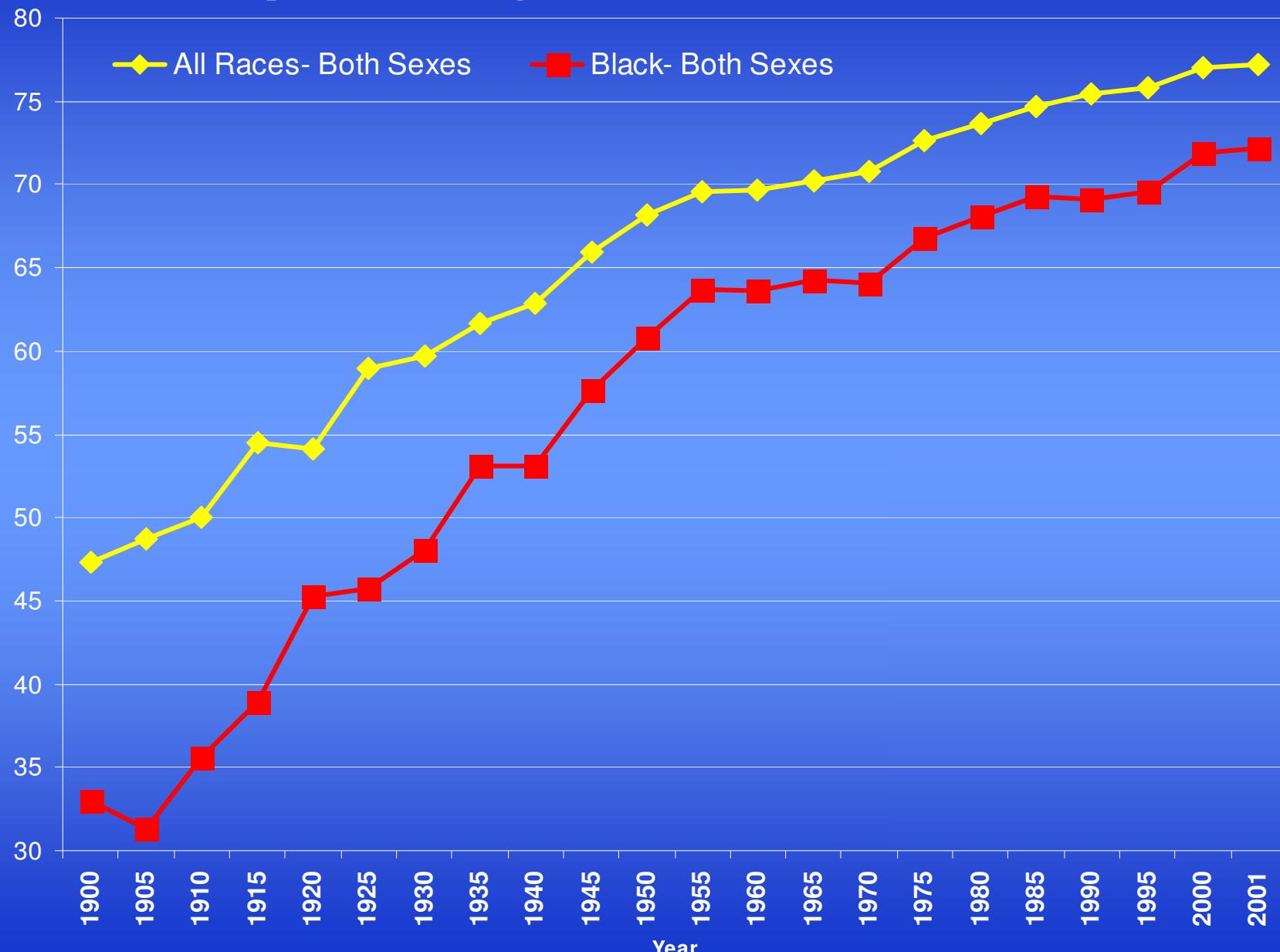


Life Expectancy at Birth, United States



Source: National Vital Statistics Reports, Vol. 52, No. 14

Life Expectancy at Birth, United States

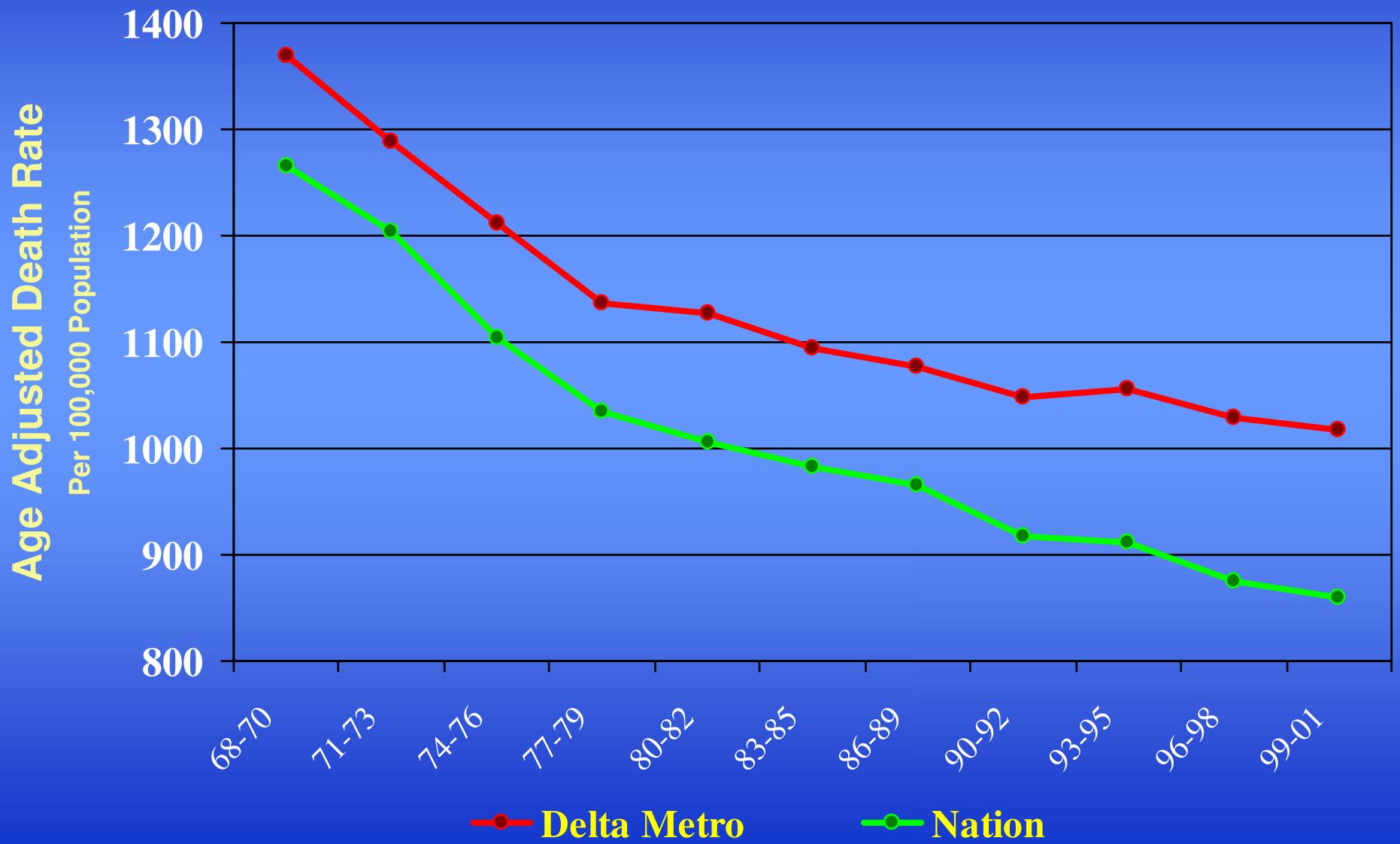


Source: National Vital Statistics Reports, Vol. 52, No. 14

Age Adjusted Mortality Rates

3-Year Averages

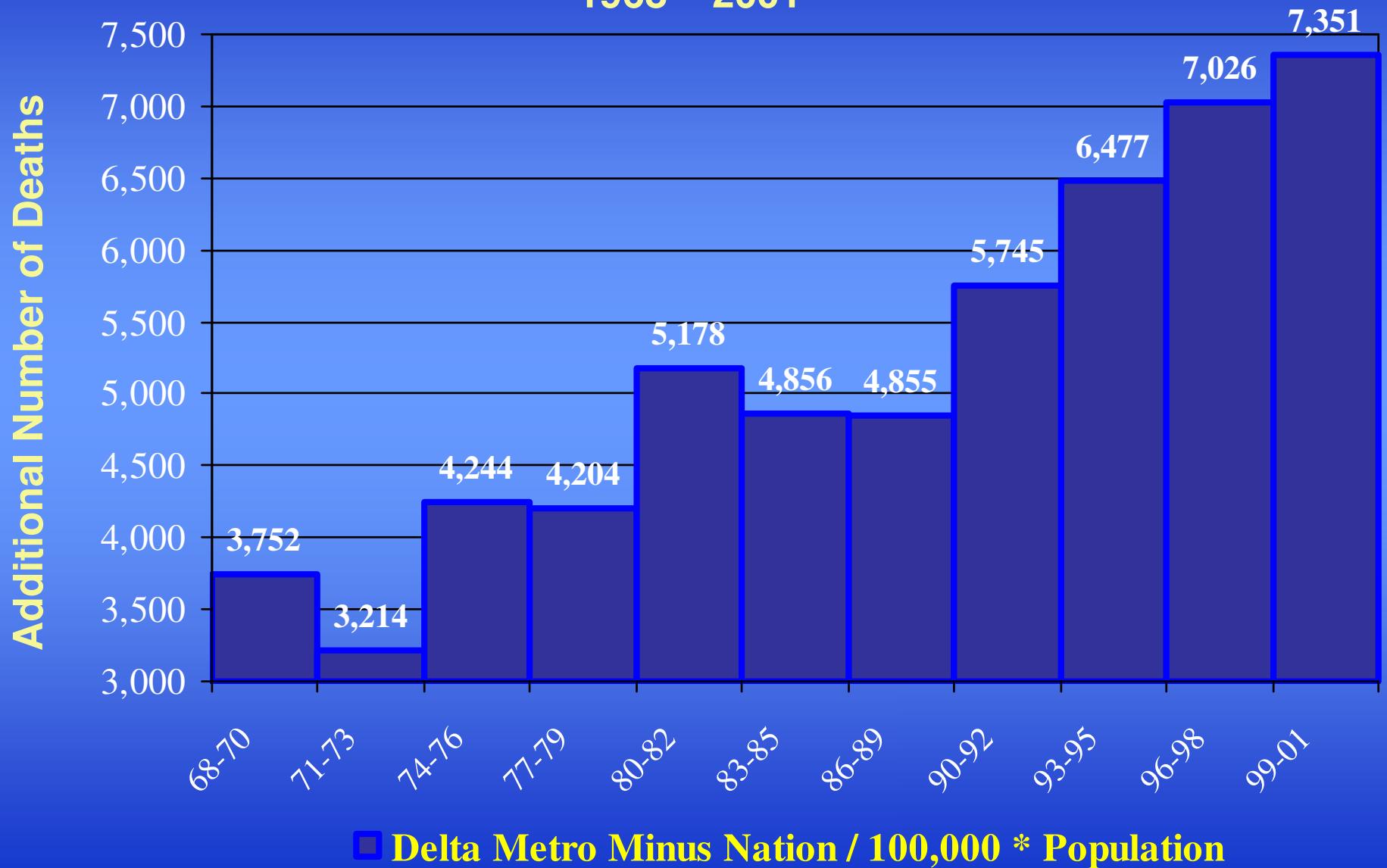
1968 – 2001



Additional Deaths in Delta Metro Area

3-Year Averages

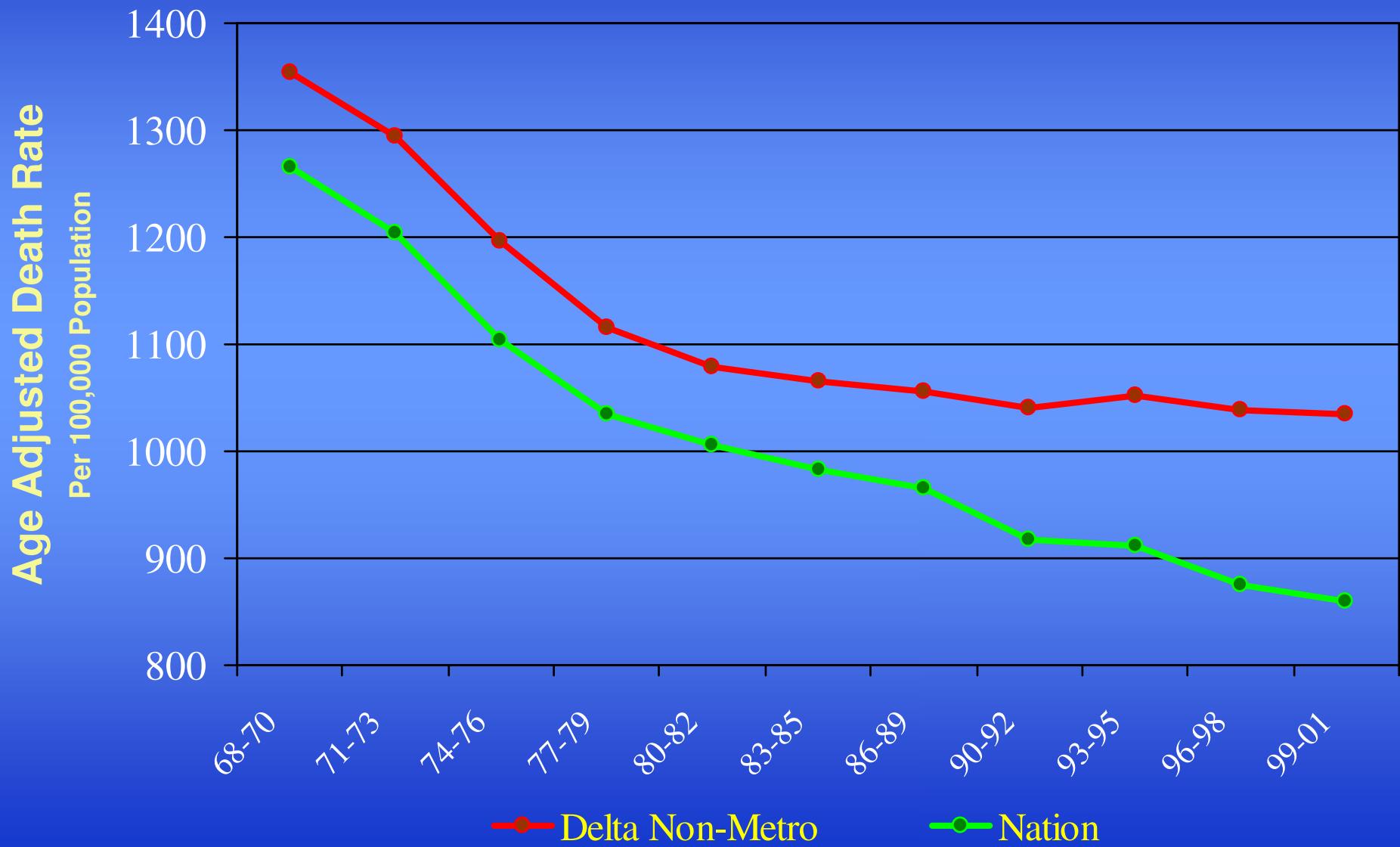
1968 – 2001



Age Adjusted Mortality Rates

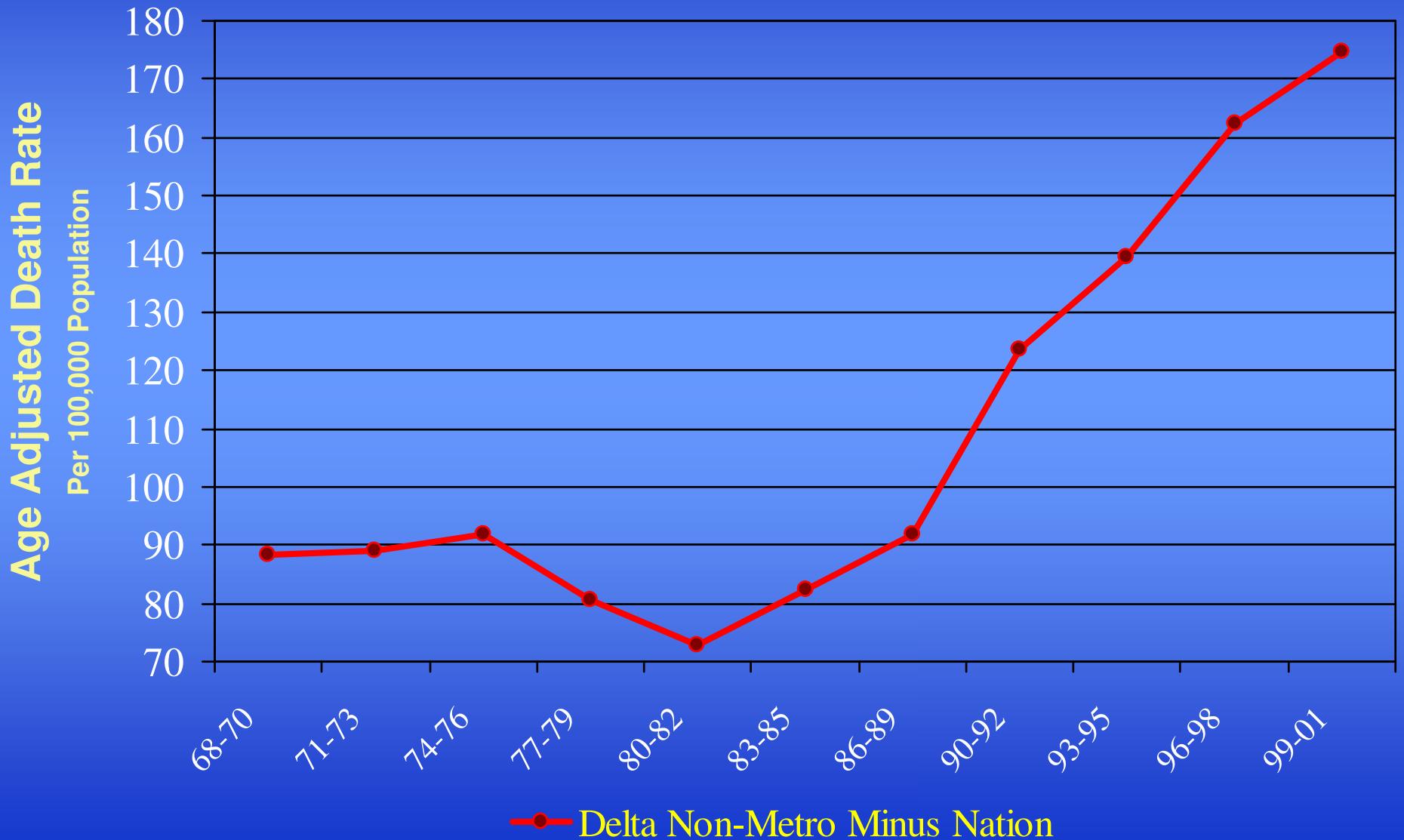
3-Year Averages

1968 – 2001



Difference in Age Adjusted Mortality Rates

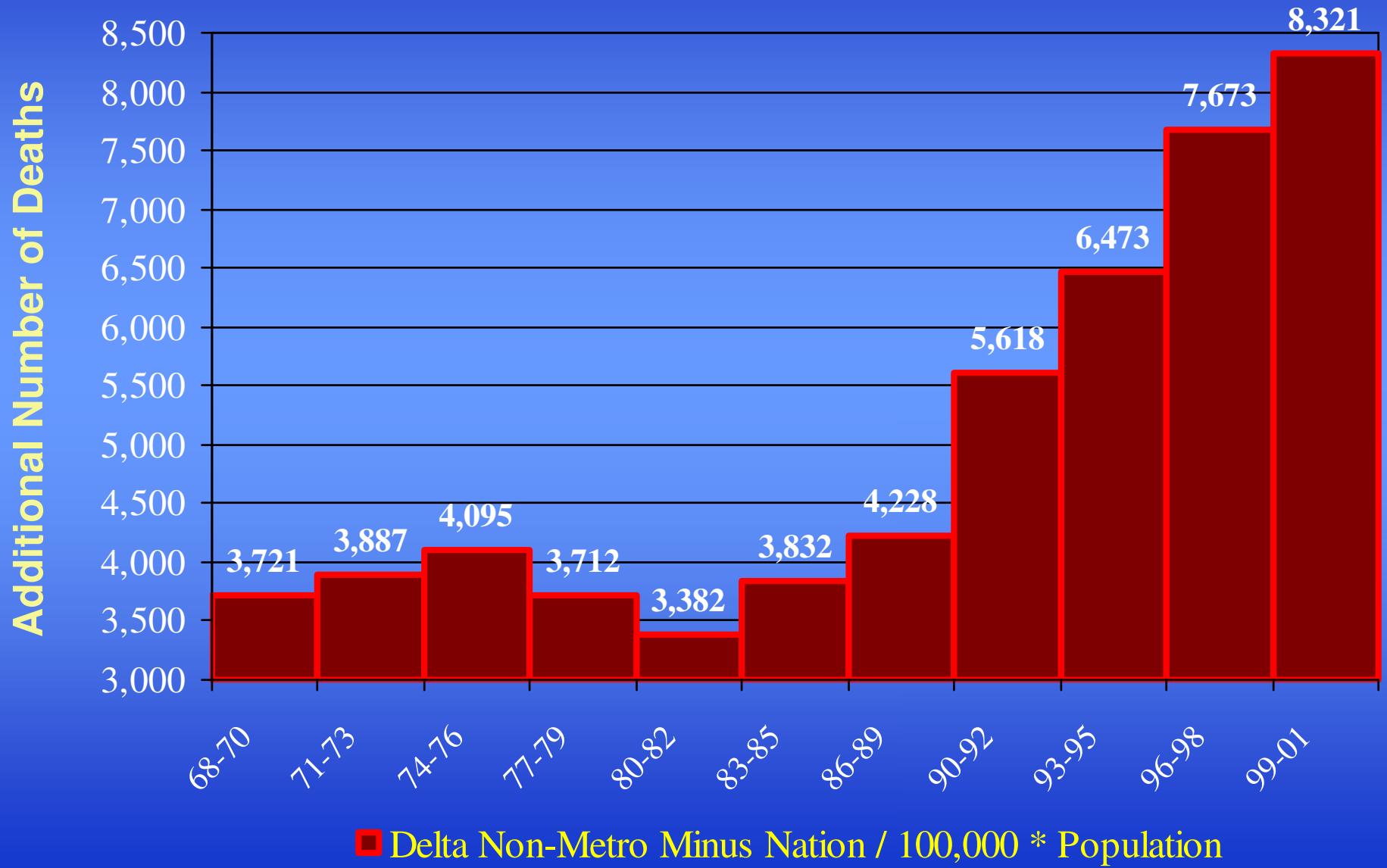
3-Year Averages
1968 – 2001



Additional Deaths in Delta Non-Metro Area

3-Year Averages

1968 – 2001



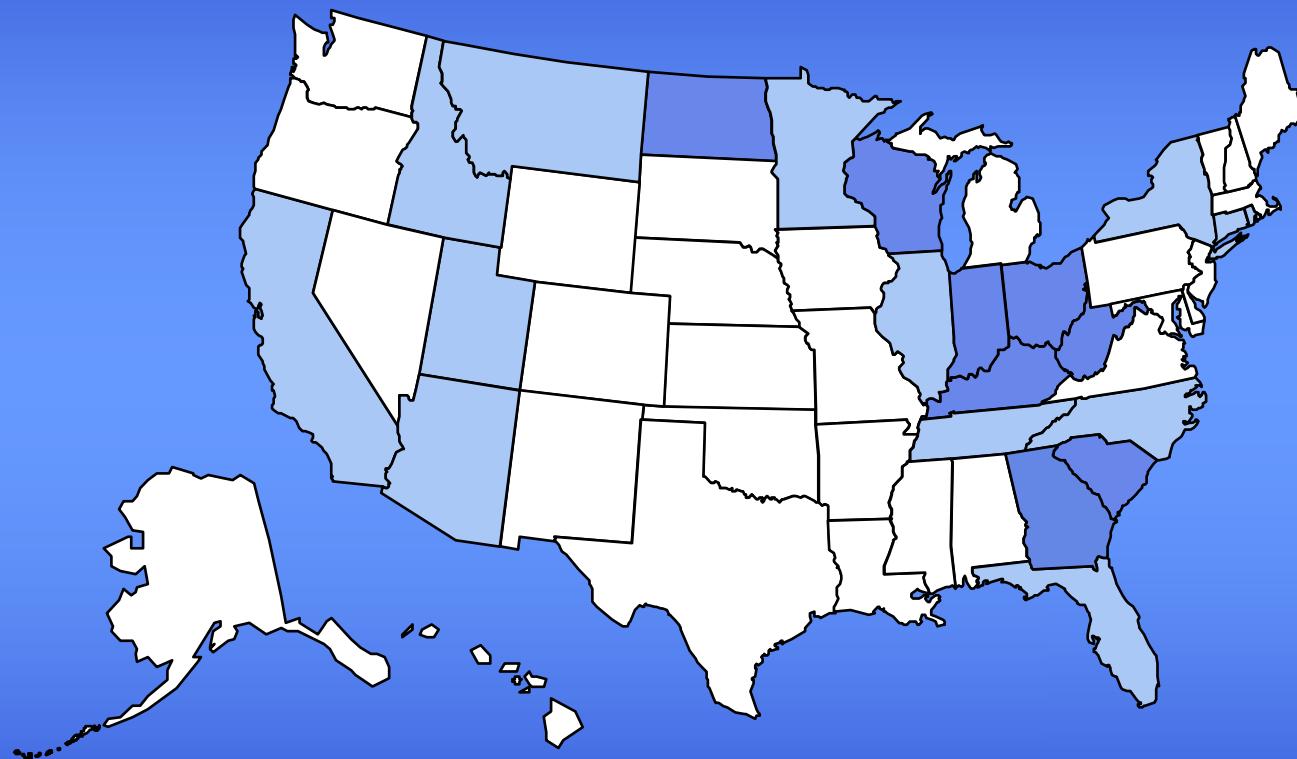
More Questions than Answers

- Are we dealing with a temporary or sustained trend?
- What role does racial disparity play?
- What would an analysis of causes of death tell us about the trend?



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

(* $\text{BMI} \geq 30$, or ~ 30 lbs overweight for 5' 4" woman)

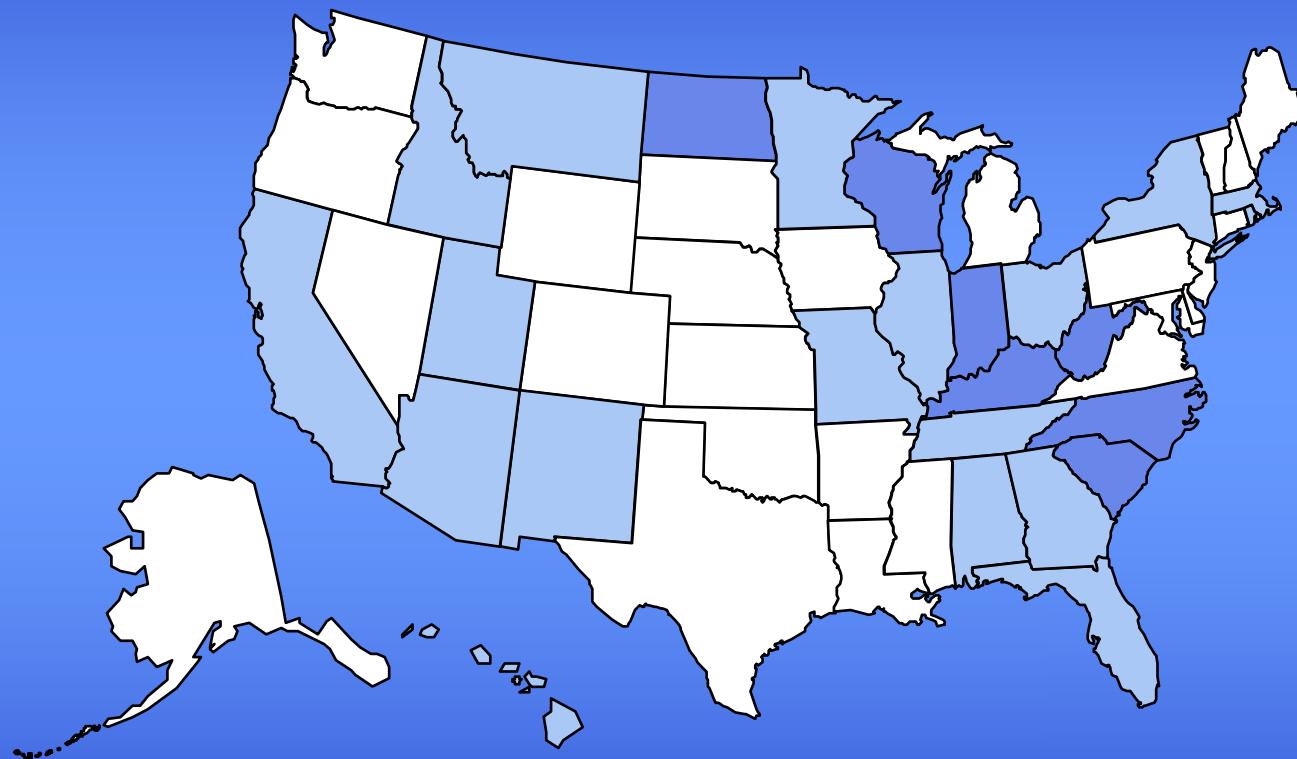


No Data <10% 10%-14%



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

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

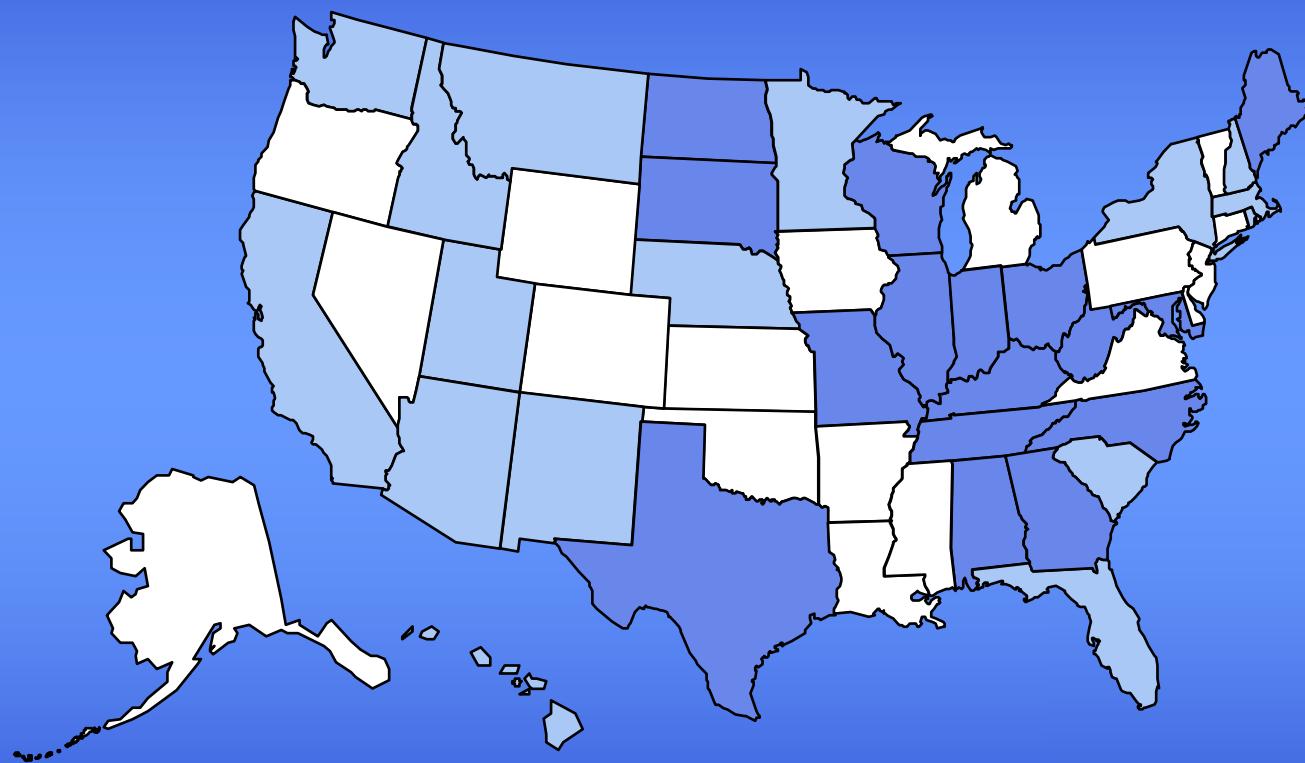


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Obesity Trends* Among U.S. Adults BRFSS, 1987

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

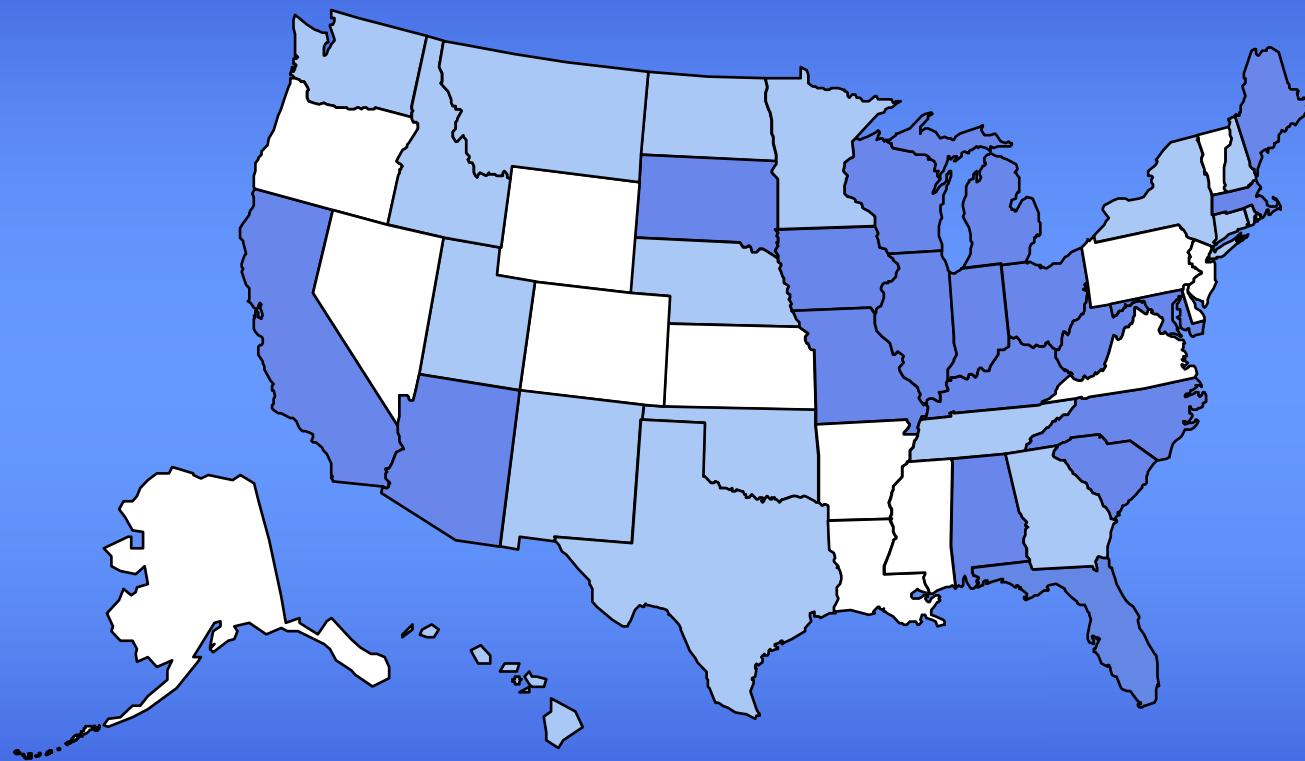


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Obesity Trends* Among U.S. Adults BRFSS, 1988

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

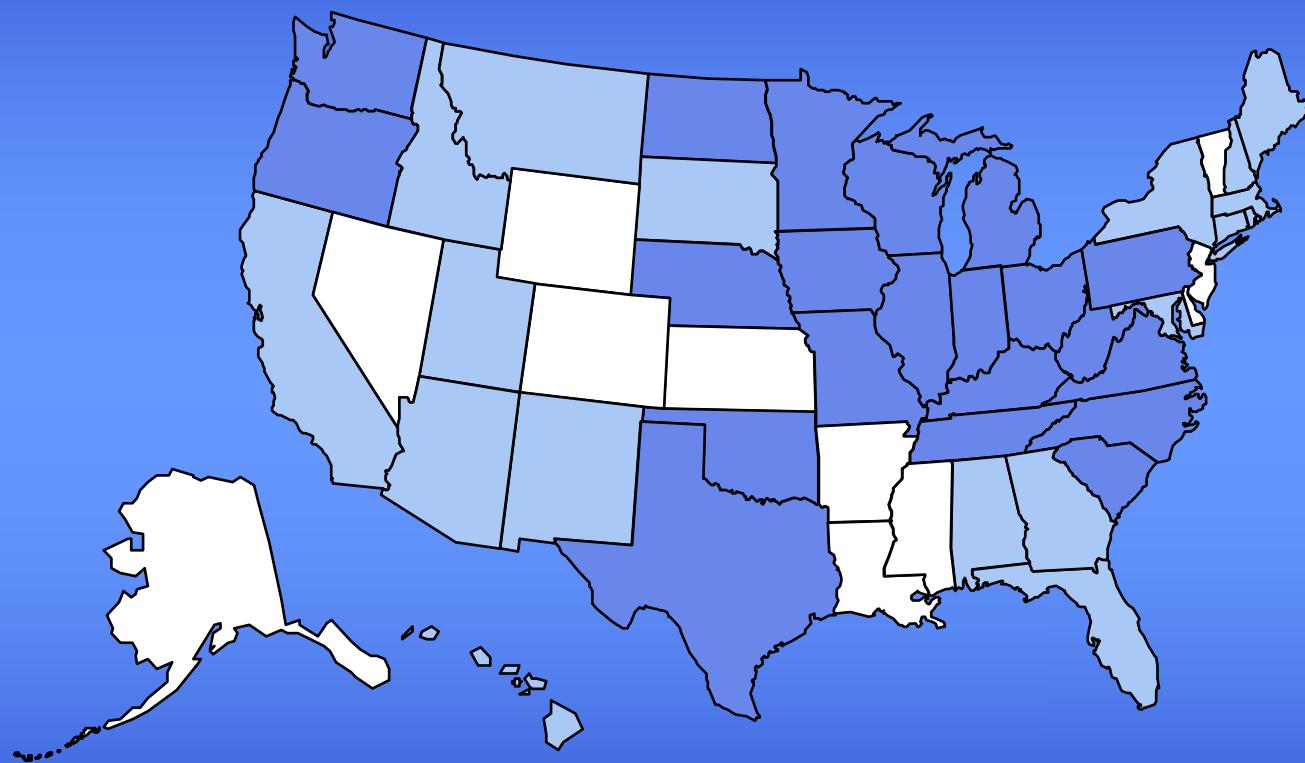


 No Data <10% 10%-14%



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

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

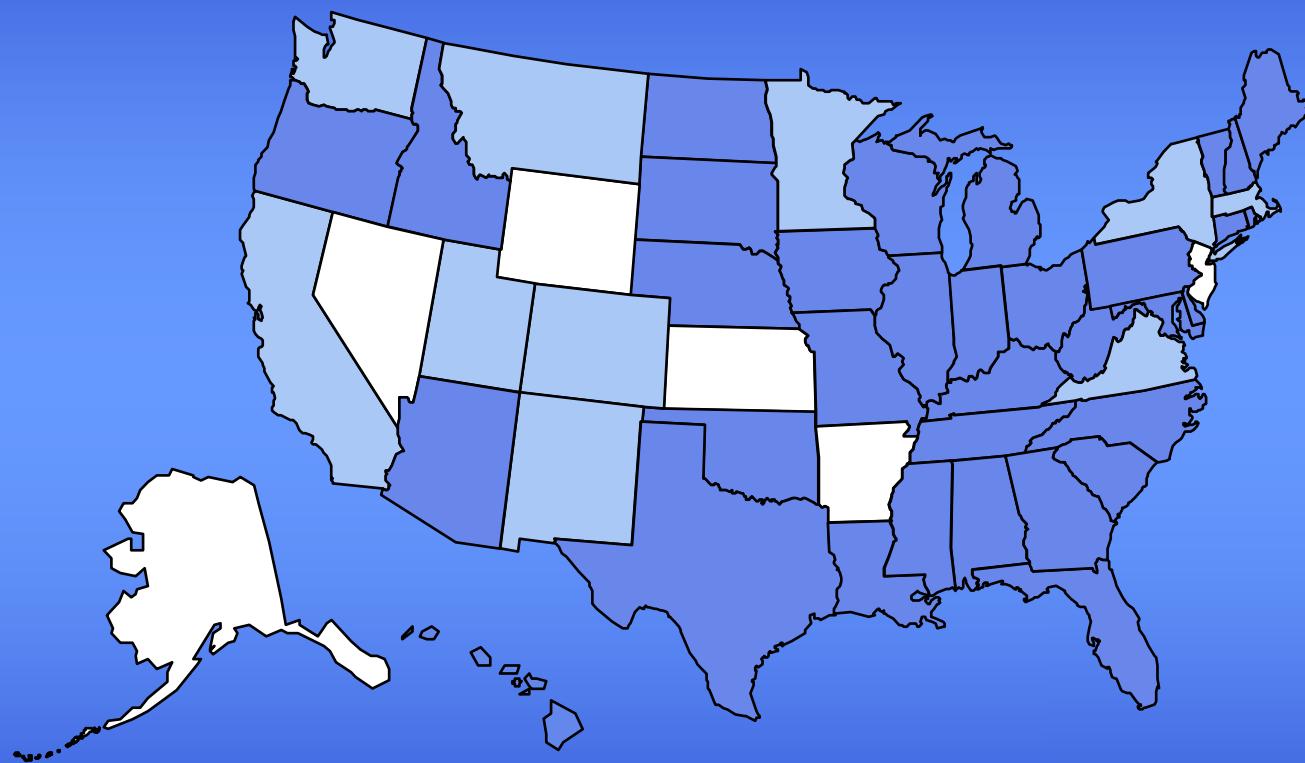


No Data <10% 10%-14%



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

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

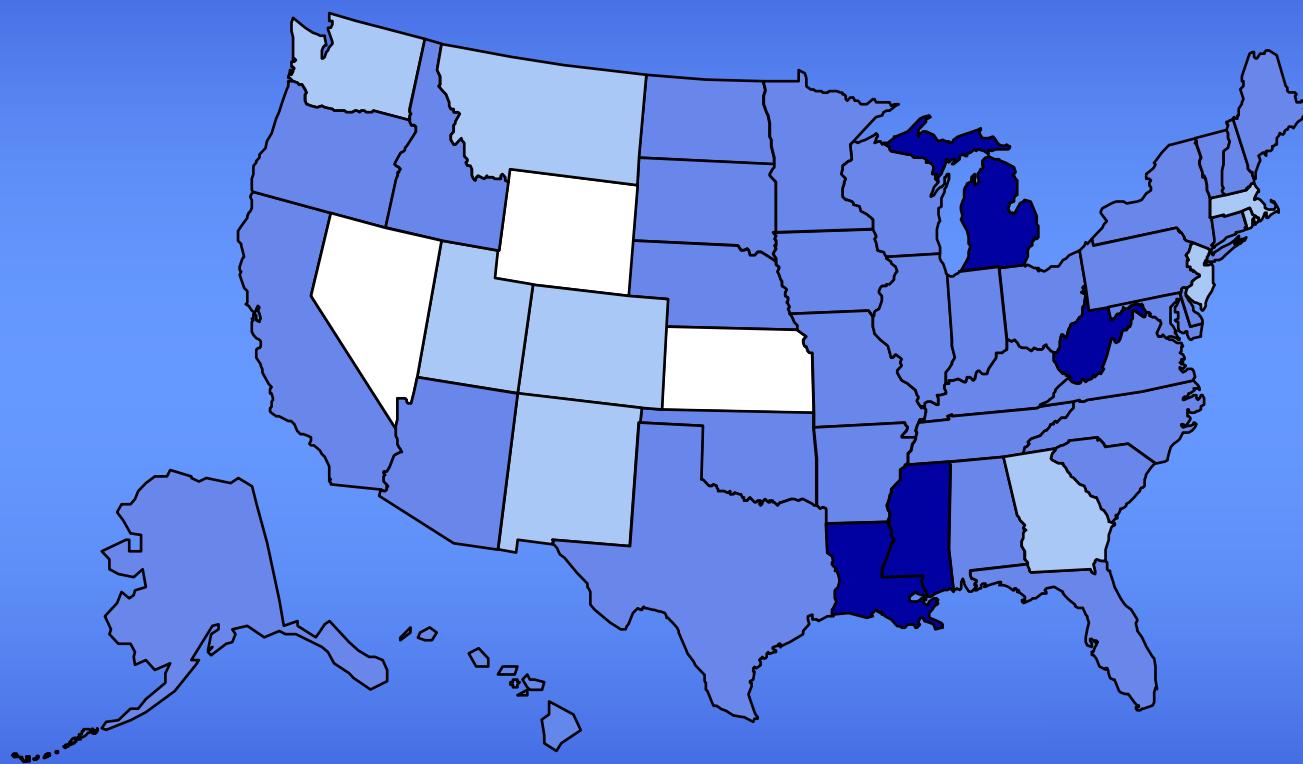


No Data <10% 10%-14%



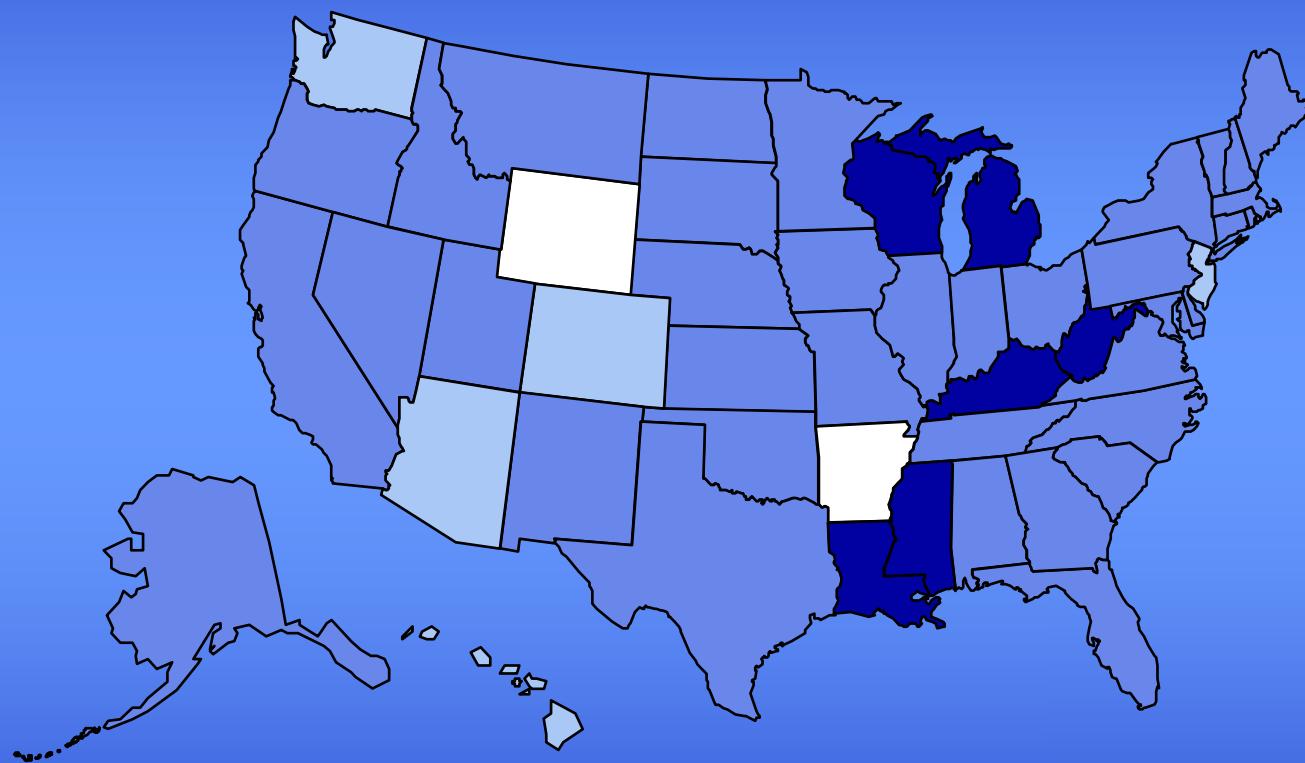
Obesity Trends* Among U.S. Adults BRFSS, 1991

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



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

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

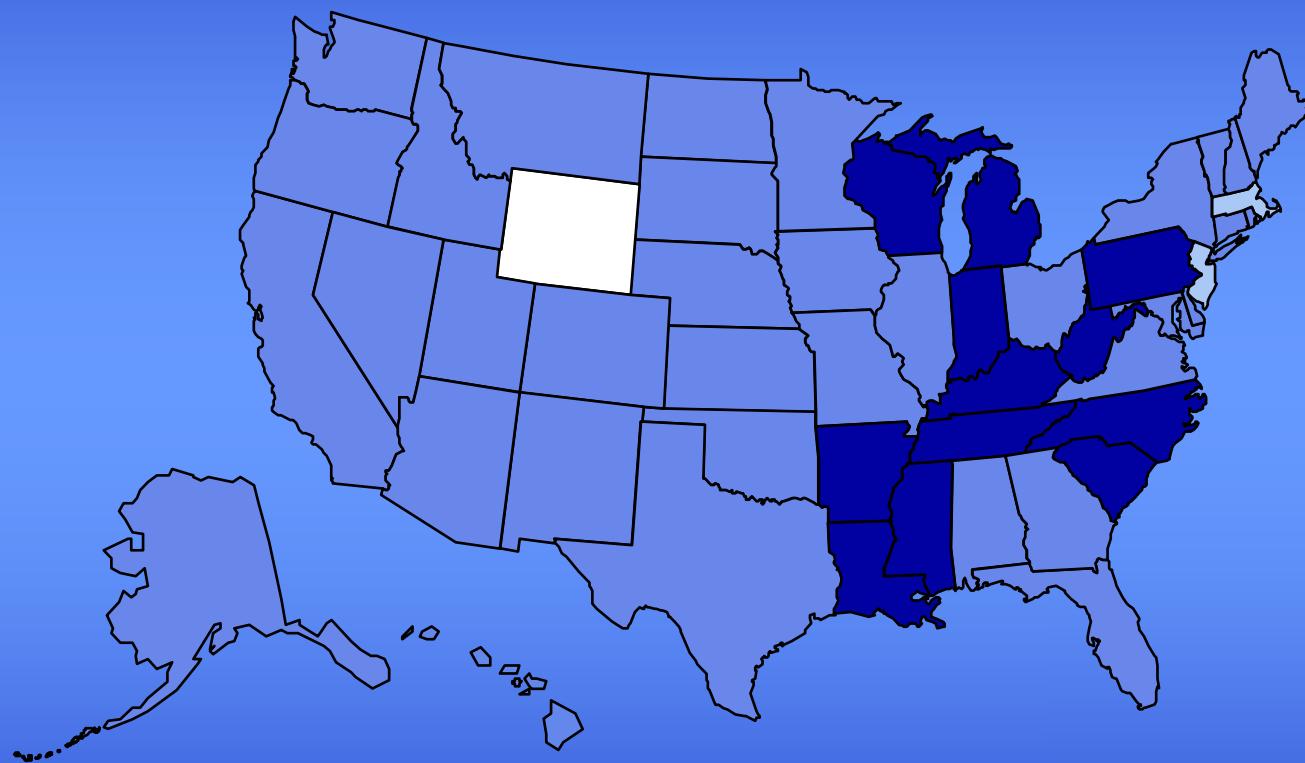


No Data <10% 10%-14% 15%-19%



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

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

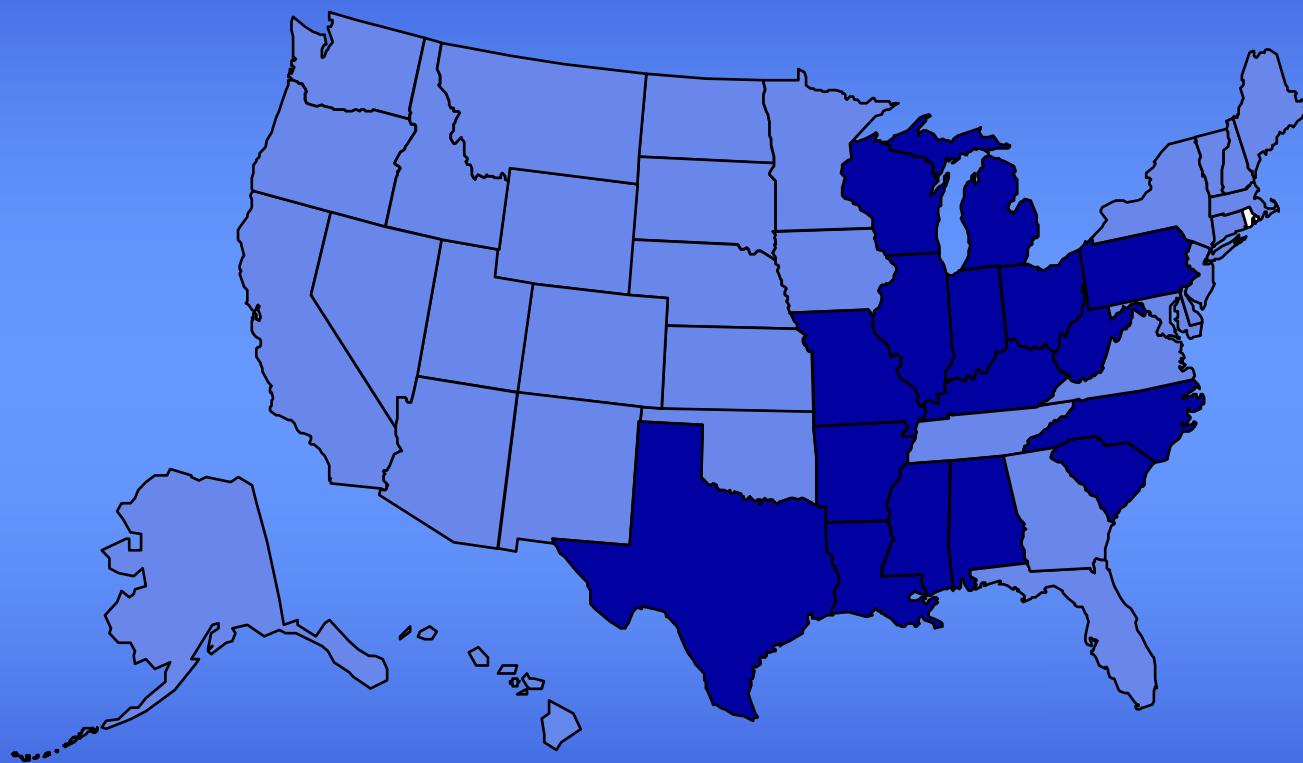


■ No Data ■ <10% ■ 10%-14% ■ 15%-19%



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

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

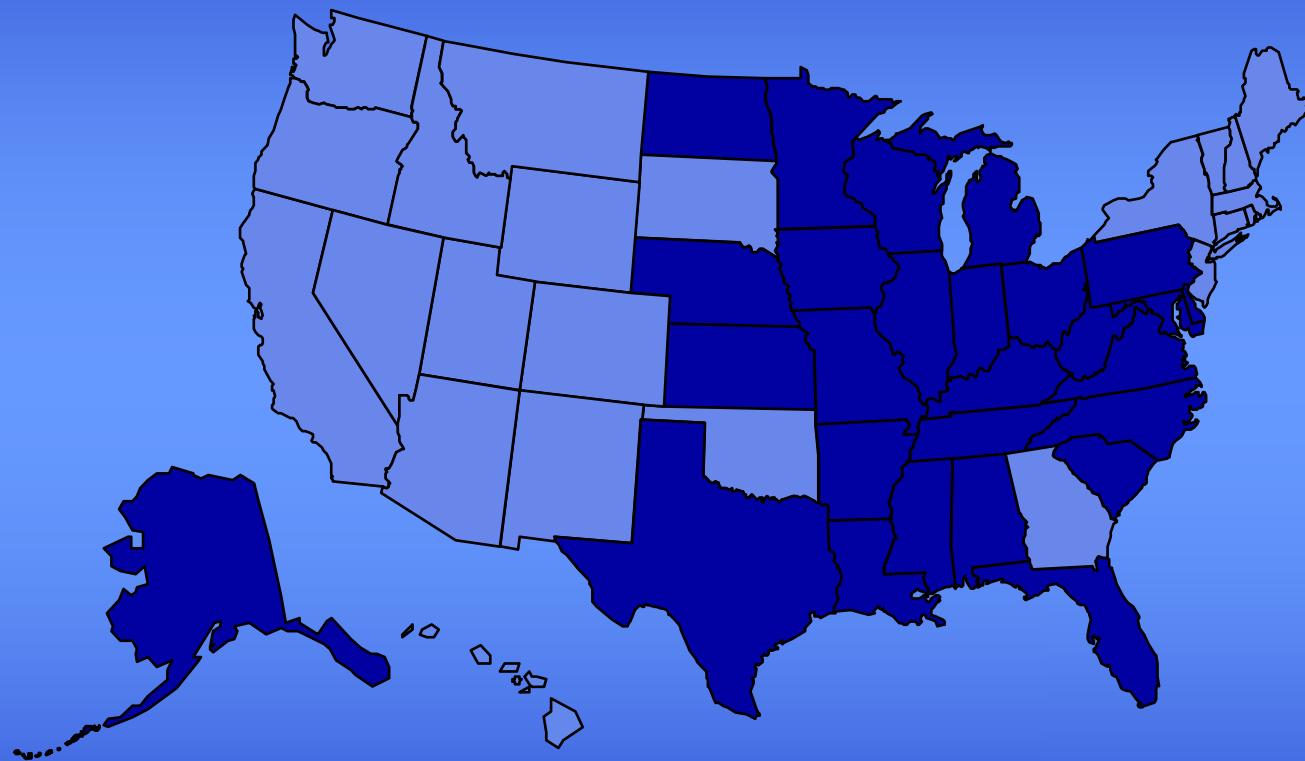


■ No Data ■ <10% ■ 10%-14% ■ 15%-19%



Obesity Trends* Among U.S. Adults BRFSS, 1995

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

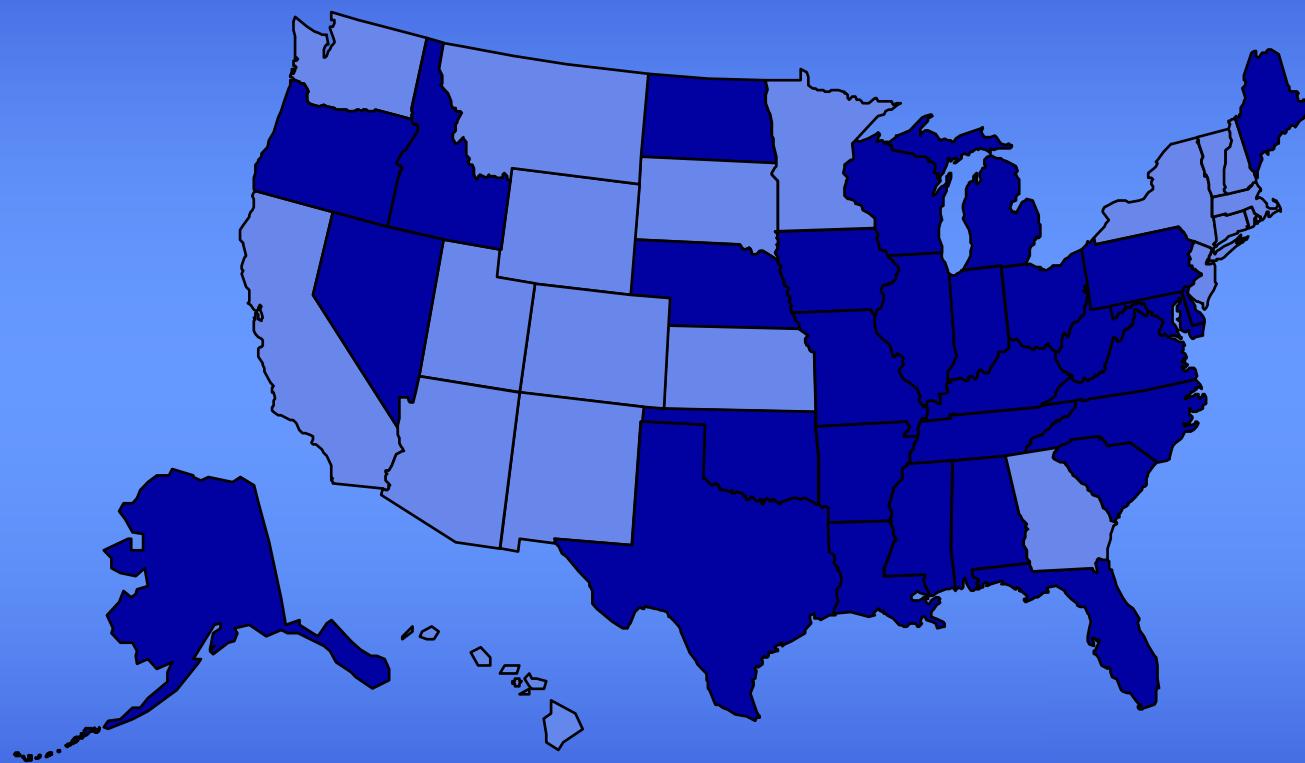


No Data **<10%** **10%-14%** **15%-19%**



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

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

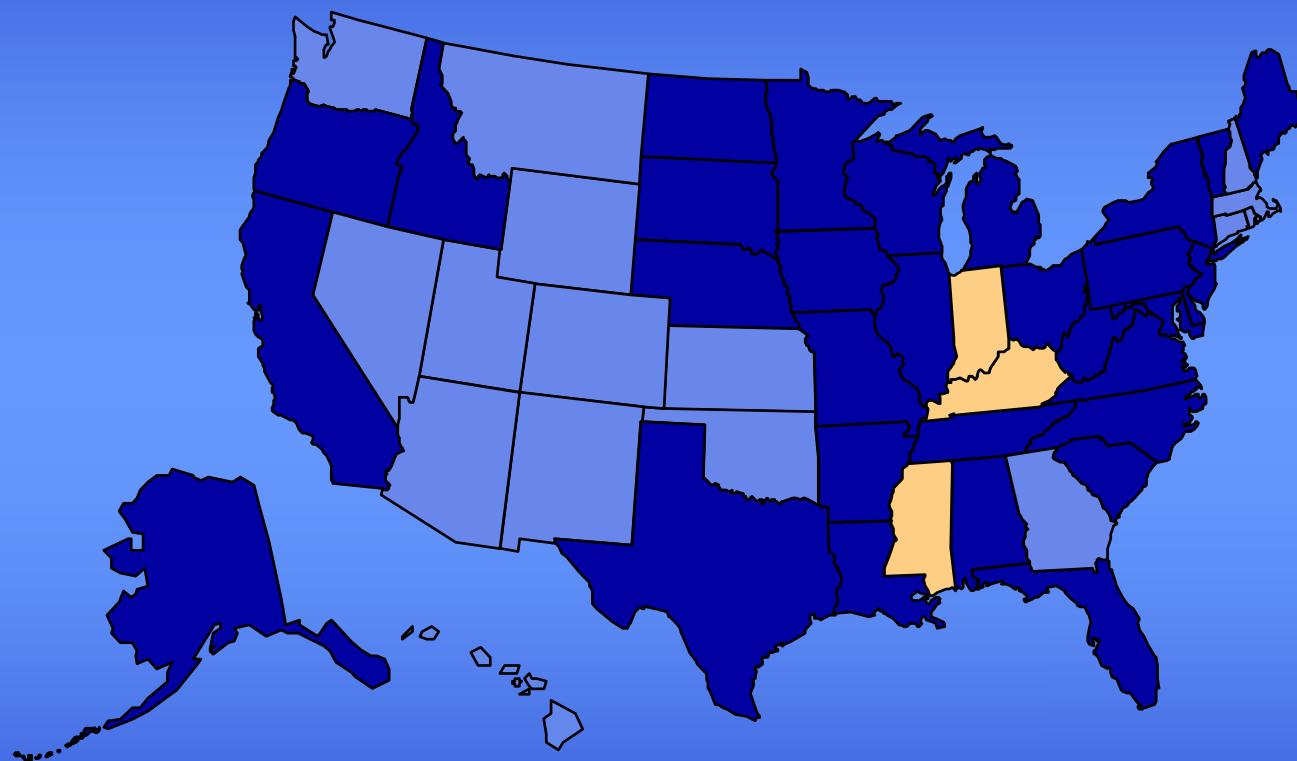


No Data <10% 10%-14% 15%-19%



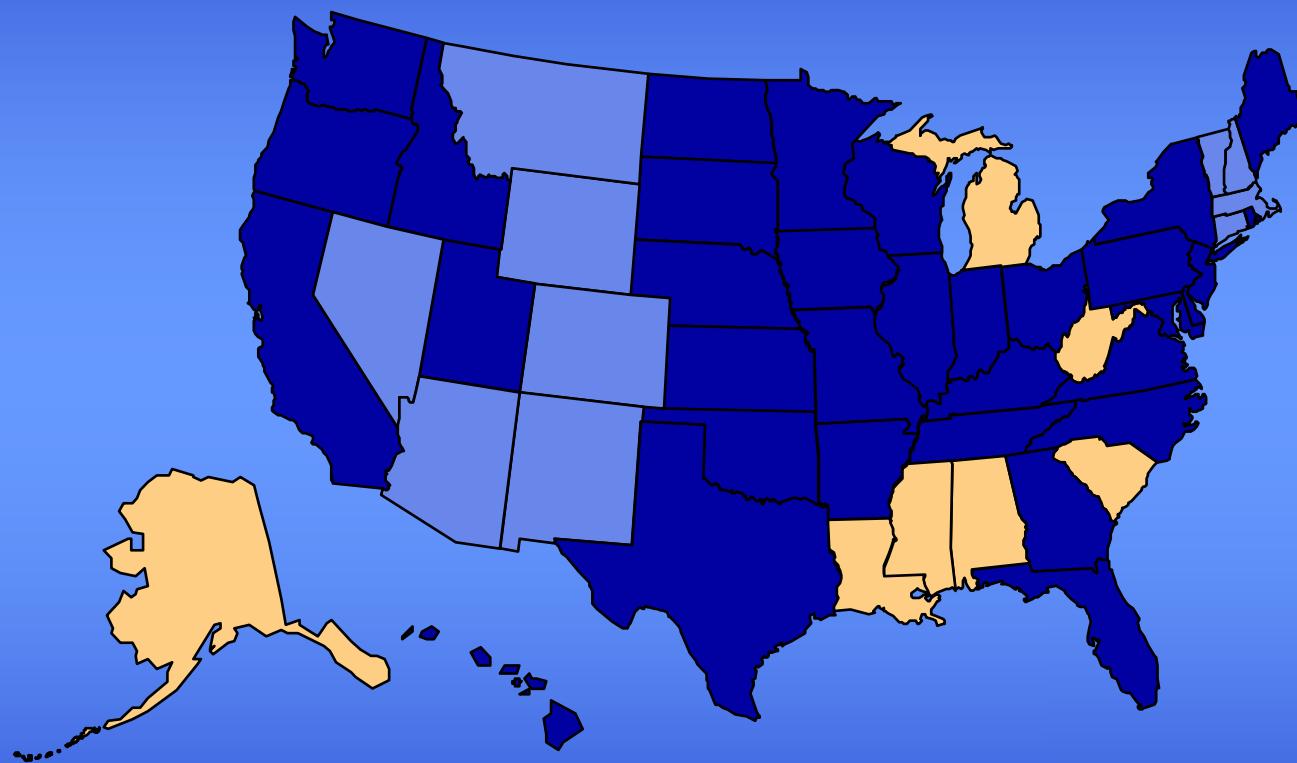
Obesity Trends* Among U.S. Adults BRFSS, 1997

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



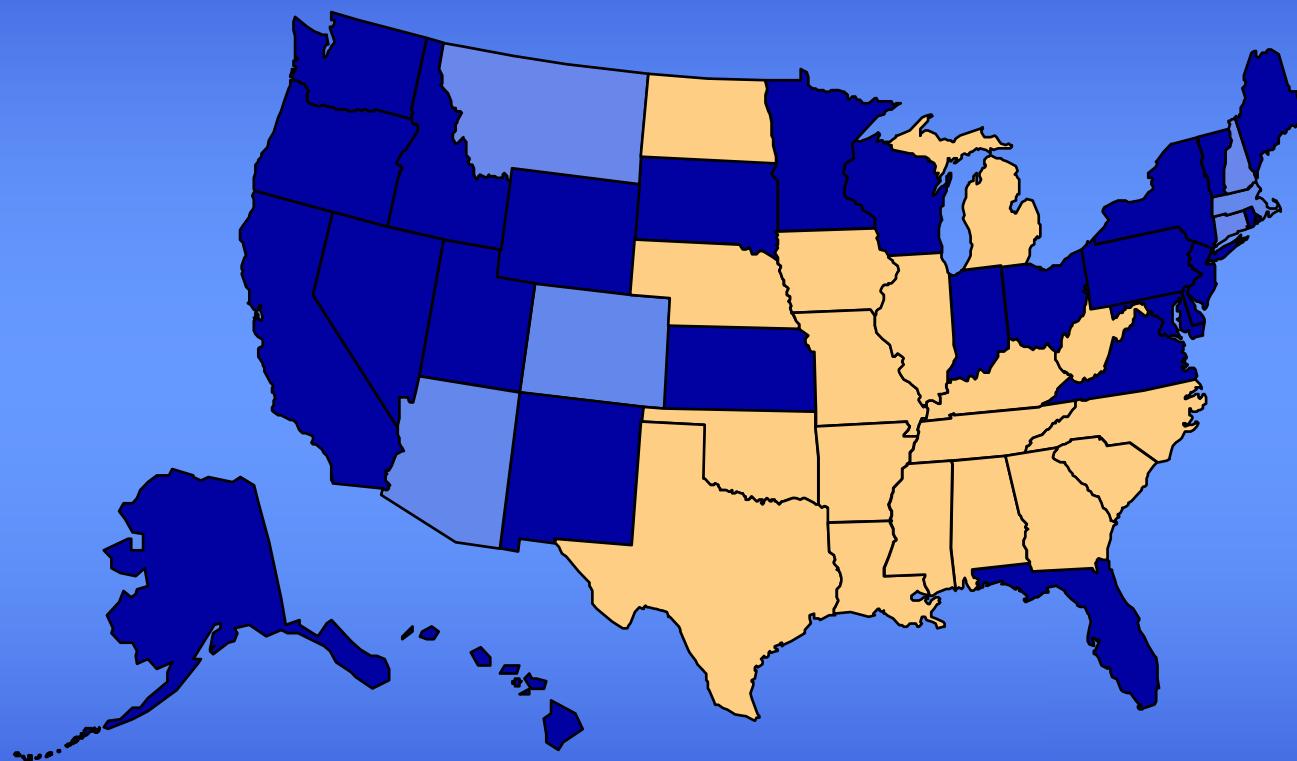
Obesity Trends* Among U.S. Adults BRFSS, 1998

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



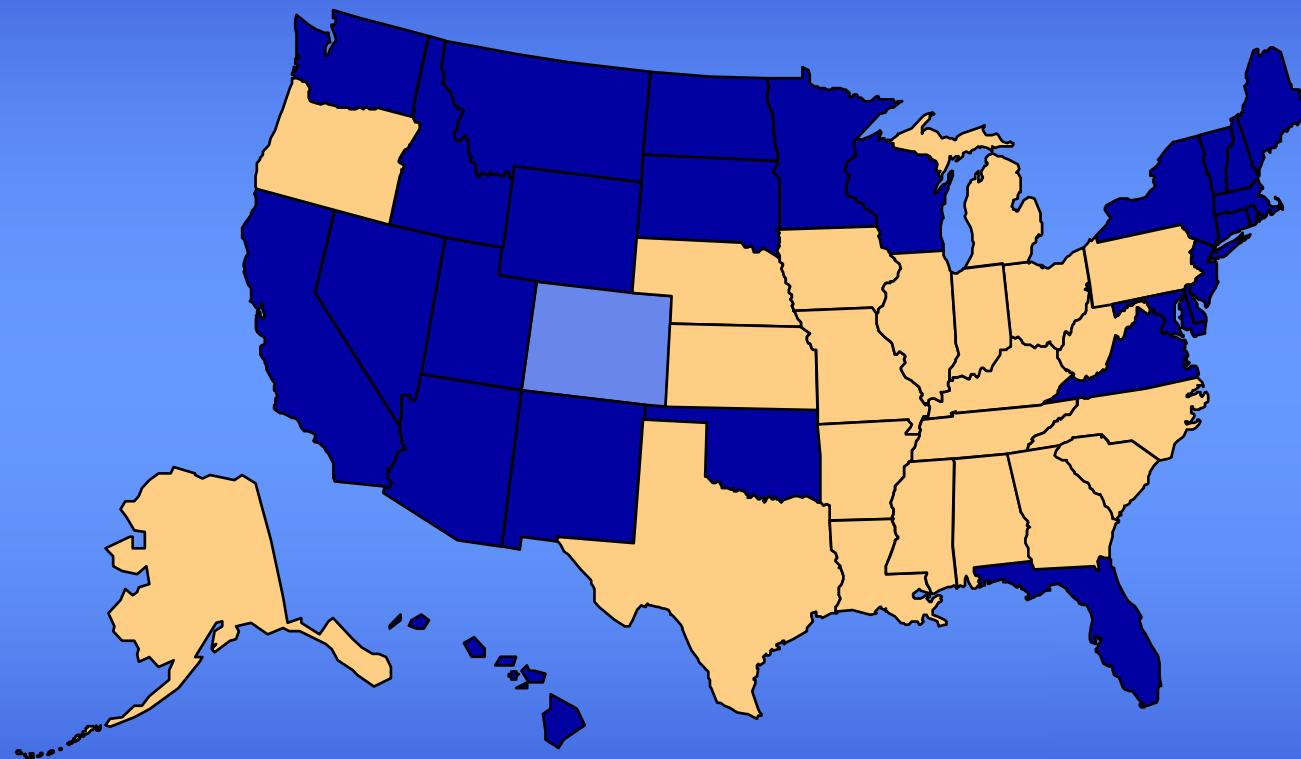
Obesity Trends* Among U.S. Adults BRFSS, 1999

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



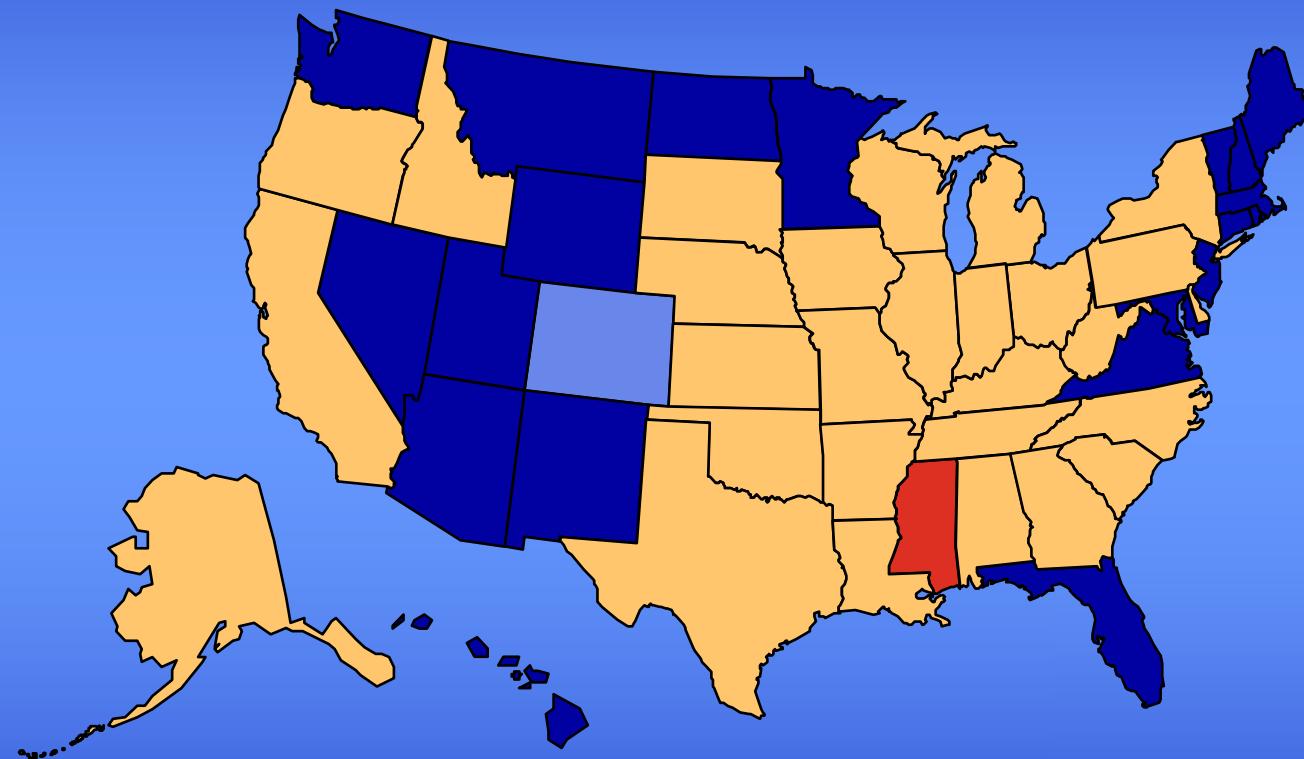
Obesity Trends* Among U.S. Adults BRFSS, 2000

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



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

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

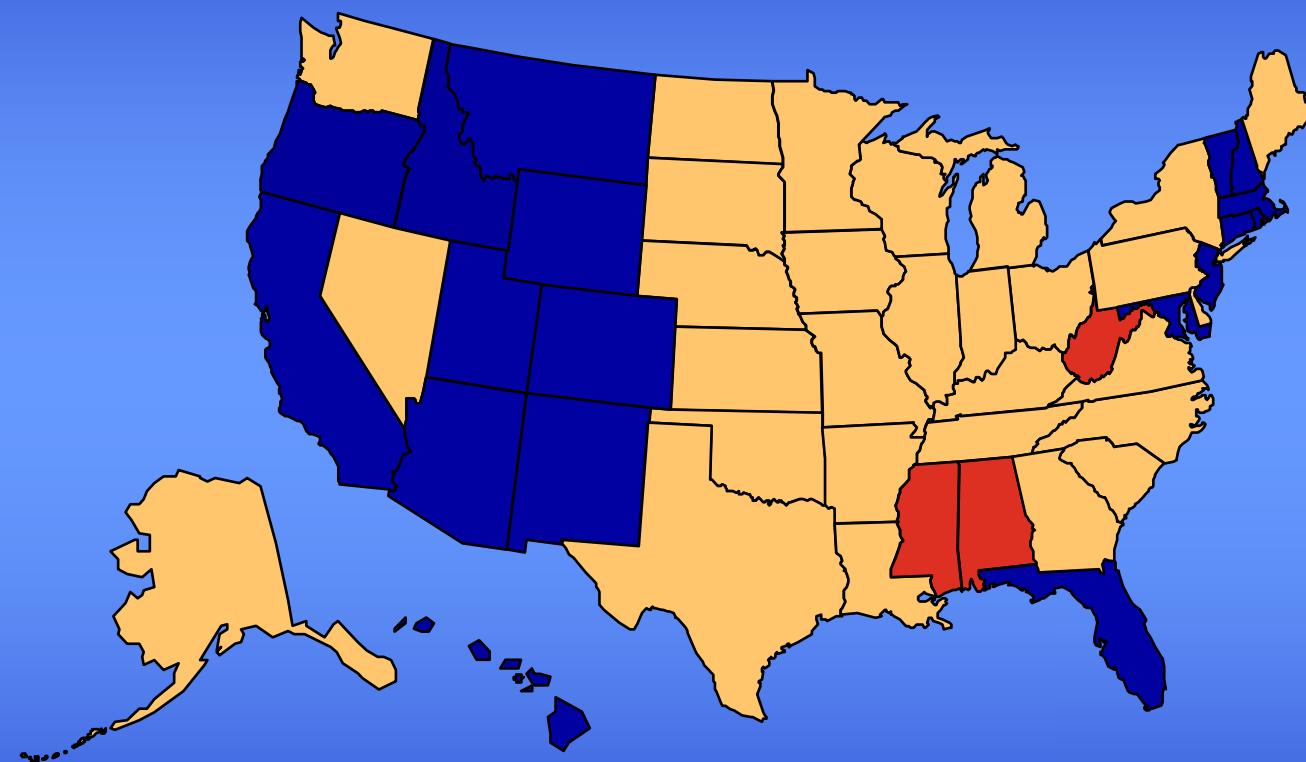


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- | | | | | | |
|-----------|--------|-----------|-----------|-----------|---------------|
| ■ No Data | ■ <10% | ■ 10%-14% | ■ 15%-19% | ■ 20%-24% | ■ $\geq 25\%$ |
|-----------|--------|-----------|-----------|-----------|---------------|

OBESITY TRENDS* AMONG U.S. ADULTS BRFSS, 2002

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



Source: Behavioral Risk Factor Surveillance System, CDC

“Obesity has roughly the same association with chronic health conditions as does 20 years of aging.”

**Julie L. Gerberding, M.D., M.P.H.
Director, Centers for Disease Control and Prevention**



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“The speed with which obesity has increased can be explained by changes in *society* that have increased calorie intake and reduced energy expenditure.”

**Julie L. Gerberding, M.D., M.P.H.
Director, Centers for Disease Control and Prevention**



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More Questions...

- Is the trend a consequence of the obesity epidemic?
- Is the trend the leading edge of a more widespread problem for the United States?
- What are the implications for the health and wealth of the Delta Region?



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Thank You

