

**Richard J. Jackson, MD, MPH**

**Director**

**National Center for Environmental Health  
Centers for Disease Control and Prevention**

**[RJJackson@cdc.gov](mailto:RJJackson@cdc.gov)**

**770-488-7000**



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

[www.cdc.gov/healthyplaces.](http://www.cdc.gov/healthyplaces)



# Health in the Late 19<sup>th</sup> Century

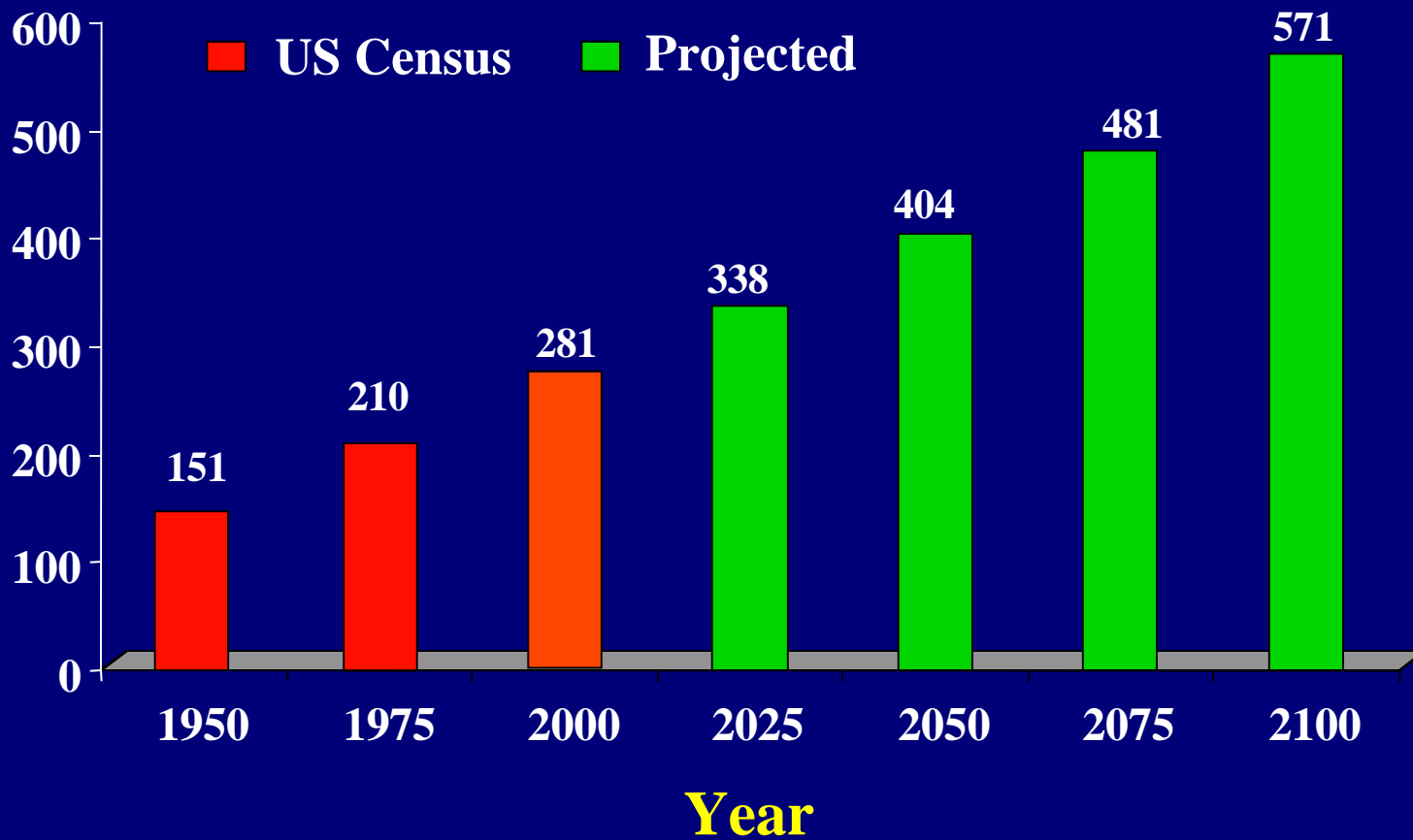
- Challenge of TB, Cholera, Yellow Fever, Malaria and other infectious diseases.
- Challenges Seemed Insurmountable
- Importance of Architects, Planners, Builders, Zoning Efforts, Public Works esp. Drinking and Waste Water Systems.

# Diseases of the 21<sup>st</sup> Century

- Diseases and costs of care for Aging Populations.
- Mental Disorders: Depression, Anxiety, Developmental, Substance Abuse
- Overweight: Diabetes II, Heart Disease
- Musculoskeletal: Arthritis, Osteoporosis
- Respiratory: Asthma, Emphysema
- Cardiovascular: Heart Attack, Stroke
- Macro-environment: Climate, Conflict

# U.S. Population, 1990-2100

Number in millions

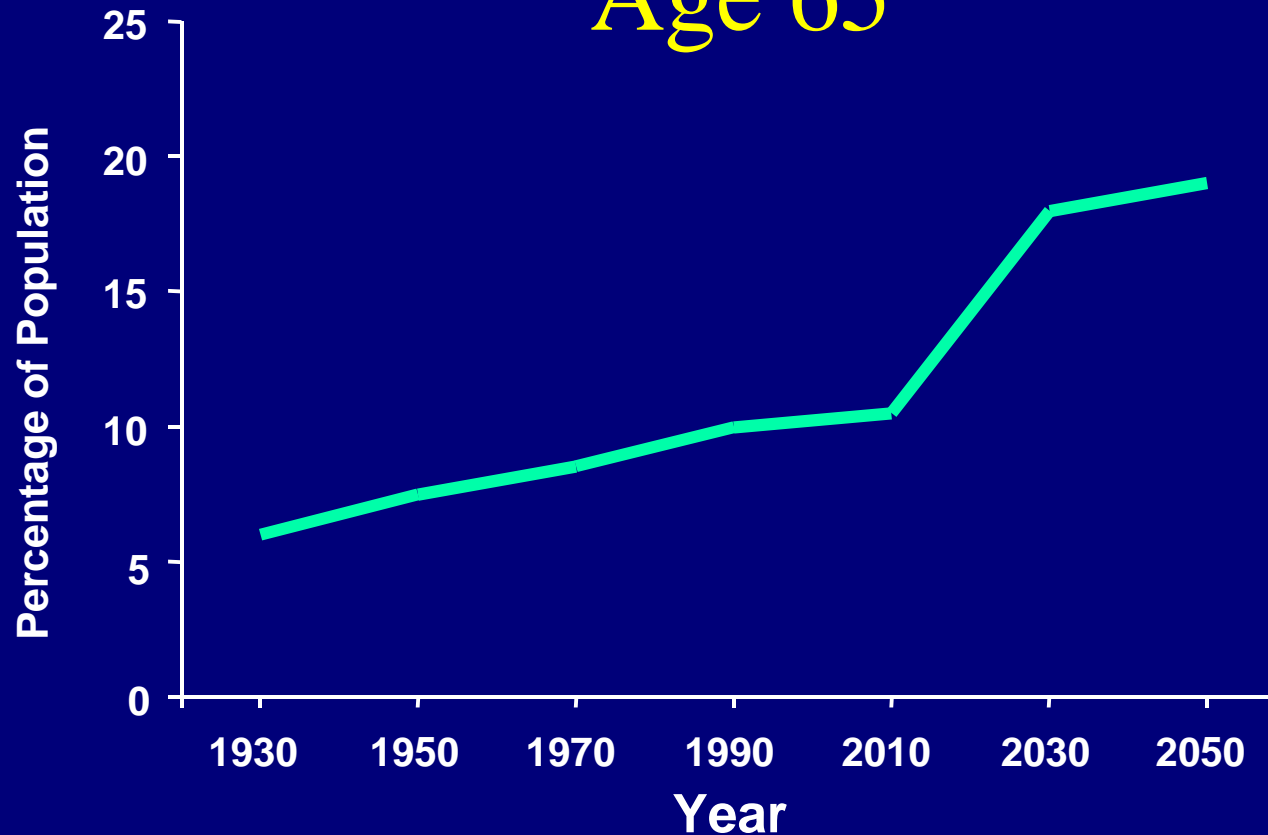


Source: U.S. Census Bureau



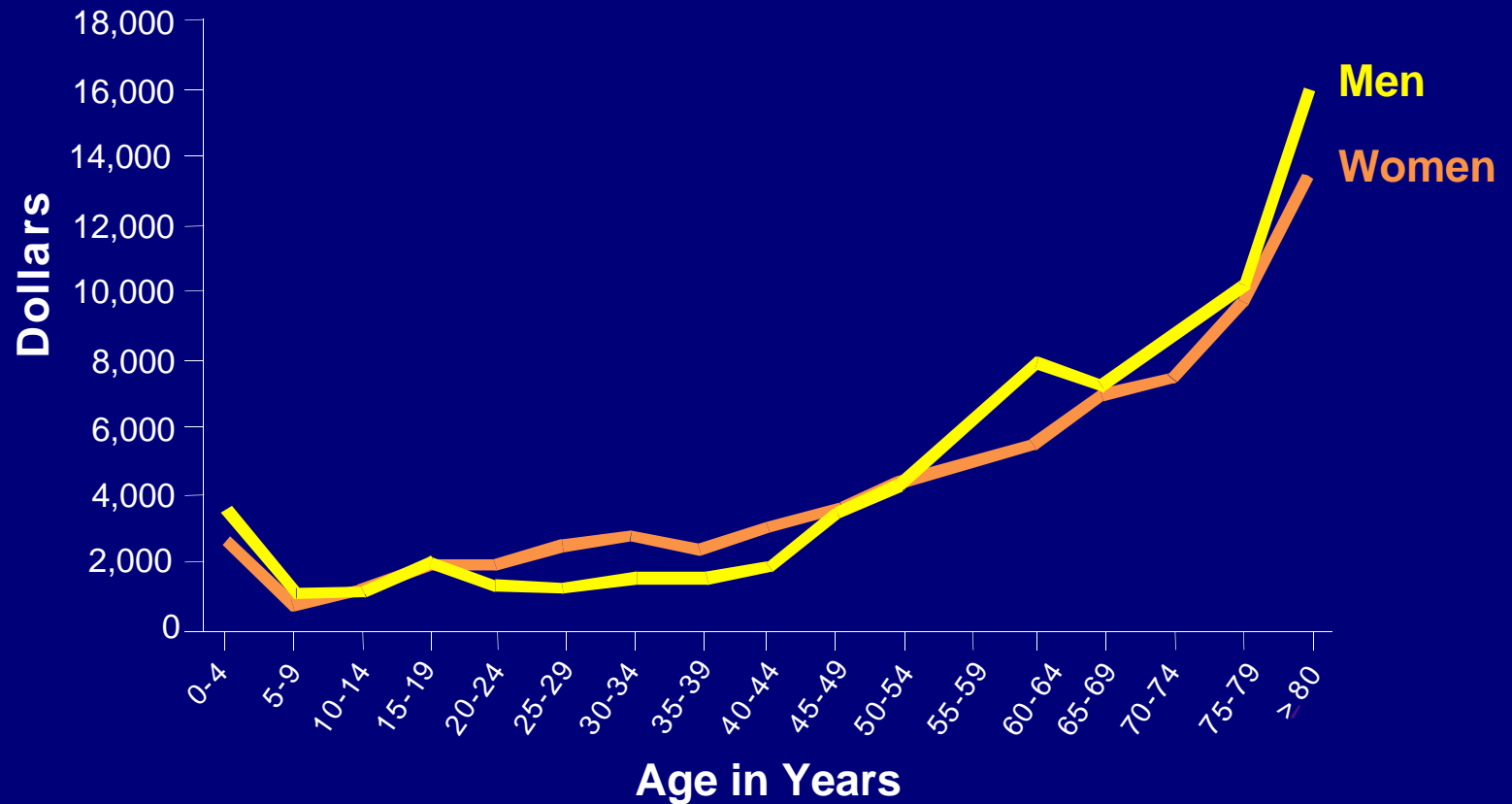
# An Aging Population

## Percentage of U.S. Population over Age 65



Source: From Baby Boom to Elder Boom: Providing Health Care for an Aging Population  
Copyright 1996, Watson Wyatt Worldwide.

# Estimated Per Capita Health Expenditures by Age and Sex, 1995



Source: From Baby Boom to Elder Boom: Providing Health Care for an Aging Population  
Copyright 1996, Watson Wyatt Worldwide.

# Charlottesville: Welcome to the big city

By Maurice Tamman  
mtamman@ajc.com

**Charlotte** — Over the past 40 years, satellite lenses have clicked away, 450 miles high, capturing the nation's night lights.

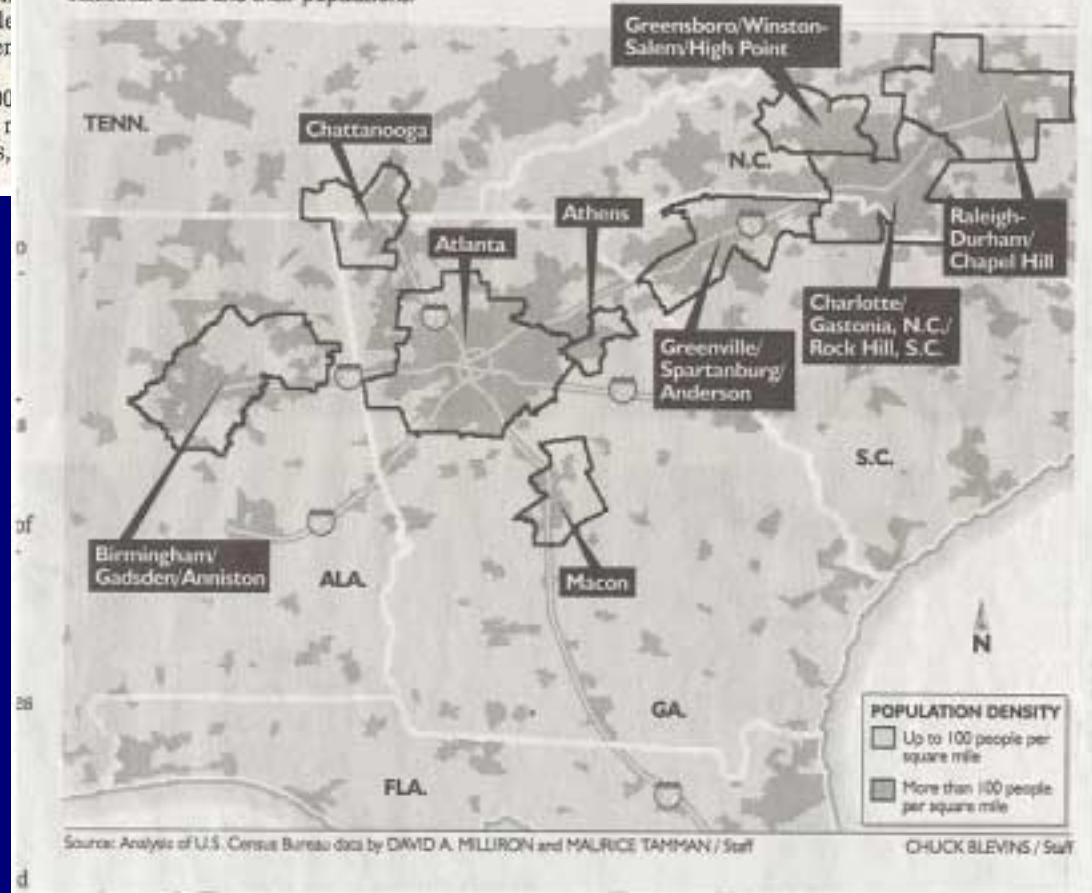
In the 1970s, those lenses detected only a few blips from Georgia, Alabama, Tennessee, and the Carolinas. Today, the region glows like a wheel-shaped constellation, with Atlanta at its hub.

During that time, metropolitan areas have grown from 1.39 million people in five counties to 4.11 million in 20 counties; it pushes out 20, 75 and 85 toward Birmingham, Macon, Greenville, Charlotte. All the while, markets boomed, extending toward Atlanta.

According to the 2000 Census, 10 million people live in the Piedmont megalopolis,

## PIEDMONT MEGALOPOLIS

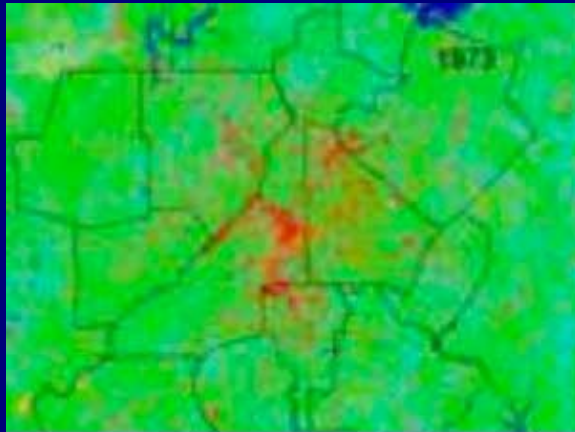
Atlanta is the hub of what has been called the Piedmont megalopolis, stretching along I-20, I-75 and I-85 from Birmingham to Greenville, S.C., Charlotte and even Raleigh and from Chattanooga to Macon. This shows how the areas are growing together as people move to areas along the interstates. A look at those metropolitan statistical areas and their populations:



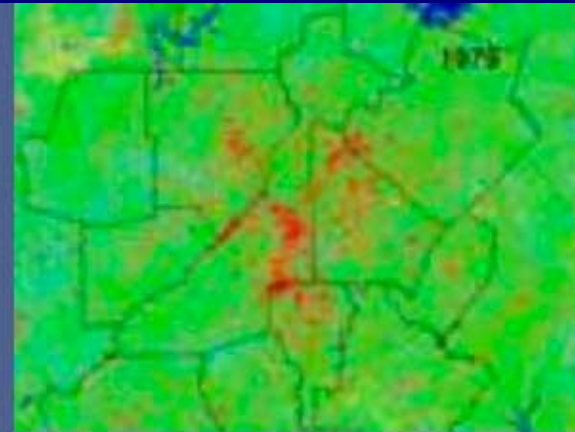
Atlanta Journal-  
Constitution,  
April 15, 2001



1973



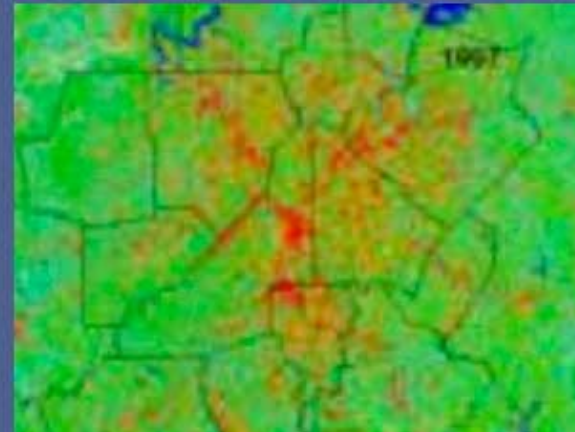
1979



1987



1997



# 25 Years of Urban Growth in Atlanta

Source: Scientific Visualization Studio, Goddard Space Flight Center













- Next Transportation Bill ‘Safe Tea’ will be at Least \$375 Billion– Must Pass in 2003



# New Jersey “BuildOut”



**New Jersey loses 44 Football Fields worth of Green Space each Day.**



## Parks' interest in fake grass grows

By CLINT WILLIAMS  
cwilliams@ajc.com

A 5-year-old may not have a clue what "cutting-edge" means — as sharp as the sharp side of a knife, maybe — but the youngest baseball players at Shaw Park in east Cobb County will be cutting-edge when they play the season opener today.

The Shetland League players, ages 4-6, will run, throw, hit and sometimes catch on the first artificial turf installed for general use at a metro Atlanta public park. The Dalton Parks and Recreation Department — which has three soccer fields with artificial turf — is the only other park system in Georgia to have installed plastic grass for league use. The Rockdale Miracle League, which conducts baseball games for children with handicaps, has one field with synthetic turf.

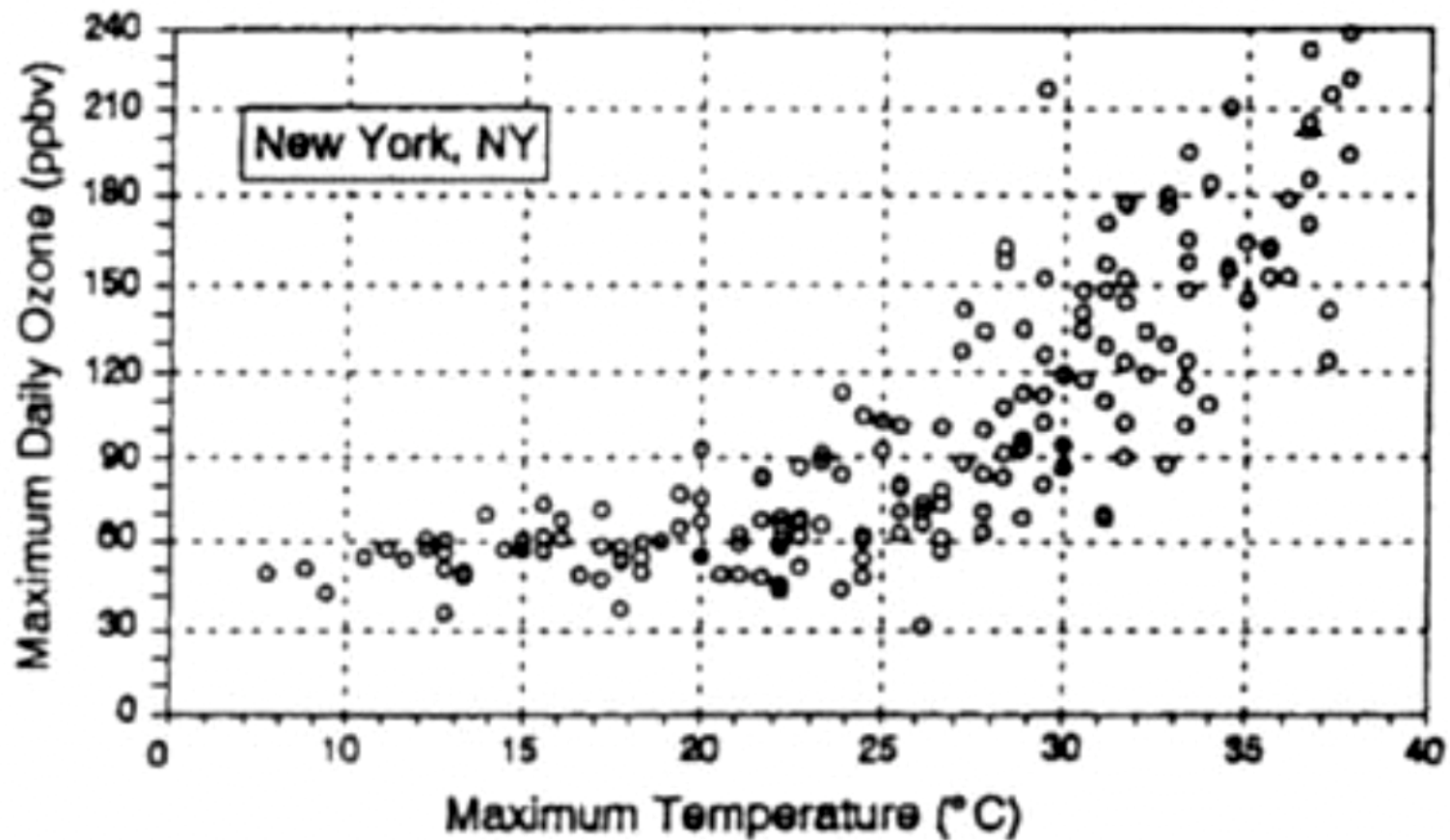


Photos by ANDY SHARP / Staff

(Top photo) Cobb County Parks, Recreation and Cultural Affairs Department workers roll out artificial turf at Shaw Park. (bottom) Darby McCamy of Grass Tex, makers of the turf, checks the blades.



## Maximum Daily Ozone Concentrations and Maximum Daily Temperature



Asthma outbreak hits kids  
RISKS OF THE 'RED ZONE'

The Atlanta Journal-Constitution

AUG. 19, 2000

SATURDAY

# Smothered in smog



Atlanta looked like Los Angeles on Friday, as heat hovered around 100 and smog hung in the air. This view is southwesterly, from DeKalb-Peachtree Airport.

JOHN SPINK/Staff

Mortality proves sad truth: Heat can kill



Two-year-old Tyrell Johnson, 2, breathes fresh air Friday as his aunt Susan Thomas tends him at Atlanta's Hughes Spalding Children's Hospital. High smog readings in metro Atlanta have produced a flare-up of asthma cases, especially among children.

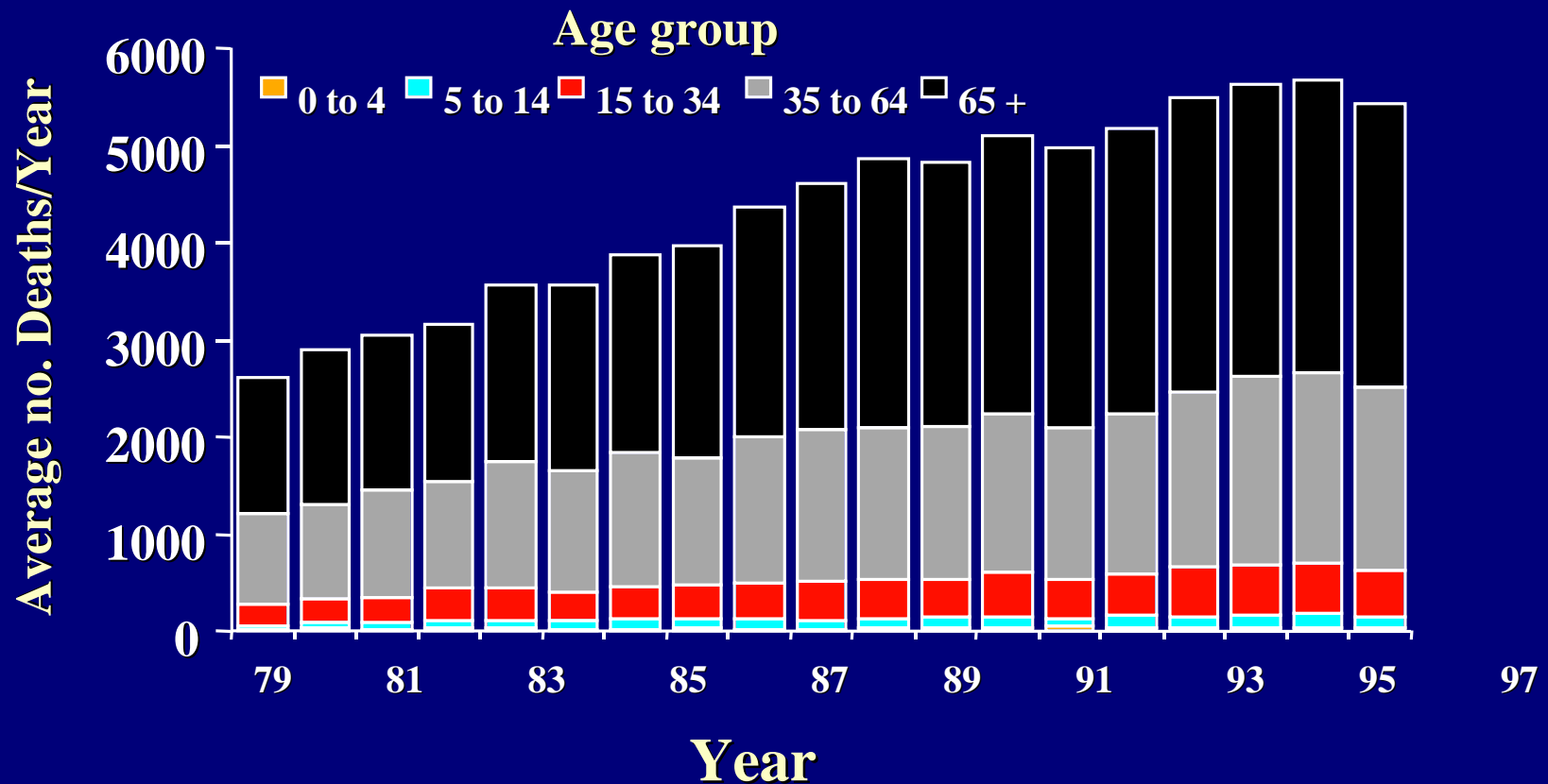
Journal-Constitution SATURDAY, AUG. 19, 2000





# Deaths Due to Asthma

## United States, 1979-1997





## Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma

Michael S. Friedman, MD  
 Kenneth E. Powell, MD, MPH  
 Laci Harsanyi, MS  
 Jeffrey M. Graham, MD  
 W. Gerald Tsang, MD

**D**ESPITE ADVANCES IN ASTHMA therapy, asthma remains a substantial public health problem. In the United States, asthma is a leading cause of childhood morbidity, with an estimated prevalence of 6.9% in children and youth younger than 18 years.<sup>1</sup> Numerous studies have demonstrated an increase in the morbidity, mortality, and prevalence of asthma in different populations.<sup>2-7</sup> The cause or causes of this trend remain controversial.<sup>8,9</sup>

Experimental, laboratory, and epidemiologic studies in the last several years have linked high concentrations of known air pollutants to respiratory health problems, most notably exacerbations of asthma.<sup>10-22</sup> However, opportunities to study the health effects of anthropogenic improvements in air quality are rare. One study found a decrease in particulate pollution and respiratory hospital admissions associated with the closure of an industrial factory in that community.<sup>23</sup> To our knowledge, no study has examined the impact of improved ozone pollution for an extended period of time on asthma exacerbations or other markers of asthma morbidity. Also, the extent to which moderate concentrations of

**Context** Vehicle exhaust is a major source of ozone and other air pollutants. Although high ground-level ozone pollution is associated with transient increases in asthma morbidity, the impact of citywide transportation changes on air quality and childhood asthma has not been studied. The alternative transportation strategy implemented during the 1996 Summer Olympic Games in Atlanta, Ga, provided such an opportunity.

**Objective** To describe traffic changes in Atlanta, Ga, during the 1996 Summer Olympic Games and concomitant changes in air quality and childhood asthma events.

**Design** Ecological study comparing the 17 days of the Olympic Games (July 19–August 4, 1996) to a baseline period consisting of the 4 weeks before and 4 weeks after the Olympic Games.

**Setting and Subjects** Children aged 1 to 15 years who resided in the 5 central counties of metropolitan Atlanta and whose data were captured in 1 of 4 databases.

**Main Outcome Measures** Citywide acute care visits and hospitalizations for asthma (asthma events) and nonasthma events, concentrations of major air pollutants, meteorological variables, and traffic counts.

**Results** During the Olympic Games, the number of asthma acute care events decreased 41.6% (4.23 vs 2.47 daily events) in the Georgia Medicaid claims file, 46.1% (1.36 vs 0.76 daily events) in a health maintenance organization database, 11.1% (4.77 vs 4.24 daily events) in 3 pediatric emergency departments, and 19.1% (2.04 vs 1.65 daily hospitalizations) in the Georgia Hospital Discharge Database. The number of nonasthma acute care events in the 4 databases changed -3.1%, +1.3%, -2.1%, and +1.0%, respectively. In multivariate regression analysis, only the reduction in asthma events recorded in the Medicaid database was significant (relative risk, 0.48; 95% confidence interval, 0.44-0.56). Peak daily ozone concentrations decreased 27.9%, from 81.3 ppb during the baseline period to 58.6 ppb during the Olympic Games ( $P < .001$ ). Peak weekday morning traffic counts dropped 22.5% ( $P < .001$ ). Traffic counts were significantly correlated with that day's peak ozone concentration (average  $r = 0.36$  for all 4 roads examined). Meteorological conditions during the Olympic Games did not differ substantially from the baseline period.

**Conclusions** Efforts to reduce downtown traffic congestion in Atlanta during the Olympic Games resulted in decreased traffic density, especially during the official evening period. This was associated with a prolonged reduction in ozone pollution and significantly lower rates of childhood asthma events. These data provide support for efforts to reduce air pollution and improve health via reductions in motor vehicle traffic.

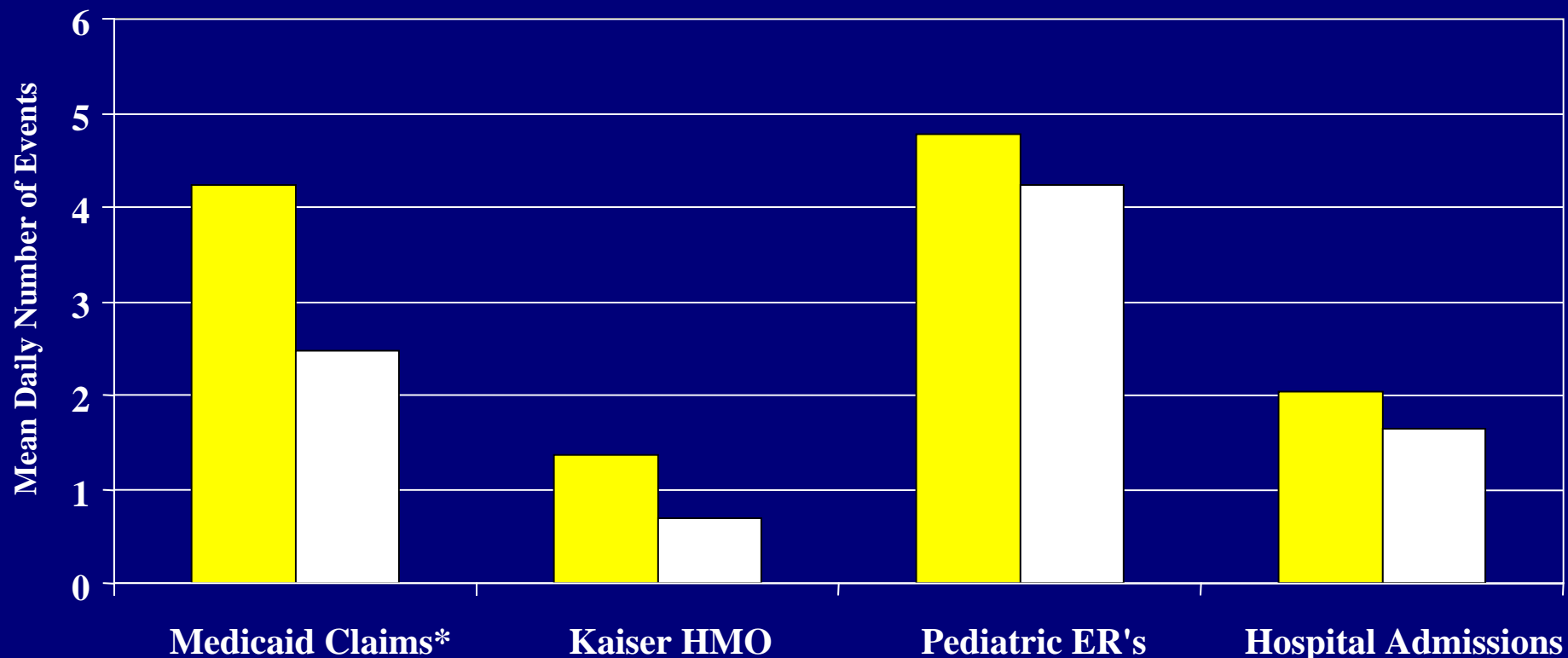
JAMA. 2007;297:899-907. [www.jama.com](http://www.jama.com)

ozone (ie, daily peak of 50-100 ppb) during various exposure lengths affects asthma morbidity remains controversial.<sup>24-26</sup>



**Author disclosures of potential conflicts of interest and author contributions are found at the end of this article. Corresponding author and Reprints: Michael S. Friedman, MD, Air Pollution and Respiratory Health Branch, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA 30333 (mfriedm@cdc.gov).**

# Results: Acute Care Visits for Asthma 1-16 year old residents of Atlanta



■ Baseline Period ■ Olympic Period†

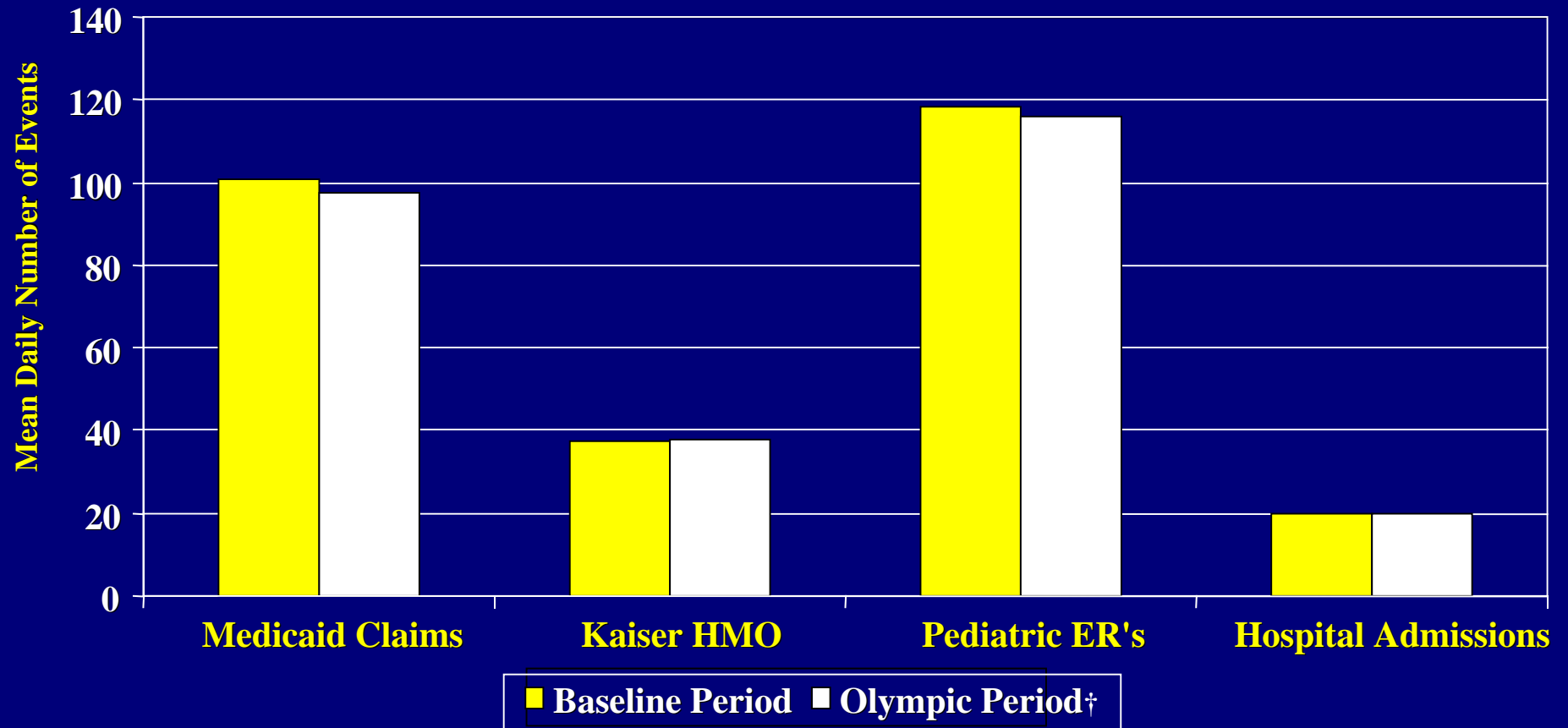
•p = 0.01

† July 19 –August 4, 1996

Source: Friedman, et al, *JAMA*, 2001



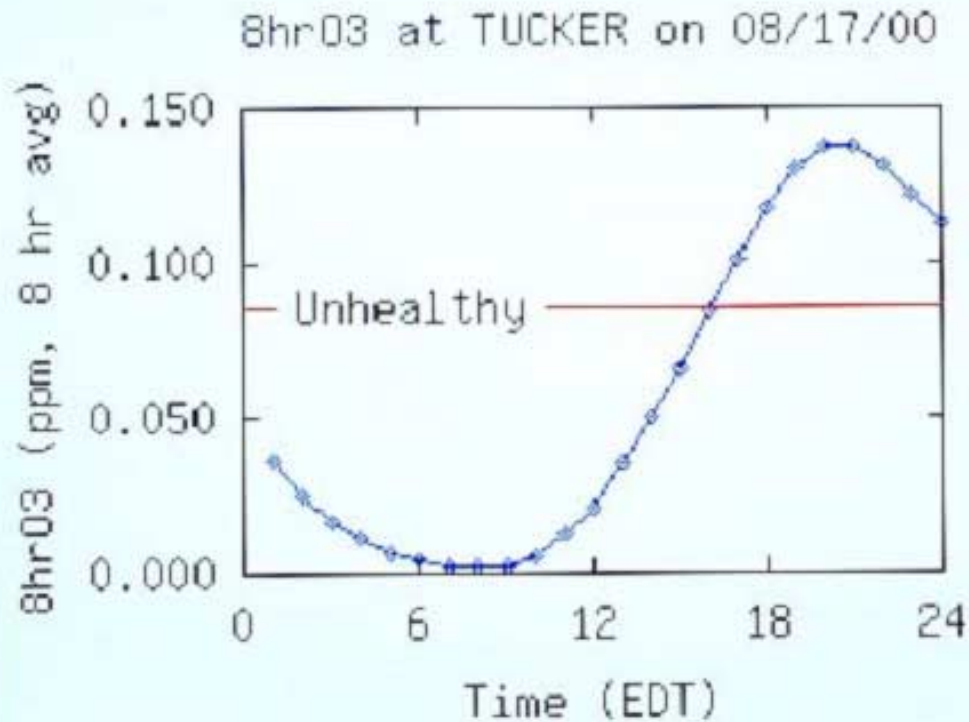
# Results: Total Non-Asthma Related Acute Care Visits 1-16 year old residents of Atlanta



† July 19 –August 4, 1996

Source: Friedman, et al, *JAMA*, 2001

# Ground Level Ozone



**Levels increase in late afternoon  
as traffic and temperature peak**





Source Water Protection is Health Protection









# Increased Moisture, Forest Removal and Impervious Surfaces

- More Rapid Runoff
- Erosion & Siltation
- Flooding
- Less Groundwater Recharge
- Soil Instability



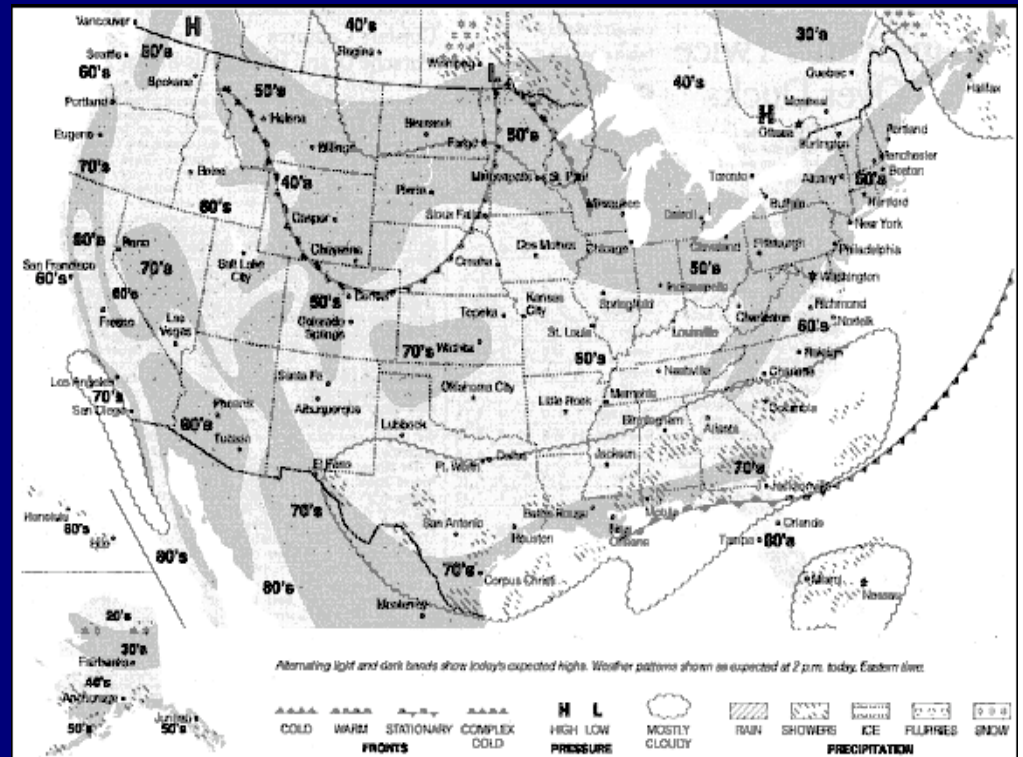
# CLIMATE CHANGE IMPACTS ON THE UNITED STATES

THE POTENTIAL CONSEQUENCES OF CLIMATE VARIABILITY AND CHANGE

## Overview

National Assessment Synthesis Team

US Global Change Research Program



### Highlights: Rainfall

Heavy rain fell from the Mississippi Valley to the Northeast in recent days as a slow disturbance combined with abundant moisture from the Gulf of Mexico and Atlantic Ocean. Rainfall records were set in many places, including New York City.

Rainfall for selected locations (inches)

Raleigh, N.C.	5.79
Virginia Beach	5.31
Charleston, S.C.	4.85
New York	4.58
Philadelphia	2.82
Washington	1.38

**One of the most notable climate trends in the United States in the last 100 years has been a relatively steady increase in wetness. The added precipitation has been the result of more days with extreme rain rather than a large increase in the total number of days with precipitation.**

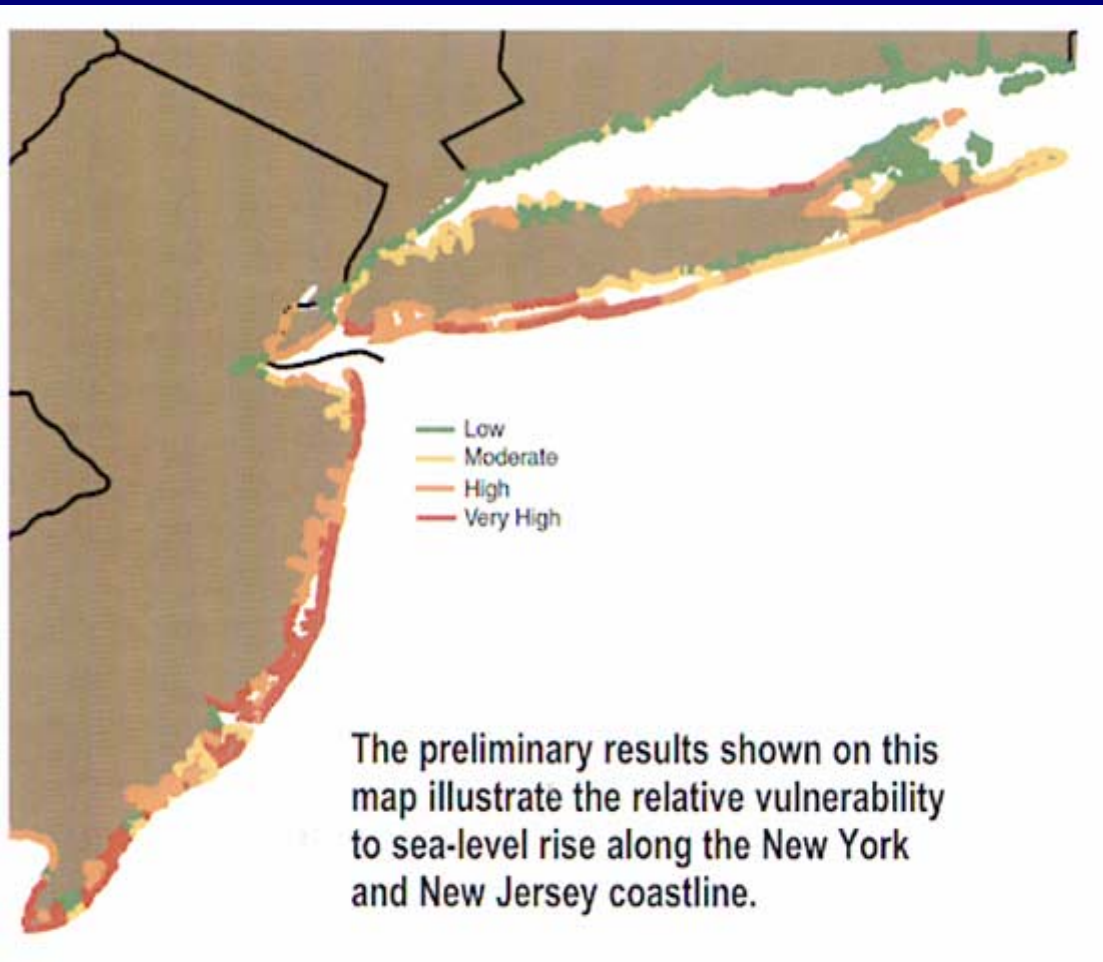
clined into the 70's as far north as the Columbia Valley.  
**FOCUS: WET DAYS** Late last week, record rain soaked parts of the Middle Atlantic and Northeast. In Raleigh, N.C., 5.33 inches fell on Friday, the wettest day there since records began in 1948. Daily rainfall records were also noted on Friday at New York City and Allentown, Pa., with 3.06 and 2.56 inches, respectively. **One of the most notable climate trends in the United States in the last 100 years has been a relatively steady increase in wetness. The added precipitation has been the result of more days with extreme rain rather than a large increase in the total number of days with precipitation.**

Atmospheric Moisture Increased 10% in the 20<sup>th</sup> Century





# Global Warming and New Jersey



Sea Level has risen 6 to 8 inches in 20<sup>th</sup> Century—

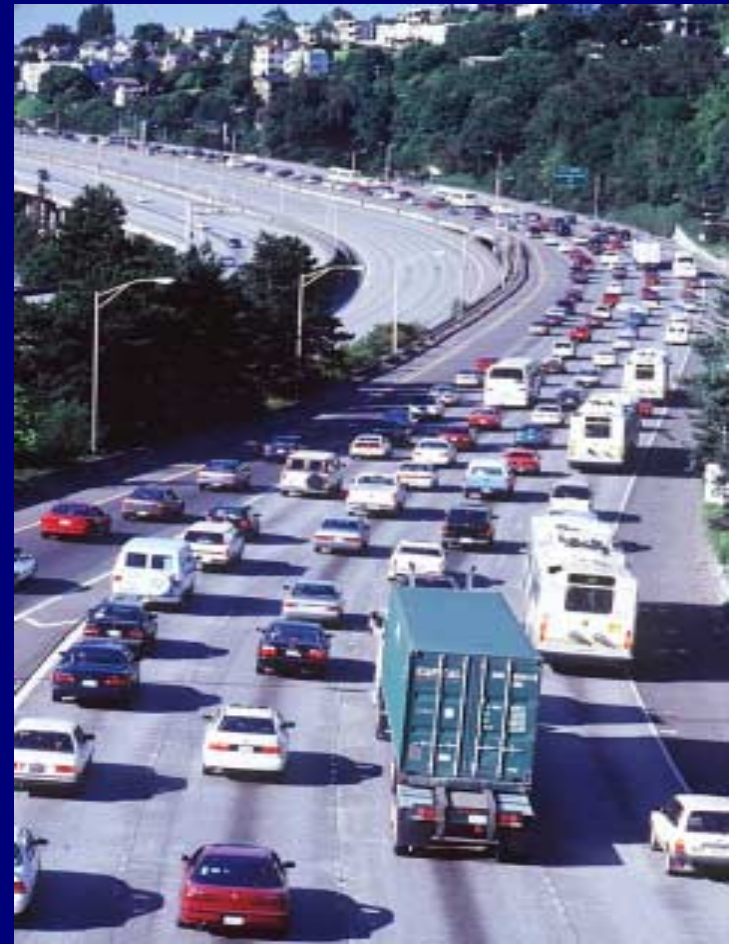
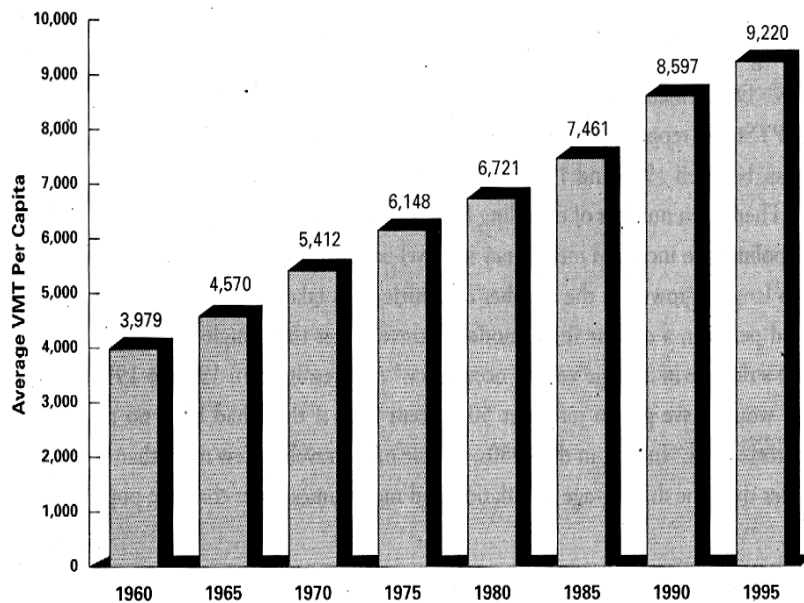
Median Projection for 21<sup>st</sup> Century is One meter.

# Vehicle Miles Traveled - USA

**Figure 2-2**

**Vehicle Miles Traveled (VMT) Per Capita, 1960-1995**

Source: Bureau of Transportation Statistics, U.S. Department of Transportation, *National Transportation Statistics 1998*, Washington, DC: 1998, Table 4-12; U.S. Bureau of the Census, "Historical National Population Estimates," Washington, DC: April 2, 1998.



Miles per Capita: 1960 to 1995

# Increasing Traffic Congestion Faced by America's Travelers

- **The time penalty for peak period travelers has jumped from 16 hours per year in 1982 to 62 hours in 2000.**
- **The period of time when travelers might experience congestion has increased from 4.5 hours in 1982 to 7 hours in 2000.**
- **Roadways where travel is congested has grown from 34% in 1982 to 58% in 2000.**

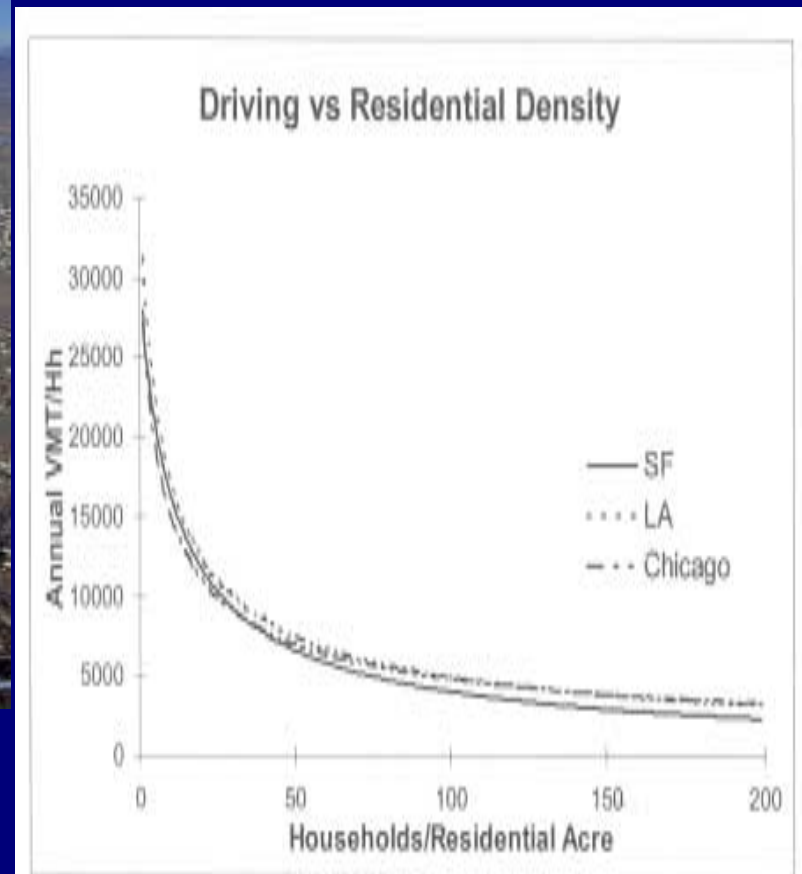
# Pedestrians Safety and Investment

- 35% of all Traffic Deaths in Cities Larger than One Million
- Federal Funds for Pedestrian Safety <0.6% of Transportation Budget





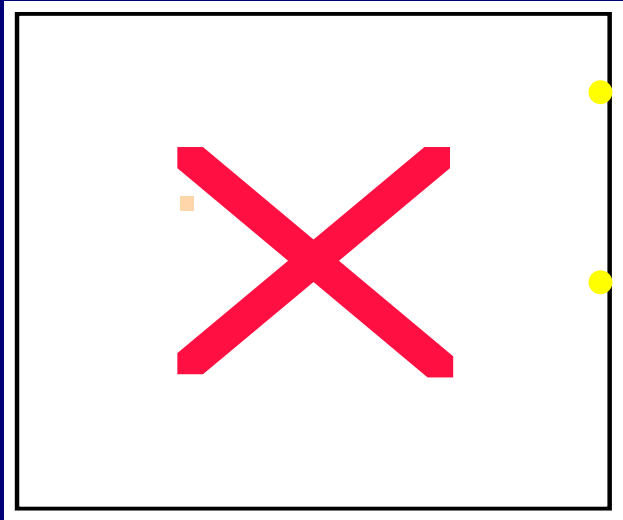
# Less Density = More Driving







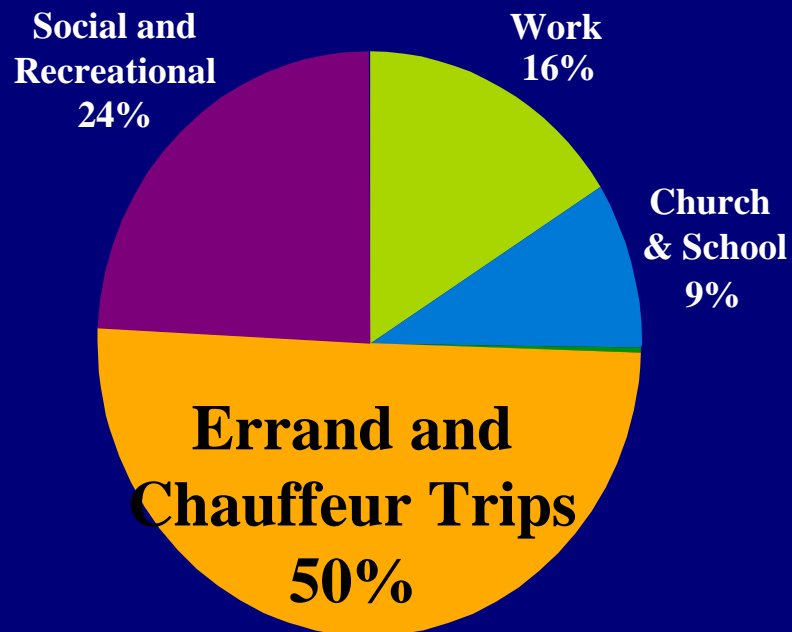
# Mega-Mileage Moms



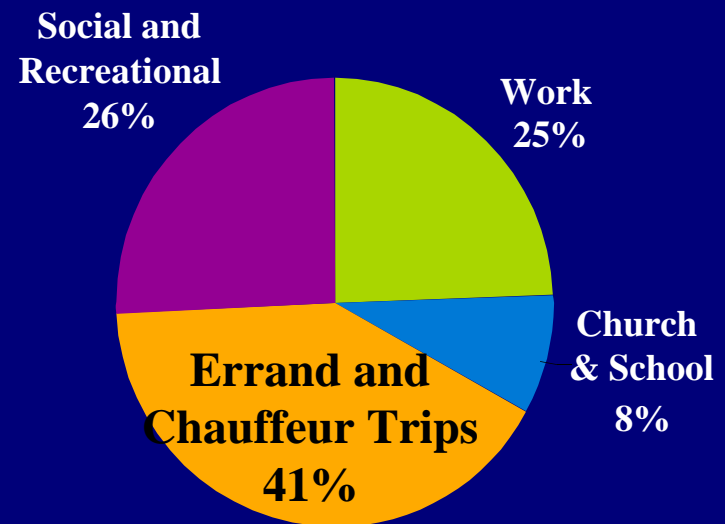
- Family “chauffeur” for children/elderly parents
- Compared to 1969, Americans drive farther:
  - 88% farther to shop
  - 137% farther for family/personal errands
- Average minutes per day spent in car:
  - Women overall: 64 minutes
  - Married mothers with school-aged children: 66 minutes
  - Single mothers: 75 minutes

# Women and Men's Trip Making by Purpose, 1995

## Women



## Men



Source: Surface Transportation Policy Project





**“It is the occupation of a child to immerse herself in her environment”.**



# DOT to look at risks, benefits of tree-lined sidewalks

By CHRISTOPHER QUINN  
cq@ajc.com

Bill Gadbold would have never known what hit him.

The sound of a backup sump the curb gave him a scant second of warning.

He turned his head to check out the noise as he walked along Peachtree Street to the backdoor MARTA station, and a Lexus ground by in a blur. The driver backing a car into him against his ear, the car so close he could have touched it.

Had the car hopped the curb, "I had nowhere to go," he said.

Or nothing to hide behind. State Department of Transportation construction standards, which cities and counties rely on when building sidewalks and streets, prohibit trees, benches or utility poles within 8 feet of the curb.

The trees are a hazard to drivers, according to DOT standards.

That's ridiculous, said Sally Flocks.



**EAST SIDE**

On Peachtree Road at Peachtree Road, a central strip between the east side of Peachtree Road and the west side, DOT standards say trees cannot be planted within 8 feet of a curb without a special dispensation.

Flocks, the Mart and evangelist president of Atlanta's Pedestrian Educating Drivers on Safety, and Adam Orlin, a local developer, want the DOT to reconsider its standards. DOT officials say they are

reviewing them, but big changes are unlikely.

To a traffic engineer's way of thinking, sidewalks are auto recovery zones, roadside areas where drivers have space to correct course if



**WEST SIDE**

Deanna Kappas (from left), Carolyn Swain and Ariana Huggatt walk along the tree-lined west side of Peachtree Road. A developer and pedestrian group are pressing the DOT to allow trees between sidewalks and roads.

Photos by JOHN SPINA / Staff

they've veered off. Trees would narrow the driver's zone to an abrupt end before getting the car back on the road.

Atlanta's reputation as a dangerous place for walkers is well known.

from the death of writer Margaret Mitchell, who was run over on Peachtree Street in 1948, to the city's consistently low ranking in an

► **PHOTOS ON SIDEWALK, PG 101**

To a traffic engineer's way of thinking, sidewalks are auto recovery zones, roadside areas where drivers have space to correct course if they've veered off. Trees would ensure the driver came to an abrupt end before getting the car back on the road.

In 2001, drivers killed 64 pedestrians in Atlanta. The city dropped from second to 12th-most-dangerous city for walking. Statewide, drivers killed another 82 people. The 2002 survey is not complete.

## Sidewalk standards under fire

► **Continued from B1**

annual national survey.

The Surface Transportation Policy Project, an association of planners and transportation workers, ranked Atlanta the second-most-dangerous city for walkers in 2000. Cars killed 68 pedestrians in Atlanta that year, and another 69 statewide.

In 2001, drivers killed 64 pedestrians in Atlanta. The city dropped from second to 12th-most-dangerous city for walking. Statewide, drivers killed another 82 people. The 2002 survey is not complete.

David Studstill, director of operations for the DOT, said the sidewalk construction standard tries to balance the odds to produce the lowest number of serious injuries for drivers and walkers.

A driver would be seriously hurt in a collision with a tree, which remains in place 24 hours a day. On the other hand, pedestrians are on most sidewalks only intermittently. A car veering into the "recovery zone" would be likely to hit nothing.

So prohibiting trees should

result in fewer overall injuries, he said. "It's kind of like asking the question, 'Which is the lesser of two evils?' We want to protect the pedestrian, but we want to protect the drivers as well," Studstill said.

Flocks sees it differently: "[The DOT] would rather have a pedestrian killed by a car than have a car fender dented," she said.

The DOT is re-examining its standards at a time when cities and communities are trying to revitalize themselves by making streets lively places where pedestrians feel safe.

Metro cities will spend up to \$280 million in federal dollars in the next 10 years as part of the Atlanta Regional Commission's Livable Centers Initiative. Pedestrian-friendly streets are an important part of that.

Despite the push, getting anything other than a bare strip of concrete beside a road remains difficult.

Orlin, a developer with Davis Properties in Alpharetta, has tried unsuccessfully to get permission to put trees between sidewalks and streets.

He wanted trees between the road and sidewalk at the Deerfield development in Alpharetta in 2001. The city made him put the sidewalk within 2 feet of the curb on Windward Parkway, with no trees between the sidewalk and street.

Situations like that led him to write Georgia Regional Transportation Authority board Chairman Walter "Sonny" Deriso recently to ask for help in changing the standards.

Orlin says pedestrians don't feel safe on sidewalks that are so close to the curb. "You go out there on a 43 mph street, and people are driving 56. You [walk] around a curve, and it's scary."

Studstill said engineers are reviewing the standards and are considering allowing trees, benches and light poles next to the road on streets with speed limits of 35 mph or less.

► **ON THE WEB**

For a clearinghouse on pedestrian issues and statistics:  
[www.walkinginfo.org](http://www.walkinginfo.org)

Read the national pedestrian safety report: [www.fhwa.dot.gov](http://www.fhwa.dot.gov)



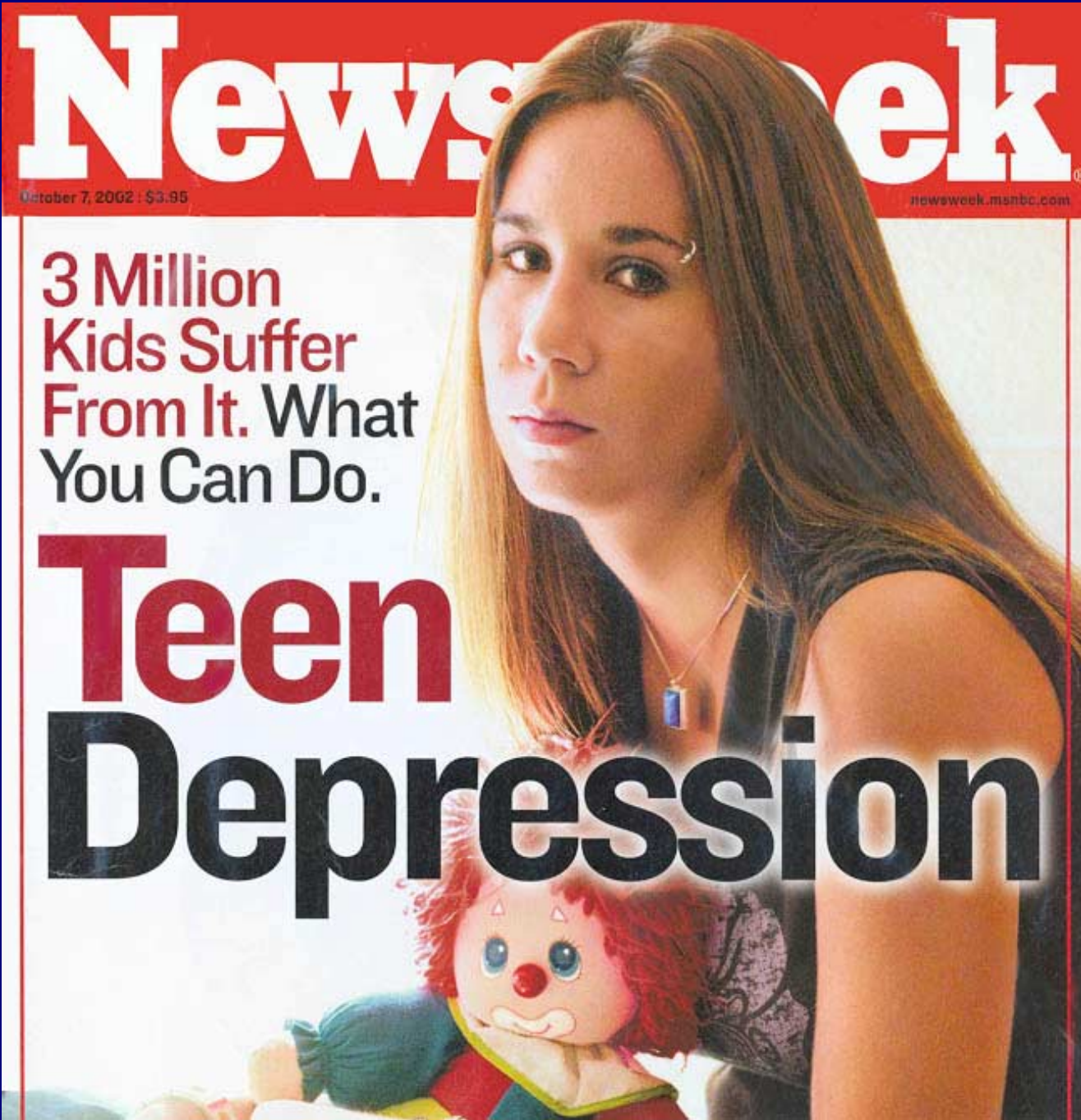
# Newsweek

October 7, 2002 : \$3.95

newsweek.msnbc.com

3 Million  
Kids Suffer  
From It. What  
You Can Do.

# Teen Depression



# Depression

## Depressive Disorders

- 19 million American adults
- Leading cause of disability in the U.S. and worldwide
- Nearly twice as many women as men are affected
- Often untreated or inadequately treated



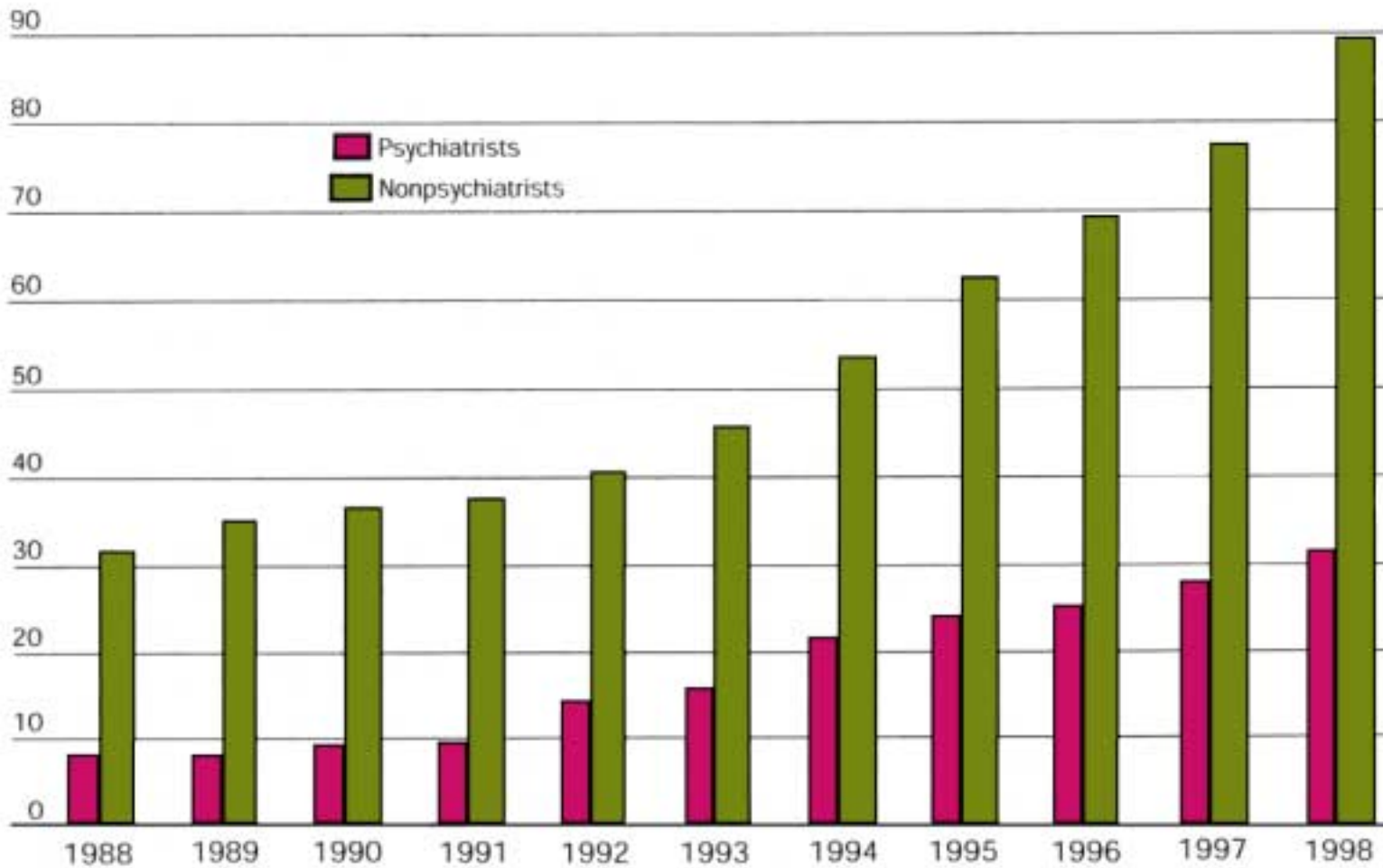
Source: National Institute of Mental Health (NIMH), 2001



# Antidepressant Rx in US

**Antidepressant Prescriptions By Physician Specialty, 1988–1998**

Millions of prescriptions



**SOURCE:** IMS Health, Inc.  
**HEALTH AFFAIRS - Volume 19, Number 4**

# Get Daylight, Get Exercise

- **Serotonin**—Higher levels with Exercise. Low levels associated with depression.
- Prevention and Treatment of Depression



# “Modern” Schools



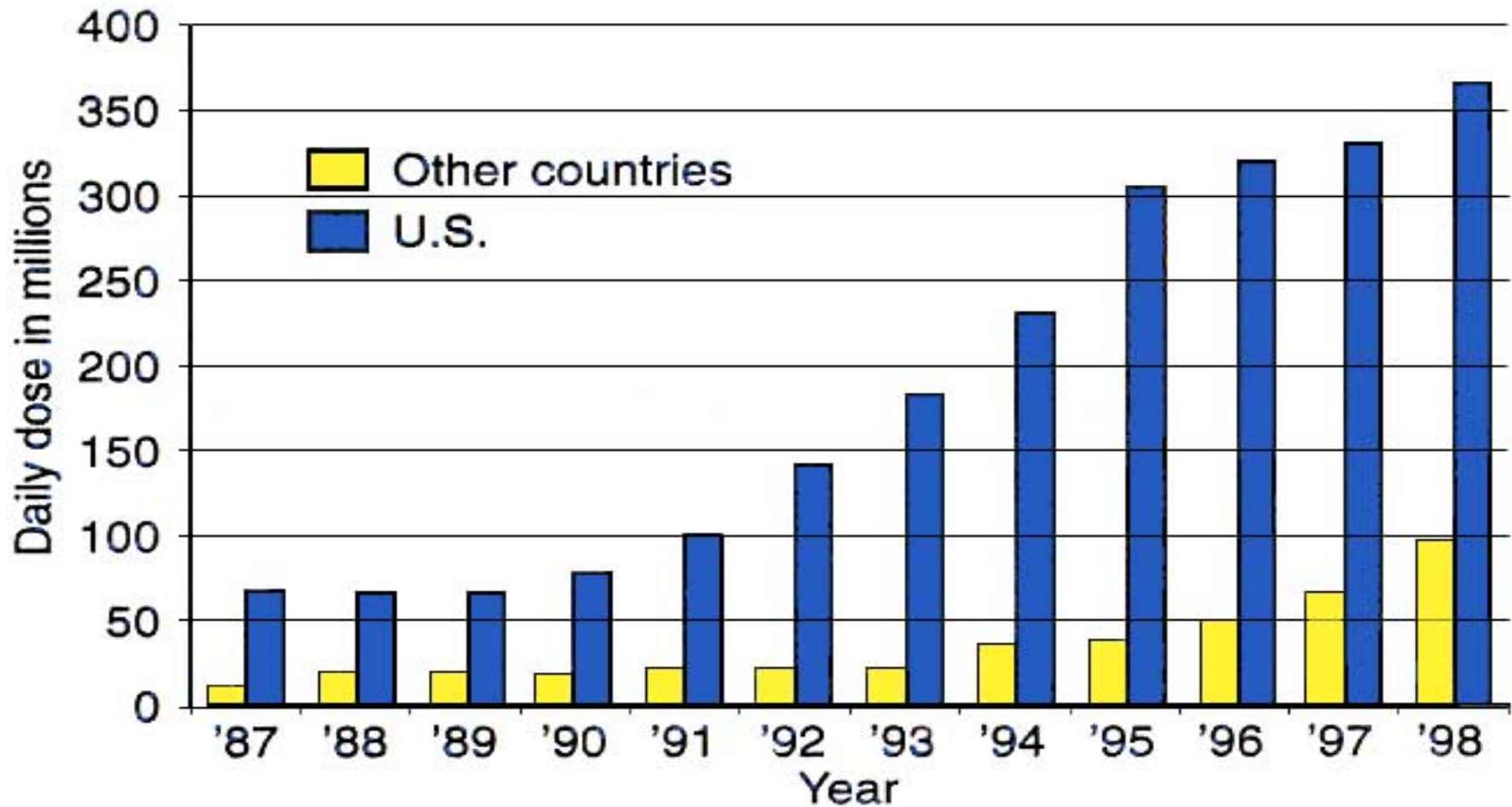
Credit: South Carolina Coastal Conservation League



Credit: Constance E. Beaumont, NTHP



## Methylphenidate (Ritalin) Consumption, United States and Elsewhere, 1987 - 1998



Source: *Science*, Vol. 289, 4 August 2000, p.721.

# Pre-1940 Schools



Credit: Manitovic Public School District



Credit: Hummel Architects, Boise, ID



Credit: Constance E. Beaumont, NTHP

# The New York Times

ON THE WEB

Editorial Desk | January 22, 2000, Saturday

## Schools Too Grand To Turn Into Trash

By Robert A. M. Stern

PS 109 Manhattan



PS 31 Bronx



Photos courtesy of New York Landmarks Conservancy, 1978



# Day-Lit Classrooms

Performance: 10 to  
25% Improvement

Sick Building  
Syndrome

Symptoms: 5 to  
10% Decrease

Energy Savings: Up  
to 30%



# Get Daylight, Get Exercise

- **Melatonin**—Lower levels in Daylight and when alert. Higher levels with darkness and sleepiness.



# Osteoporosis

- 10 million with Disease (8m women, 2m men)
- 34 million with low bone mass
- Causes One in Two women to develop fractures; one in four men.
- 300,000 hip fractures
- 700,000 vertebral fractures



# Osteoporosis Prevention and Rx

- Diet rich in Calcium and Vitamin D
- Weight-Bearing Exercise
- No Smoking; limit alcohol
- Test and medication
- Alendronate (Fosamax)  
Cost: \$2.00 per day
- Risedronate (Actonel)  
\$2.00 per day  
Fitness: muscle mass helps prevent Fractures



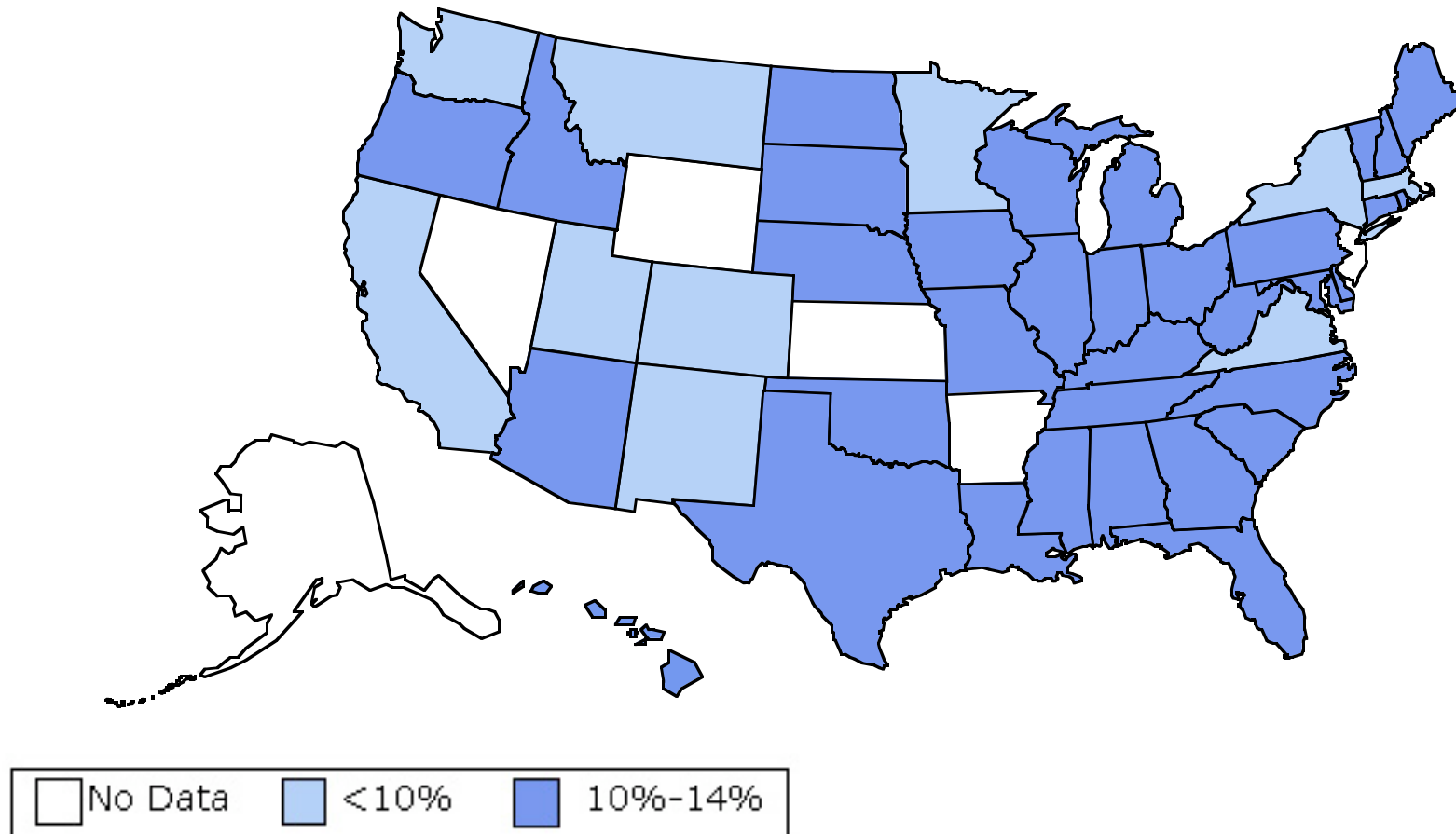




# Obesity Trends\* Among U.S. Adults

## BRFSS, 1990

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)



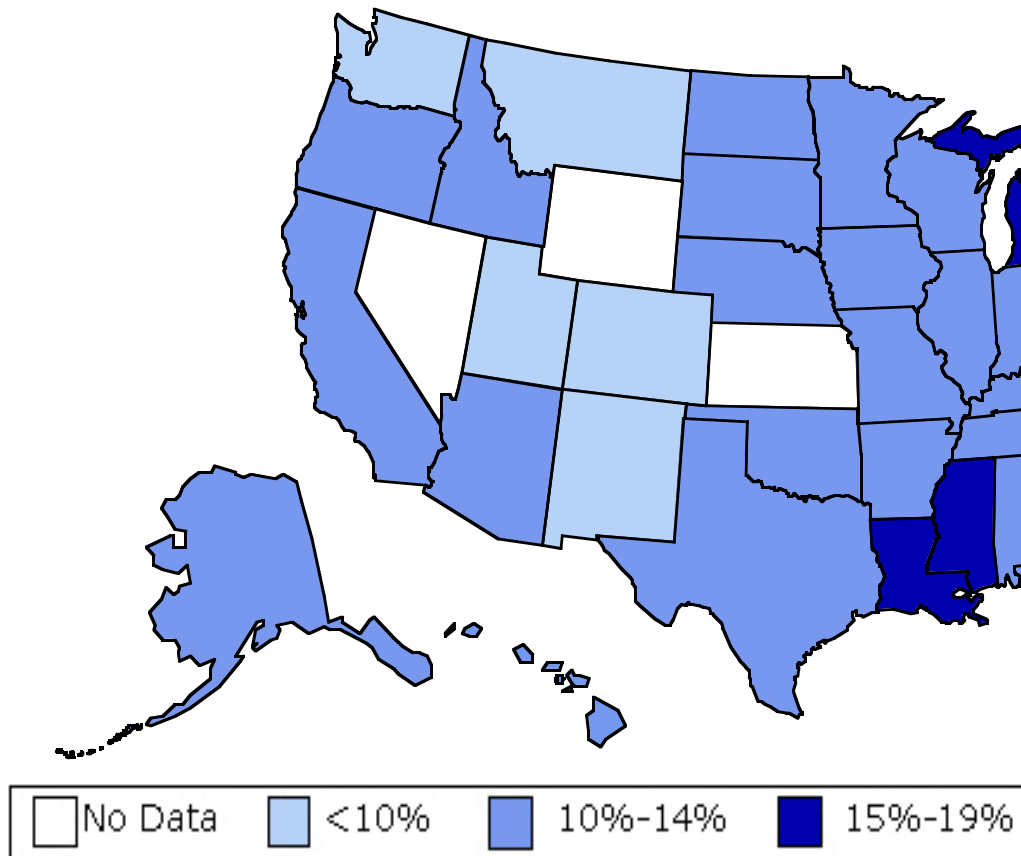
Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.



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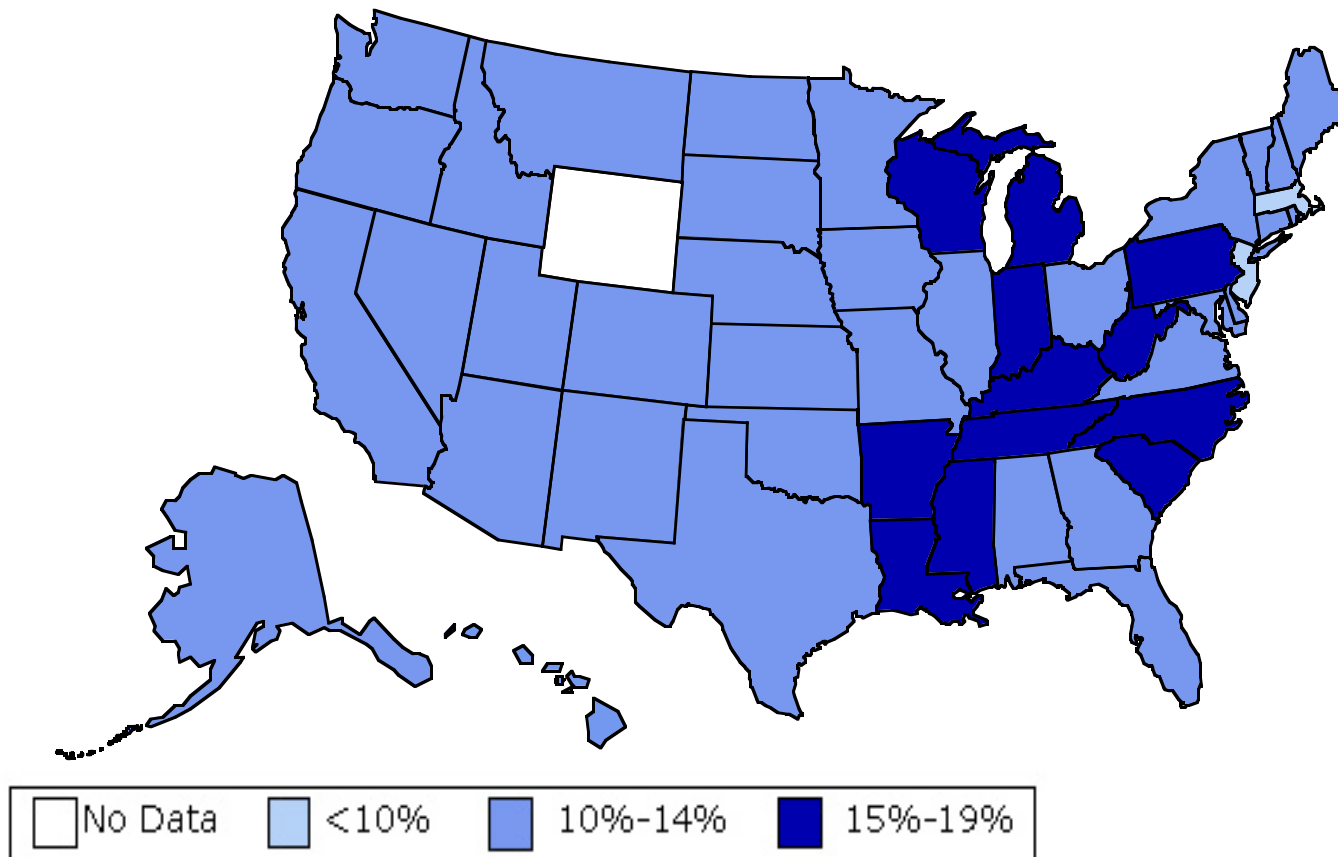


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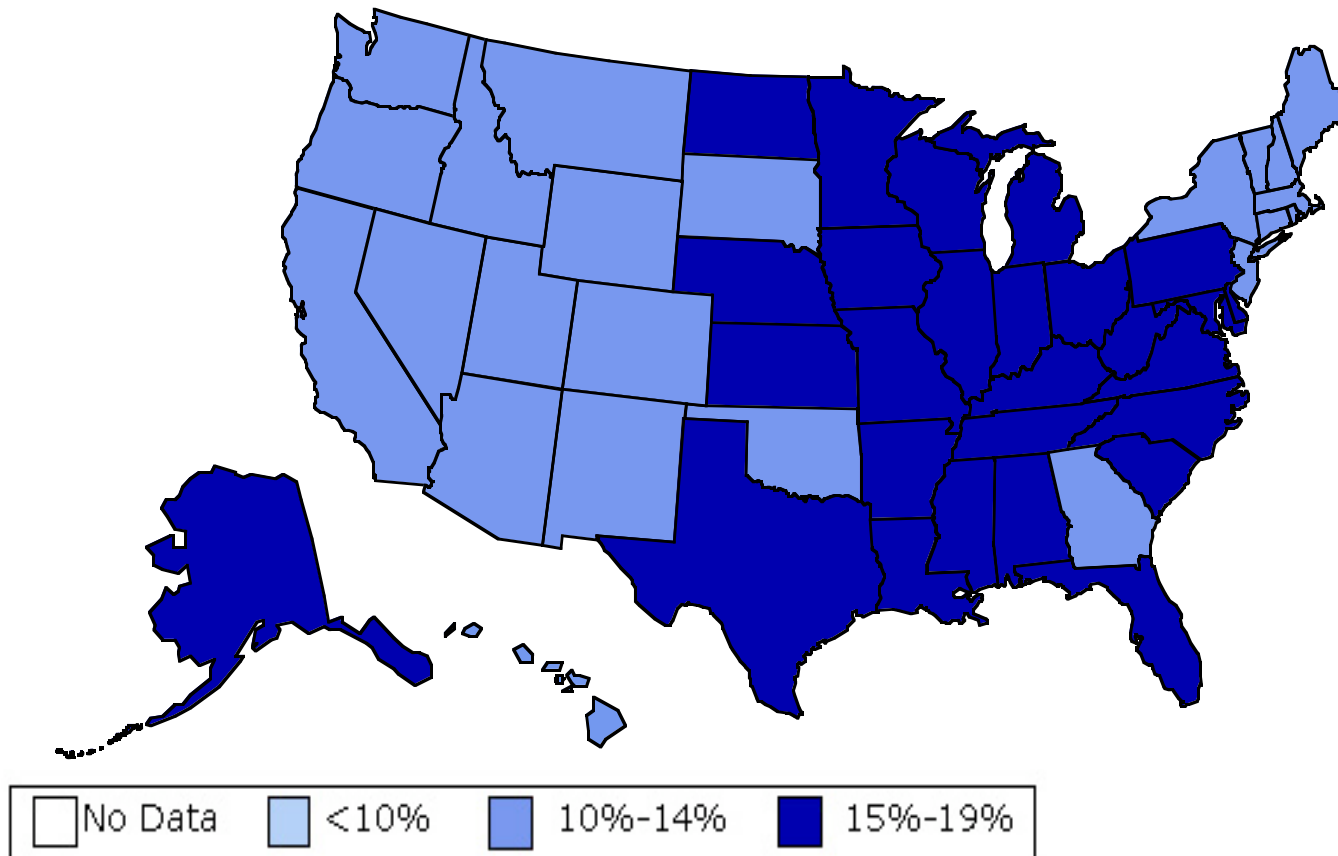


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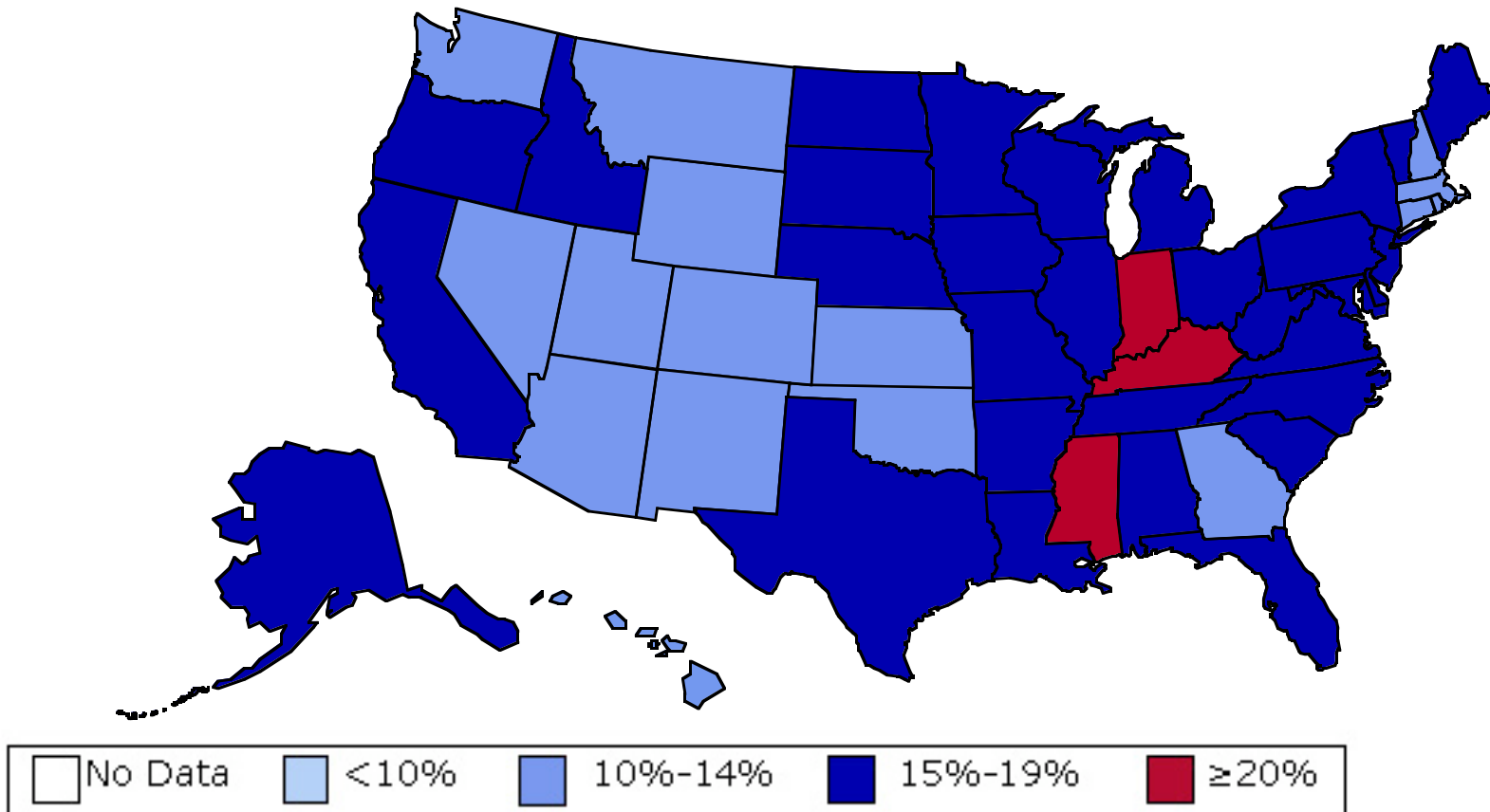
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## BRFSS, 1997

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)

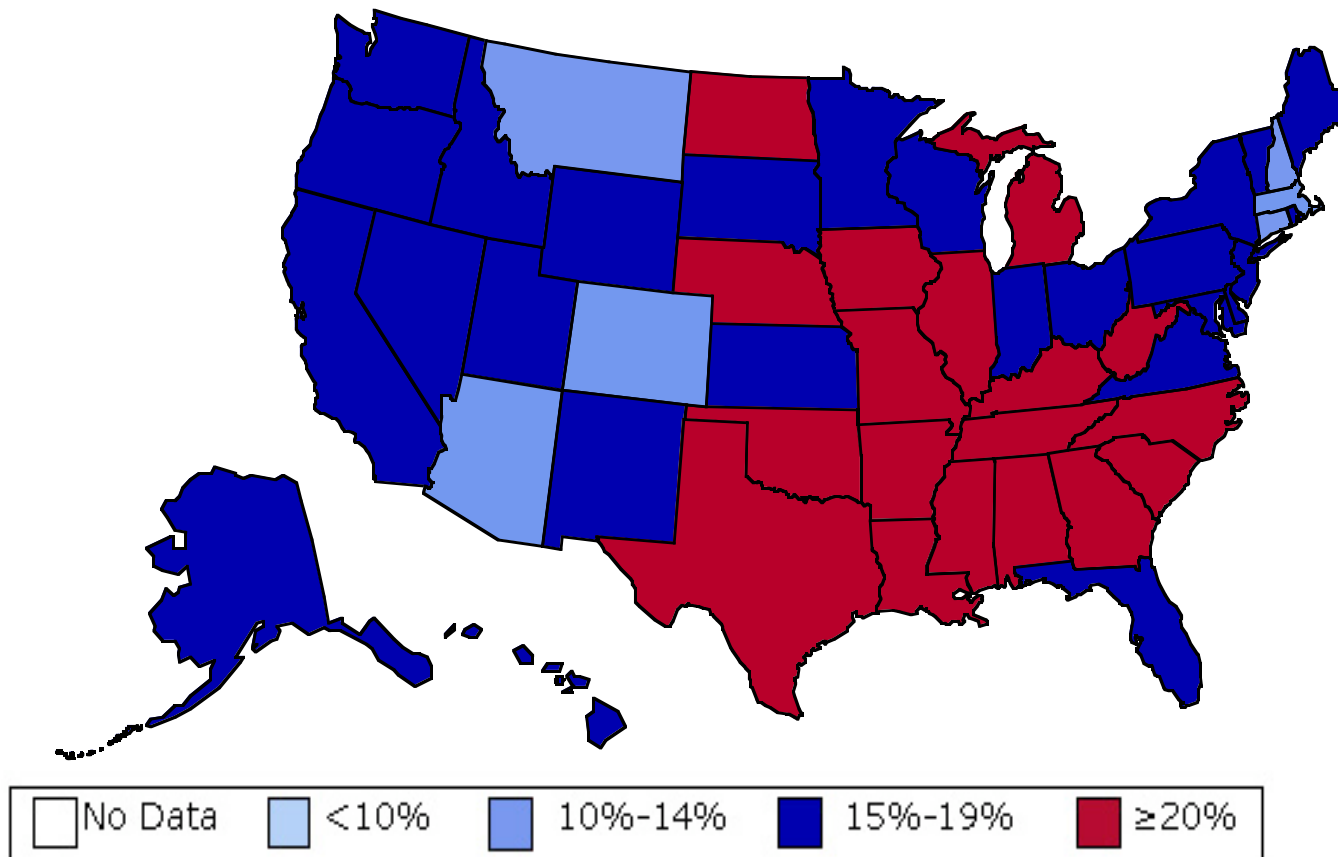


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1999

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)

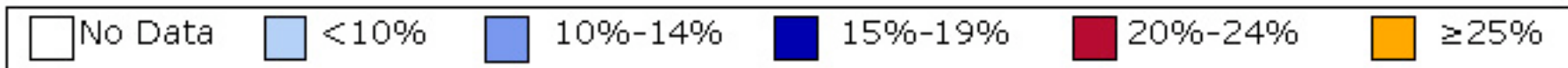
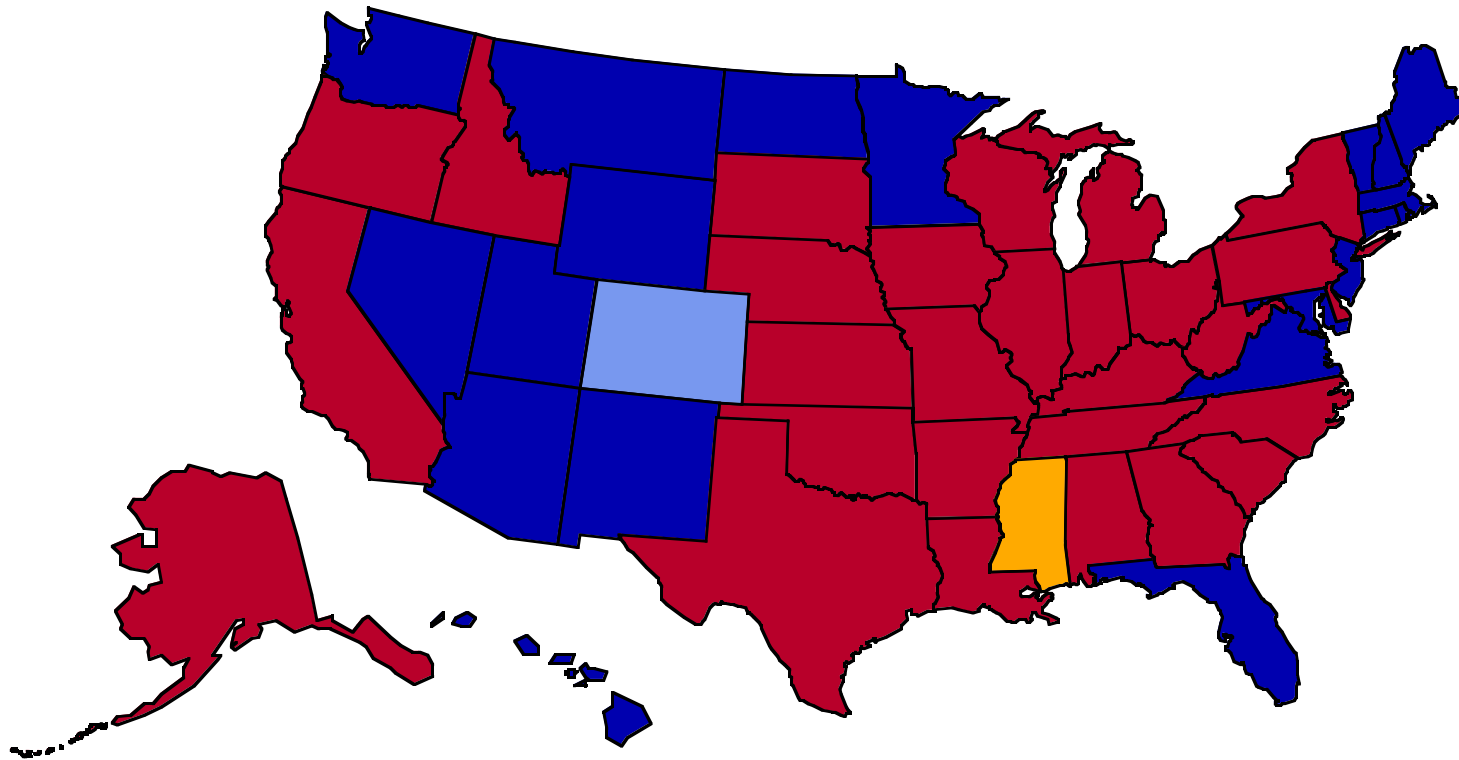


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

# Obesity Trends\* Among U.S. Adults

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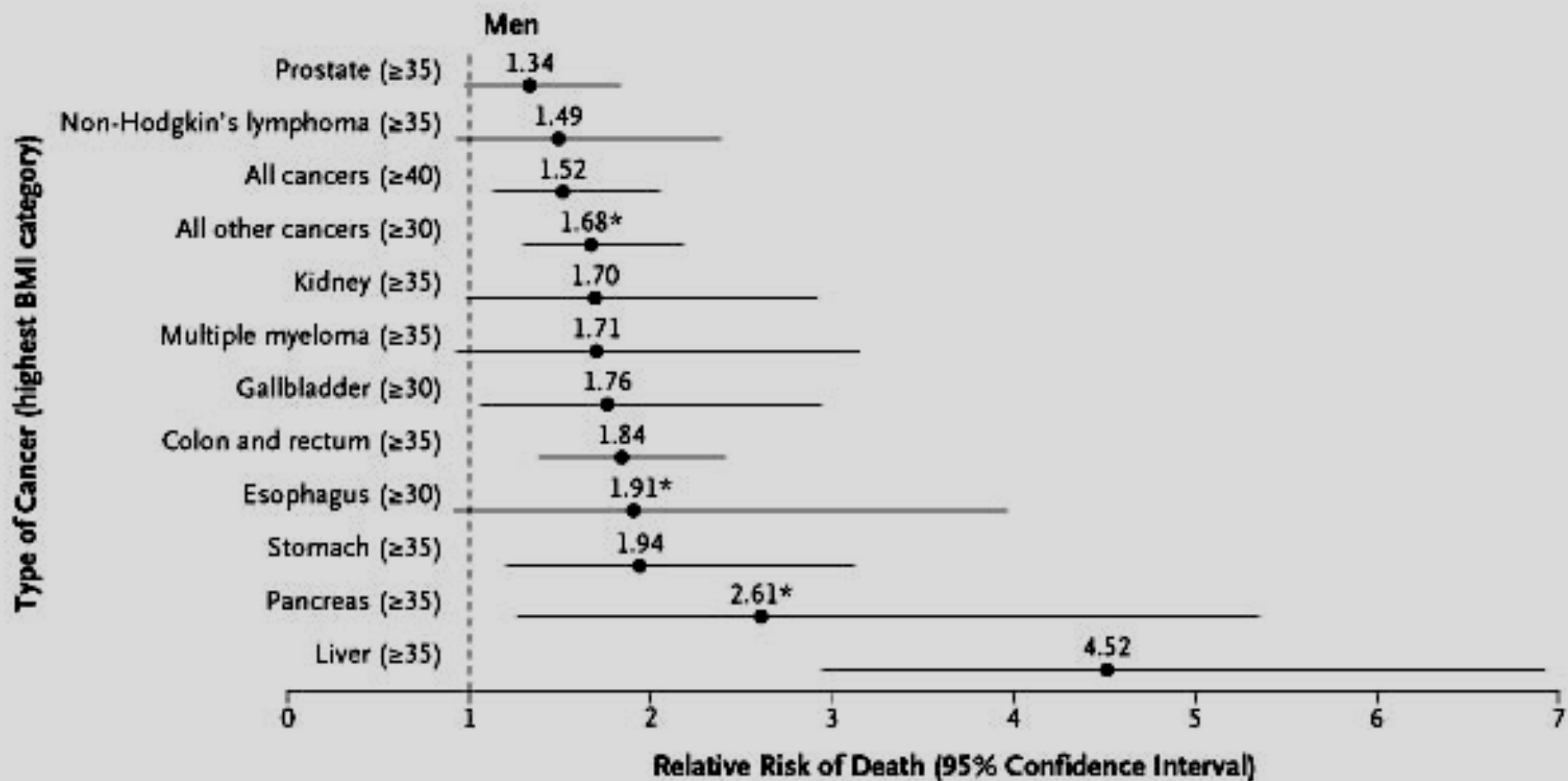


# Prevalence (%) of overweight among children and adolescents ages 6-19 years

<i>Age (years)</i> <i>1</i>	<i>1963-65</i> <i>1966-70</i> <sup>2</sup>	<i>1971-74</i>	<i>1976-80</i>	<i>1988-94</i>	<i>1999-2000</i>
6-11	4	4	7	11	15
12-19	5	6	5	11	15

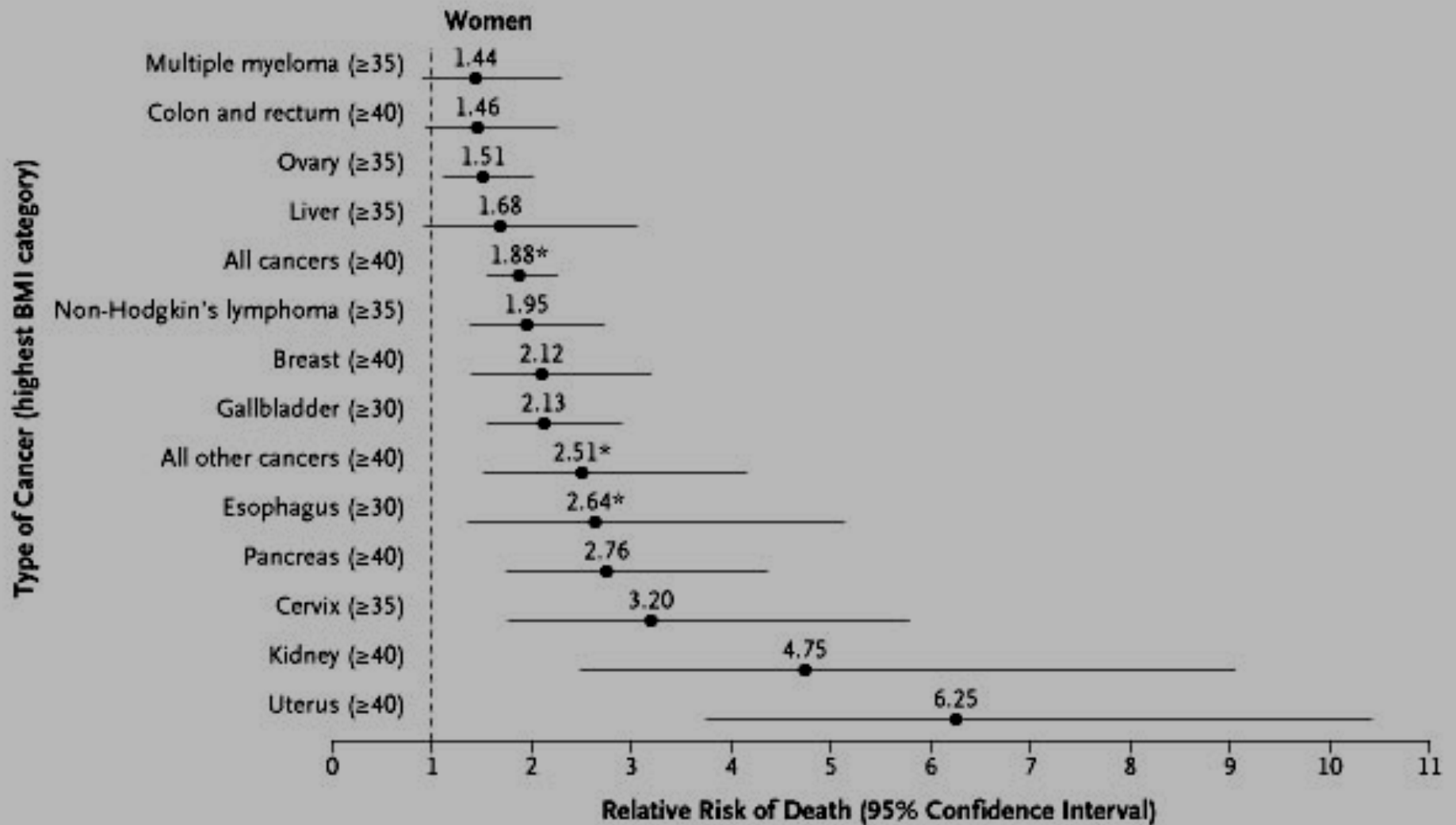
Source: 1999-2000 NHANES





Relative Risk of cancer among men in the highest BMI category, compared to those in the reference category (BMI 18.5 - 24.9). \* shows non-smokers.

Source: Calle et al., New Eng J Med



Relative Risk of cancer among women in the highest BMI category, compared to those in the reference category (BMI 18.5 - 24.9). \* shows non-smokers.

Source: Calle et al., New Eng J Med



# Physical Activity Decreases Cancer Risk

## Regular physical activity :

- decreases the risk of colon (~50%) and breast cancer (~25%)
- probably decreases the risk of prostate cancer
- may reduce the risk of lung and endometrial cancer



- Friedenreich CM, J Nutr 2002
- Hardman AE, Proc Nutr Soc 2001



The New York Times

## Why We Eat (and Eat and Eat)

### Hungry? It Could Be Biochemical

Appetite is largely controlled by a complex system of molecules that evolved over millions of years. They travel between the body and the brain, and within the brain itself.

SIGNAL

#### NEUROPEPTIDE Y

**Eat**  
A protein that acts as a transmitter in the nervous system and helps stimulate food intake as well as regulate metabolic rate and fat formation.

#### GHRELIN

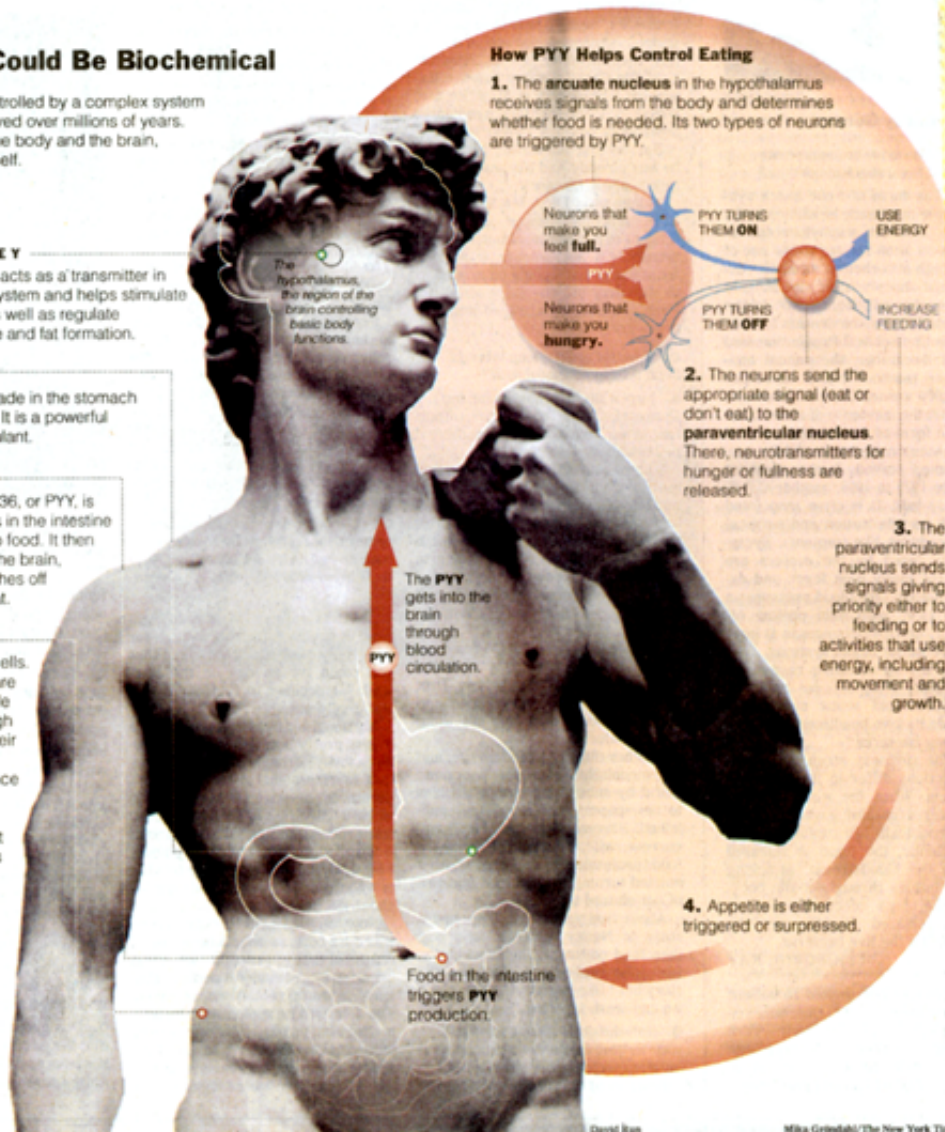
**Eat**  
A hormone made in the stomach and intestine. It is a powerful appetite stimulant.

#### PYY

**Don't Eat**  
Peptide YY3-36, or PYY, is made by cells in the intestine in response to food. It then circulates to the brain, where it switches off the urge to eat.

#### LEPTIN

**Don't Eat**  
Made by fat cells. When levels are normal, people eat just enough to maintain their weight. But leptin's absence signals the brain that the body lacks fat reserves. This can result in overeating.



Source: Dr. Stephen Bloom, Imperial College London

David Kus

Mika Grondahl/The New York Times



# Vinings Surgery Center

Fully Accredited Surgery Facility



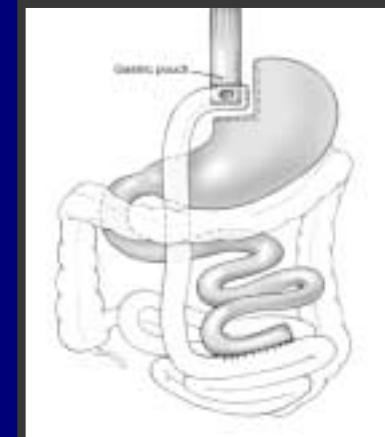
- BREAST ENLARGEMENT
- BREAST REDUCTION/LIFT
- TUMESCENT LIPOSUCTION
  - TUMMY TUCK
  - FACE LIFT
- EYELID SURGERY
- NOSE CONTOURING
- LASER TREATMENTS
- MALE BREAST REDUCTION  
(GYNECOMASTIA)
- CHEMICAL PEELS

# GI Surgery for Severe Obesity

## *Risk and Complications:*

- 10-20% require follow-up surgery
- Abdominal hernia
- Break down of staple line
- Gallstones
- 30% develop nutritional deficiency

**Cost: about \$15,000.00**



Source: NIDDK



# McFATTIES BITE BACK

## New suit heavy on hazards to health

By JOHN UZEMANN

The fat kids who ate too many Big Macs are back on the attack.

Not content to fade away after their first lawsuit against McDonald's was thrown out, the plucky New Yorkers filed new court papers yesterday to prove that the Golden Arches served their fries and chicken nuggets as "McFrankenstein" food.

The documents, obtained by The Post, accuse McDonald's of selling and promoting foods, such as Chicken McNuggets and Filet-O-Fish sandwiches, that are more "nutrientless" than customers expect.

The fat-food plaintiff's lawyers also served up scores of advertisements promoting its calorie-laden goods as being nutritious enough to eat every day, said the children's Manhattan lawyer, Vanessa Hirsch.

The amended suit quoted McDonald's chief nutritionist, Ann Ruzniak, saying last October that it was possible to eat at the home of the Hamburglar "three times a day."

And McDonald's U.S. spokesman, Walt Eiler, said last year: "Eating McDonald's food can easily fit into a balanced diet — I eat it as often as I like, and it's perfectly healthy," the complaint said.

But the eight super-sued kids involved in the class action, who claim they often dined at McDonald's at least once a day, say they're suffering from high blood pressure and high cholesterol levels.

One plaintiff, 16-year-old Ryan, testified Tuesday



**Beef Patty:** 100% pure USDA inspected beef; no additives, no fillers, no extenders.

**Big Mac Sauce:** Soybean oil, pickles, distilled vinegar, water, sugar, egg yolk, high fructose corn syrup, corn syrup, mustard flour, salt, sorbitan trioleate, potassium sorbate as a preservative, natural flavor [vegetable source], spices and some extractives, garlic (dehydrated), hydrolyzed soy, corn and wheat protein, extractive of onion and paprika, calcium disodium EDTA to protect flavor.

**American Cheese Slice:** Cultured milk, water, cream, sodium citrate, salt, sodium aluminum phosphate, tartaric acid (preservative), sodium phosphate, cheese culture, artificial color, acetic acid, enzymes, lecithin.

### The fine print

#### What's really in a Chicken McNugget:

Chicken, water, salt, modified corn starch, sodium phosphate, chicken broth powder (chicken broth, salt, and natural flavoring [chicken source]), seasoning (vegetable oil, extracts of rosemary, mace, dr. and thyme/oregano, leek/leek), battered and breaded with water, enriched bleached wheat flour (wheat, iron, thiamine mononitrate, riboflavin, folic acid), yellow corn flour, bleached wheat flour, modified corn starch, salt, leavening (sulfur dioxide, sodium acid pyrophosphate, sodium aluminum phosphate, monocalcium phosphate, calcium lactate), spices, wheat starch, dried whey, corn starch, batter set in vegetable shortening. Cooked in partially hydrogenated vegetable oils. Oils contain partially hydrogenated soybean oil and/or partially hydrogenated corn oil and/or partially hydrogenated canola oil and/or cottonseed oil and/or safflower oil and/or corn oil. TBHQ and citric acid added to help preserve freshness. Dimethylpolysiloxane added as an anti-foaming agent.



#### What's really in a Big Mac:



**Big Mac Bun:** Enriched bleached wheat flour (enriched barley flour, thiamine, riboflavin, niacin, iron, folic acid), water, high fructose corn syrup, yeast, vegetable oil (partially hydrogenated soybean, corn, canola, and/or cottonseed). Contains 2 percent or less of salt, wheat gluten, enriched barley flour, alpha amylase, mono- and diglycerides, potassium acid phosphates, calcium sulfate, ammonium chloride, monocalcium phosphate, succinic acid, sodiumhexametaphosphate, iron flour, zinc oxide flour, calcium carbonate, dextrose, tartaric acid esters of mono- and diglycerides, riboflavin mono- and diglycerides, silicon dioxide, sodium stearoyl-2-lactylate, fungal esterase, emulsifier, sodium or calcium propionate (as a preservative), niacinamide.

**“Our wide range of choices on our menu makes it possible for people to eat there three times a day if they wanted to, mixing and matching.”**  
— McDonald's chief nutritionist, Ann Ruzniak, said last October in a statement

**“Eating McDonald's food can easily fit into a balanced diet. I eat its food every day and I'm perfectly healthy.”**  
— McDonald's U.S. public relations spokesman Walt Eiler said last October in a statement

McDonald's nearly every day since he was 6. Judge Robert Sweet last month checked the firm, saying the kids' parents should have known about the potential effects of eating at McDonald's daily.

But the eight super-sued kids were beyond an average consumer's understanding. For example, he said, it could be argued that Chicken McNuggets, rather than being merely chicken, fried in a pan, are a

Filet-O-Fish, French Fry, chicken sandwiches and hamburger products as being more nutritious than a customer could expect. The complaint says that a McDonald's nutritional brochure described the fish

deuts list says the fish gurry is made from a concoction of ingredients, including modified corn starch, dextrose, cellulose gum, citric acid and an anti-foaming agent called dimethylpolysiloxane.

are nutritious. McDonald's called new suit "sensational." "McDonald's serves quality food and ingredients from quality suppliers — bread, chicken, fish, beef, potatoes, eggs, milk



# EDITORIAL

## The Ironic Politics of Obesity

**H**ere is a great irony of 21st-century global public health: While many hundreds of millions of people lack adequate food as a result of economic inequities, political corruption, or warfare, many hundreds of millions more are overweight to the point of increased risk for diet-related chronic diseases. Obesity is a worldwide phenomenon, affecting children as well as adults and forcing all but the poorest countries to divert scarce resources away from food security to take care of people with preventable heart disease and diabetes.

To reverse the obesity epidemic, we must address fundamental causes. Overweight comes from consuming more food energy than is expended in activity. The cause of this imbalance also is ironic: improved prosperity. People use extra income to eat more and be less active. Market economies encourage this. They turn people with expendable income into consumers of aggressively marketed foods that are high in energy but low in nutritional value, and of cars, television sets, and computers that promote sedentary behavior. Gaining weight is good for business. Food is particularly big business because everyone eats.

Moreover, food is so overproduced that many countries, especially the rich ones, have far more than they need—another irony. In the United States, to take an extreme example, most adults—of all ages, incomes, educational levels, and census categories—are overweight. The U.S. food supply provides 3800 kilocalories per person per day, nearly twice as much as required by many adults. Overabundant food forces companies to compete for sales through advertising, health claims, new products, larger portions, and campaigns directed toward children. Food marketing promotes weight gain. Indeed, it is difficult to think of any major industry that might benefit if people ate less food; certainly not the agriculture, food product, grocery, restaurant, diet, or drug industries. All flourish when people eat more, and all employ armies of lobbyists to discourage governments from doing anything to inhibit overeating.



The U.S. food supply provides 3800 kilocalories per person per day, nearly twice as much as required by many adults.

Food marketing promotes weight gain. Indeed, it is difficult to think of any major industry that might benefit if people ate less food.

Science  
Magazine

Marion  
Nestle PhD

Author:  
*Food  
Politics*



# DIABETES

It Strikes  
16 Million  
Americans

Are You  
at Risk?

Computer drawing of a human insulin molecule

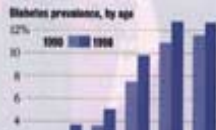
SOCIETY

## An American Epidemic

# Diabetes

**The silent killer:** Scientific research shows a 'persistent explosion' of cases—especially among those in their prime  
BY JERRY ADLER AND CLAUDIA KALB

**S**OMETHING TERRIBLE WAS HAPPENING TO YOLANDA BENTIZ's eyes. They were being poisoned; the fragile capillaries of the retina attacked from within and were leaking blood. The first symptoms were red lines, appearing vertically across her field of vision; the lines multiplied and merged into a haze that shot out light entirely. "Her blood vessels inside her eye were popping," says her daughter, Jannette Roman, a Chicago college student. Bentiz, who was in her late 40s when the problem began four years ago, was a cleaning woman, but she's had to stop working. After five surgeries, she has regained vision in one eye, but the other is completely useless. A few weeks ago, awakening one night in a hotel bedroom, she walked into a door, setting off a paroxysm of pain and nausea that hasn't let up yet. And what caused this...



**Heredity**  
Genes help determine whether you'll get diabetes. In many families, multiple generations are struck. But heredity is not destiny—especially if you eat well and exercise.

**FAMILY PLAZA:** Bentiz (left) and Roman. Bentiz's mother and two brothers died from complications of the disease.

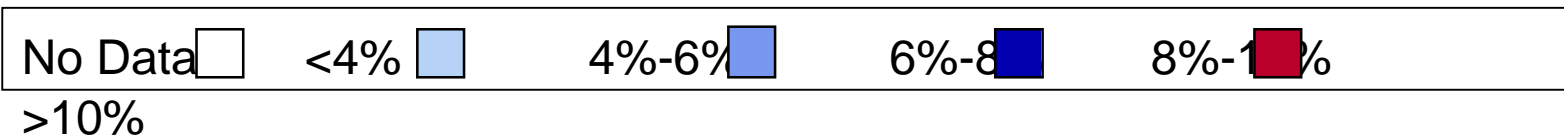
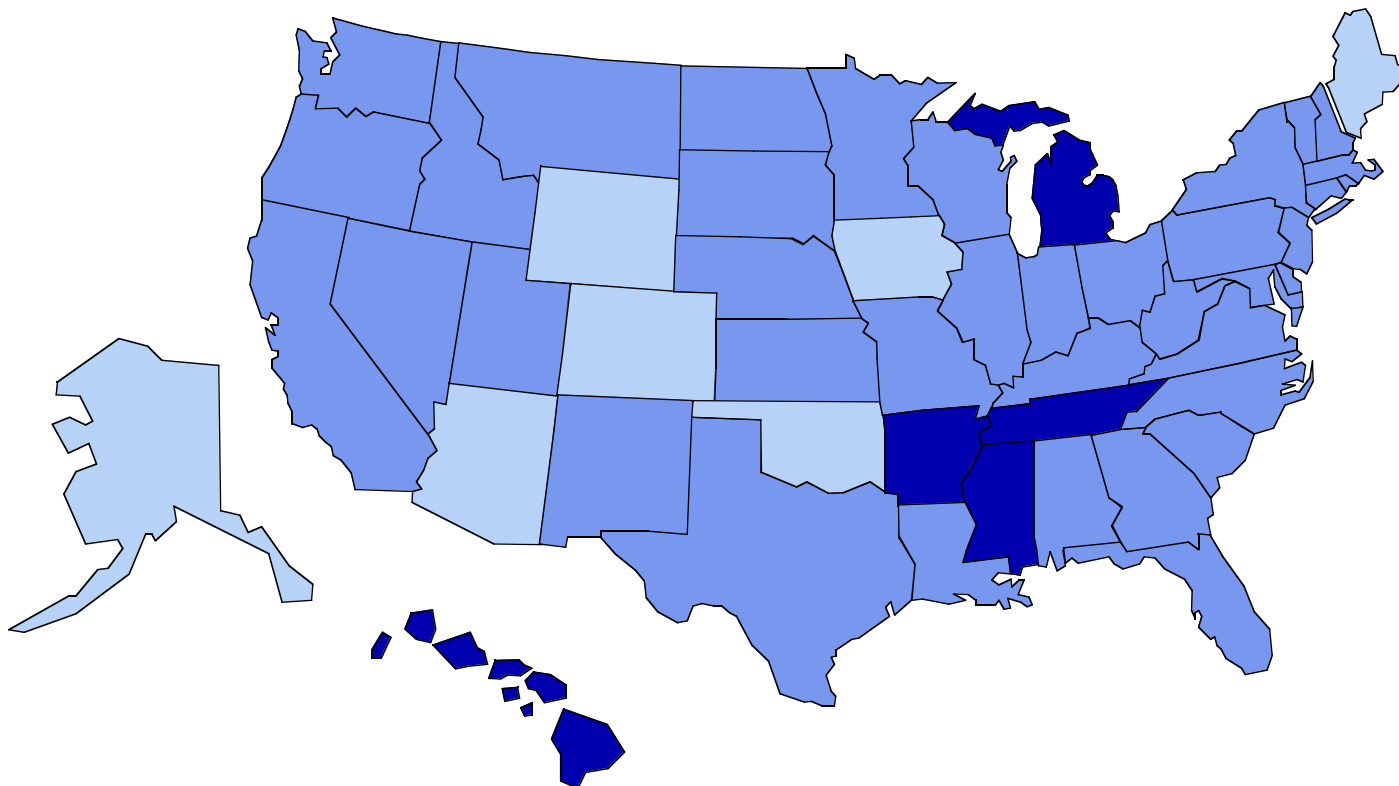
## Distribution of Modifiable Risk Factors and Relative Risk of Type 2 Diabetes among 84,941 Women in the Nurses' Health Study, 1980 to 1996

Body-mass index	No. of Cases	Relative Risk
<23.0	121	1.0
23.0-24.9	202	2.67
25.0-29.9	884	7.59
30.0-34.9	885	20.1
$\geq 35.0$	759	38.8

Source: The New England Journal of Medicine, Sept. 13, 2001

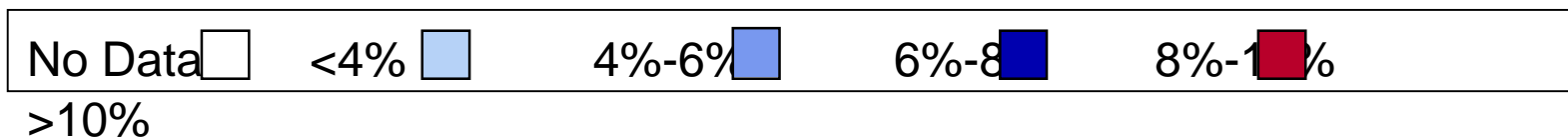
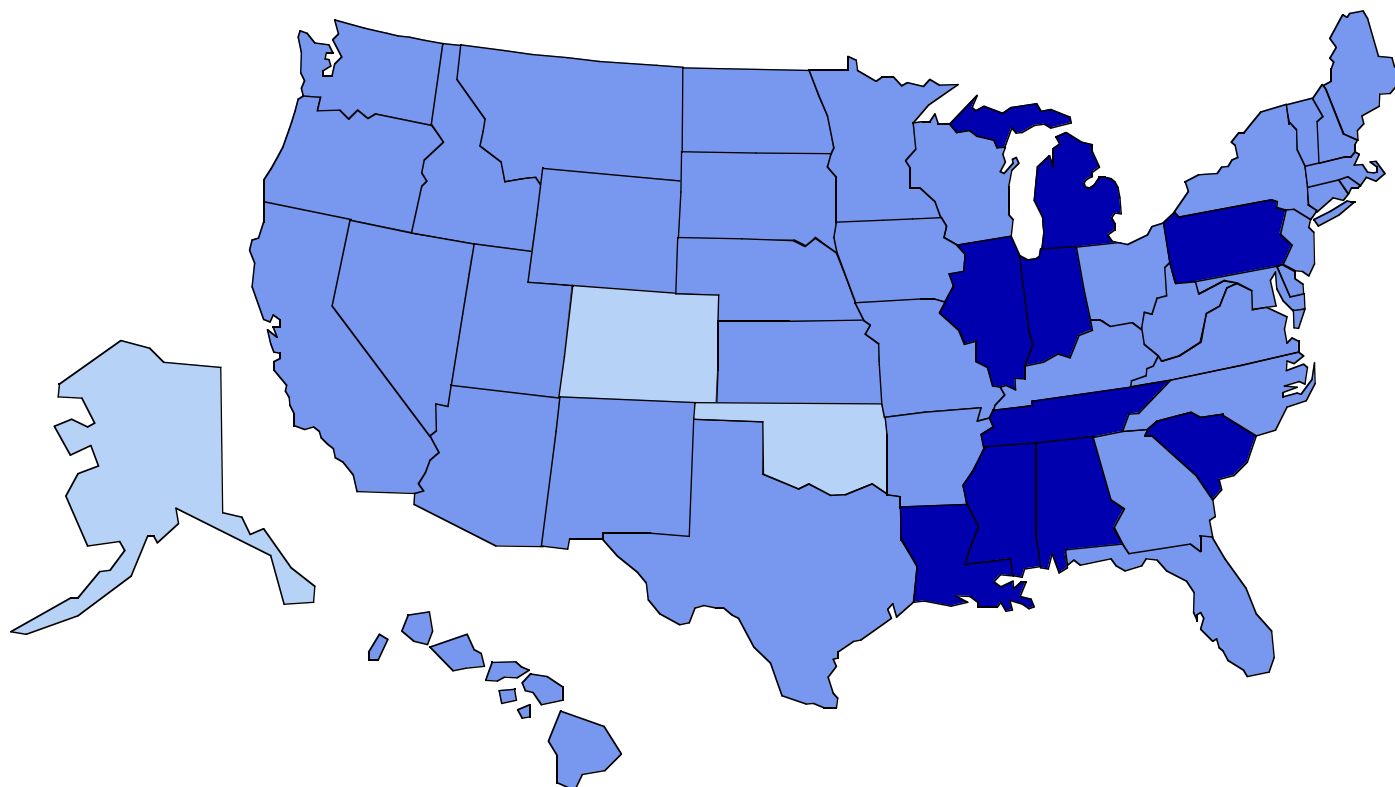


# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1993-94



Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

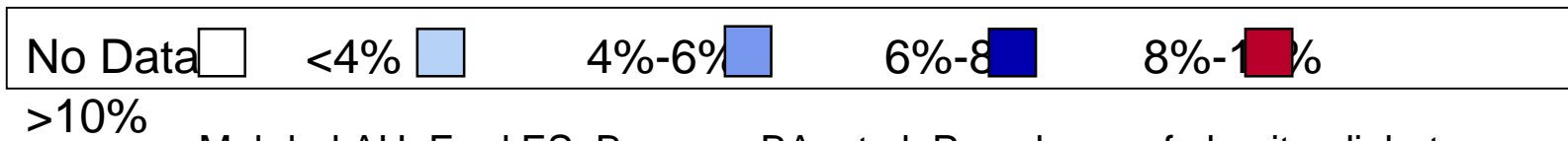
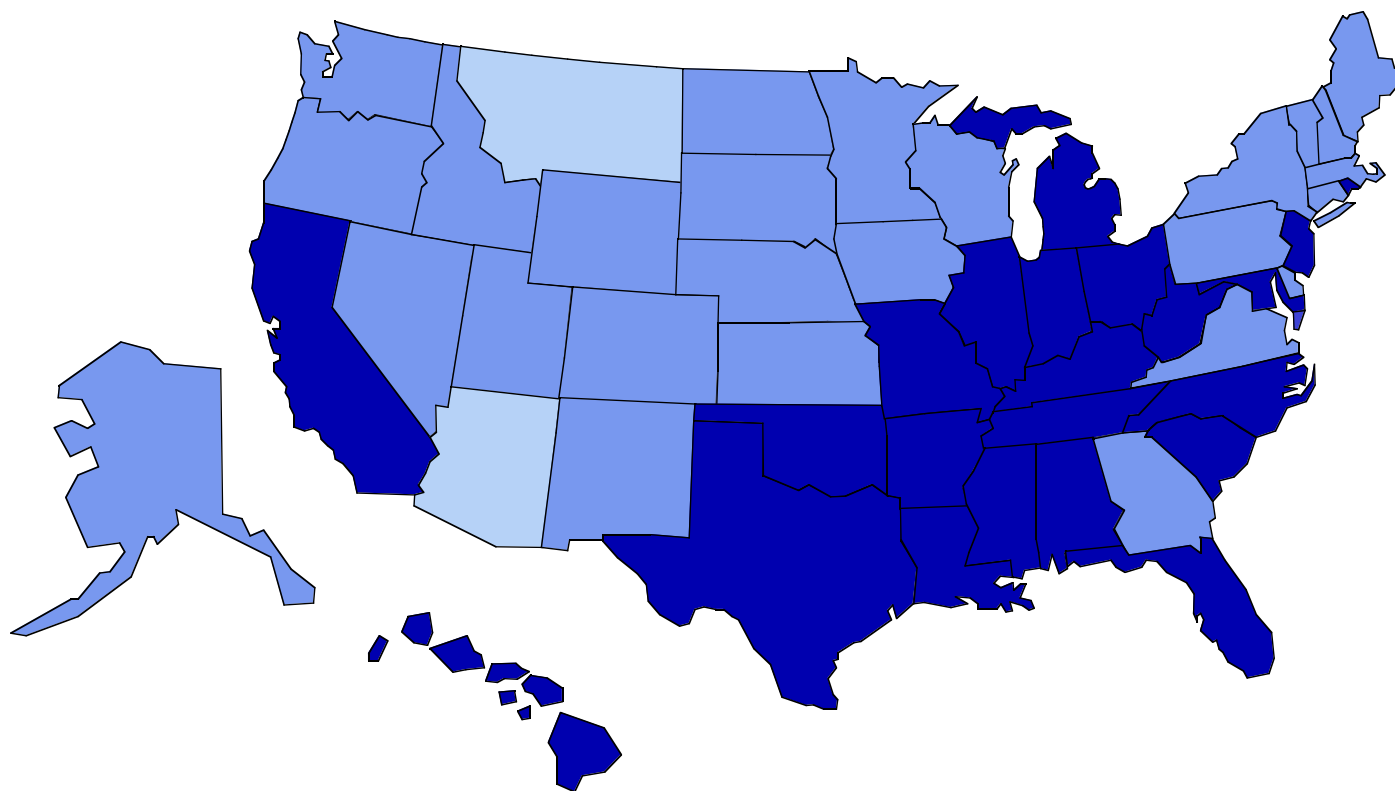
# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1995-96



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# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1997-98

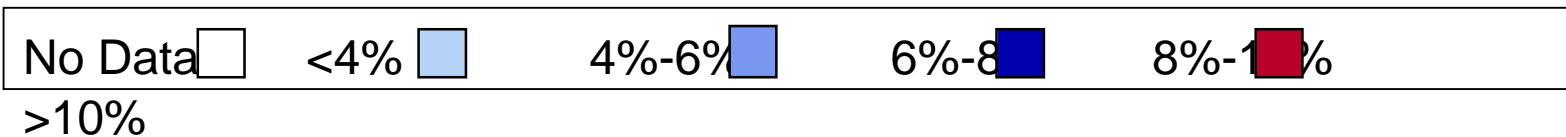
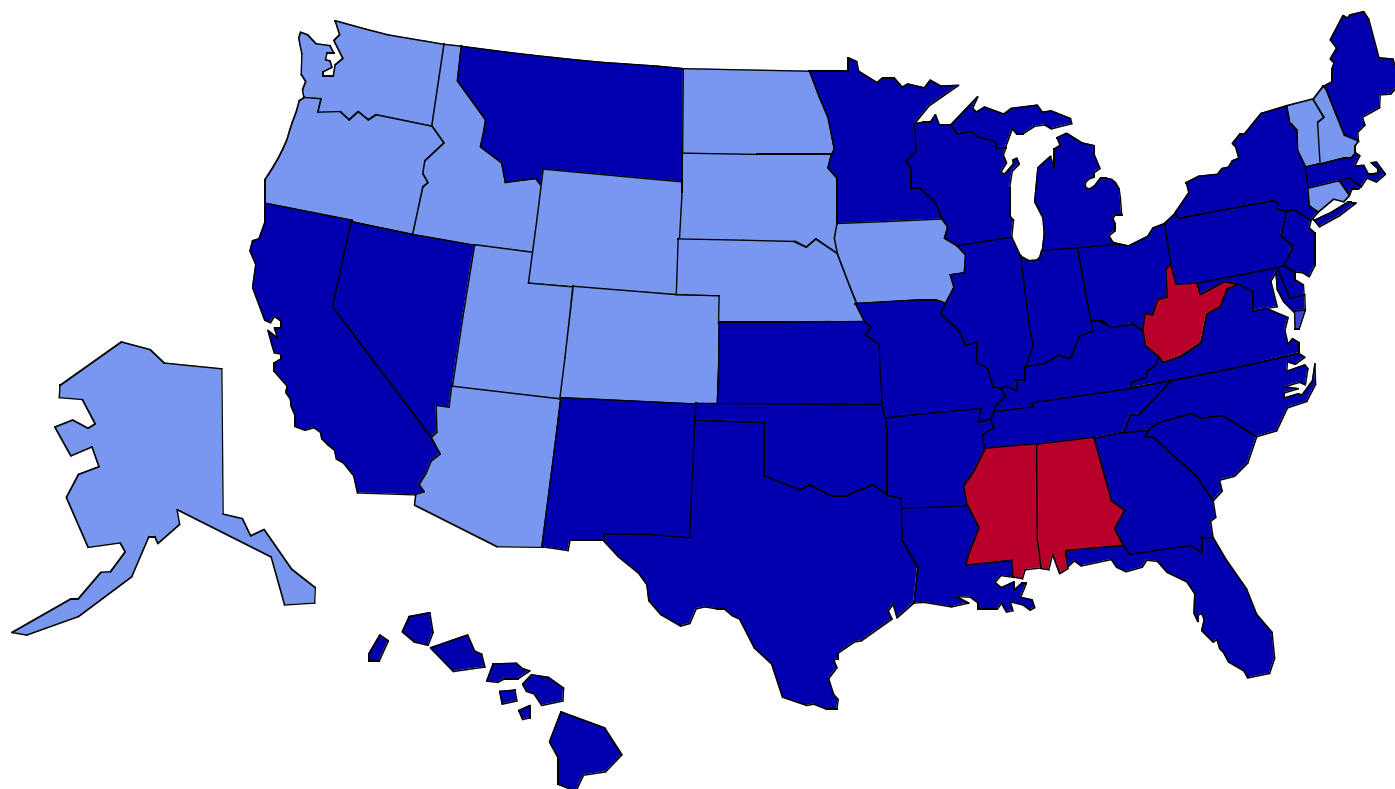


Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).



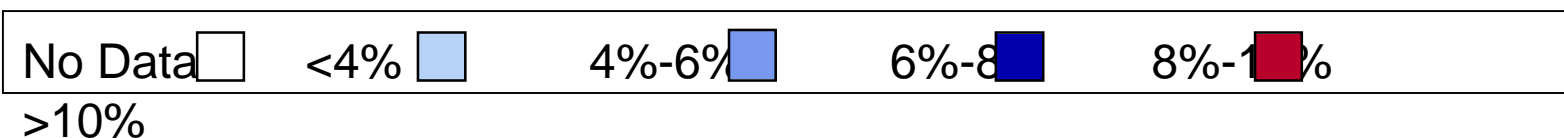
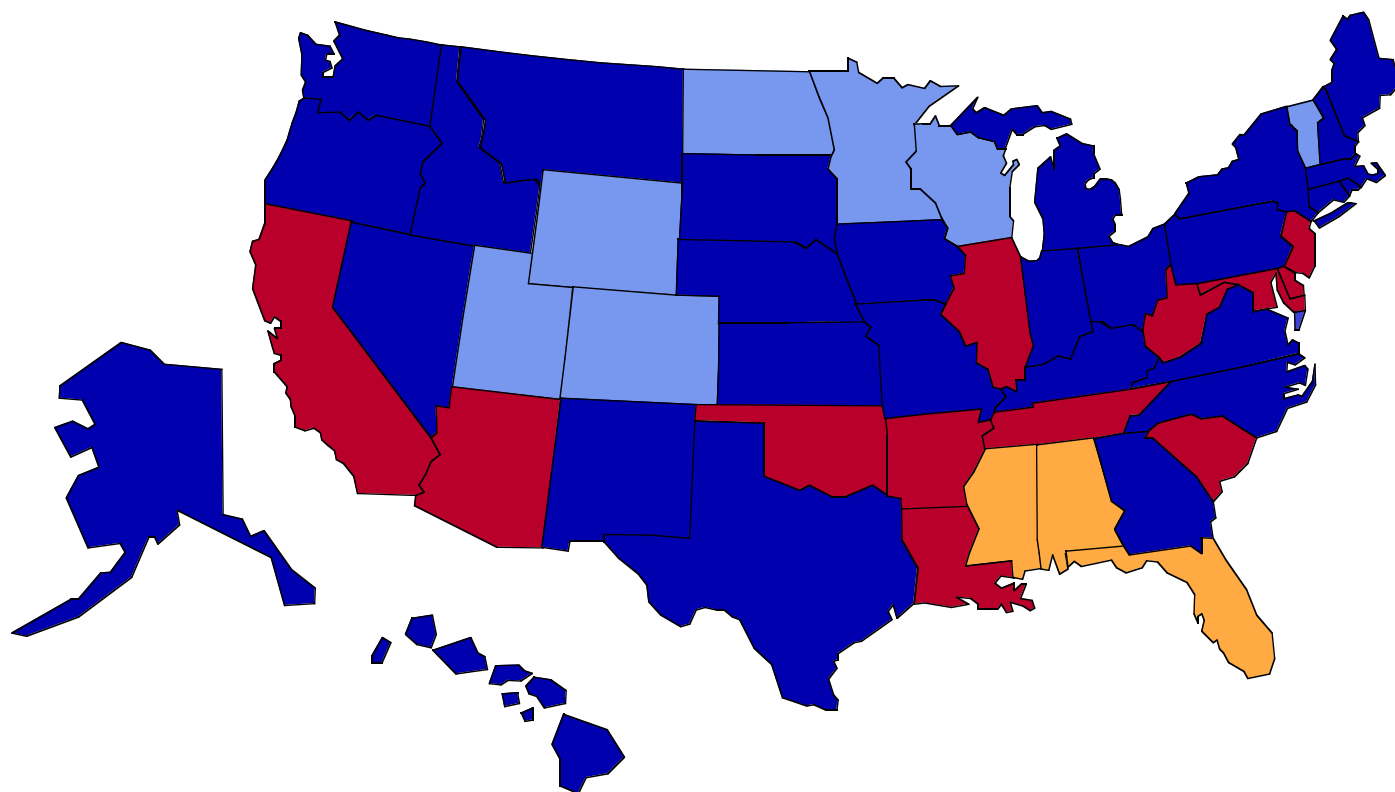


# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1999



Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

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- Weather



08/10/2001 - Updated 11:02 AM ET

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USATODAY.com

## Health & Science

08/09/2001 - Updated 10:33 PM ET

### Walking, dropping weight cuts diabetes risk in half

By Anita Manning, USA TODAY

Researchers have stopped a large diabetes-prevention study a year ahead of schedule because it became clear that what they suspected is true: Moderate exercise and diet changes can reduce the chance of developing the most common form of diabetes, even in people at highest risk.

The study, whose early termination was announced Wednesday by Health and Human Services Secretary Tommy Thompson, also found that treatment with the insulin-sensitizing drug metformin reduces the risk of type 2 diabetes, though to a lesser degree.

#### More on diabetes

- [Diabetes Q&A](#)
- [Complications come with a high price](#)
- [Index to archived stories](#)



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Department  
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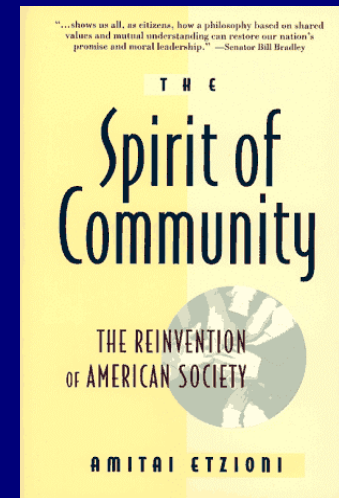
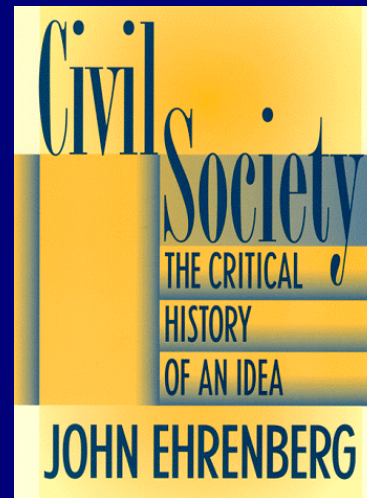
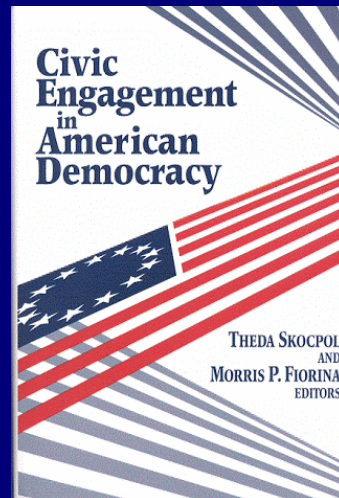
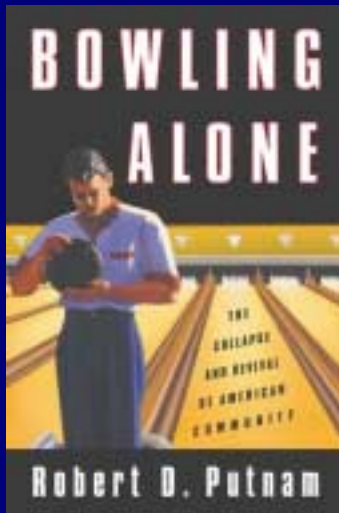


- CDC now mandates its new Buildings have attractive, daylit stairways at main entrance.
- Elevators require more effort to get to than stairs

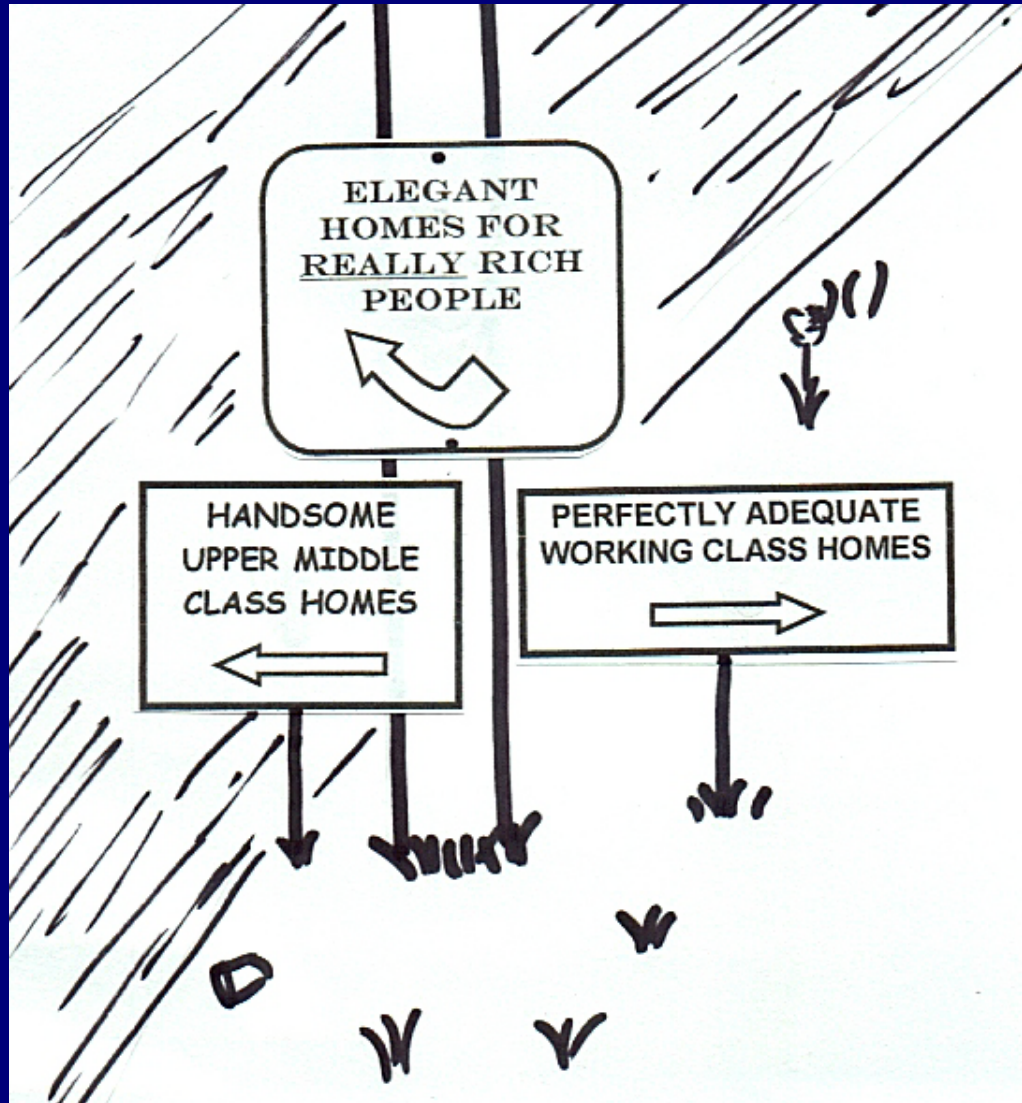
# Social Capital

Social capital defined as:

- Social networking and engagement
- Trust and reciprocity



# Sprawl and Income Inequality



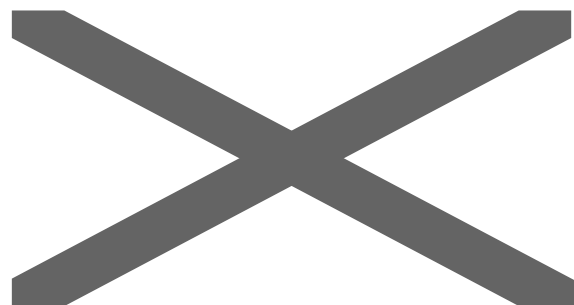


# Sprawl and Income Inequality





# Adjusted\* Odds Ratios of Being Physically Active by Perceived Environmental Characteristics



Source: *Inside City Parks*  
Peter Harnik, www.insideparks.com

\*Adjusted for socio-demographic characteristics; Referent is No Access or No Enjoyable Scenery

Source: Brownson, R.C., Baker, E.A., Housemann, R.A., et. al. (2001)

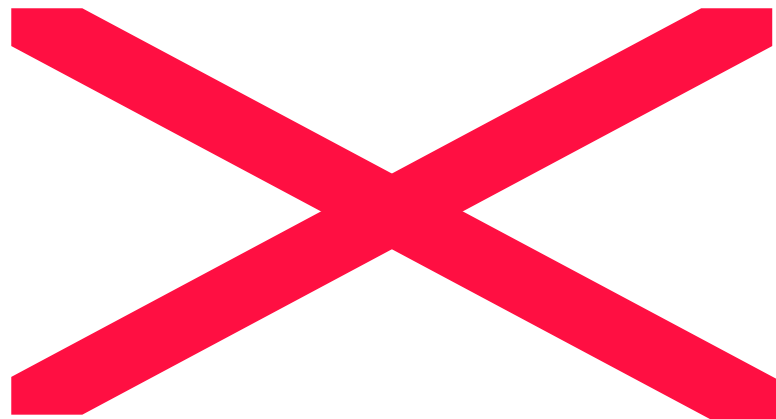


# A Goal: Reclaiming Wasted Urban Land

- Brownfield Development—  
Contaminated sites
- Often urban with  
Infrastructure in place
- Importance of Public  
Health Input



# A Goal? “Places of the Heart”



- Community Gardens: Successes and Challenges

# A Goal? Updated Planning and Housing Codes that Mitigate 21<sup>st</sup> Century Diseases

- Livable Cities of the Past would be illegal under current codes





# A Goal? A Research Data Base to help identify Healthier Communities



- Health studies of urban designs are challenging. Must examine long term well-being for many endpoints, controlling for many confounders-- most important-- SES.

# Success Stories: Health and Design

- Inviting stairways: CDC, SF
- Cross-Michigan Bike Trail
- Mississippi River Trail—Minnesota
- The Metro in DC, Light Rail many Cities
- Ozark Diabetes II intervention
- CDC RWJ Pedometer Effort



# CDC Healthy Places Website

[www.cdc.gov/healthyplaces](http://www.cdc.gov/healthyplaces)

Pending:

- American Journal of Public Health: Full September Issue
- Journal of Health Promotion: Full September Issue
- Increased Research Support From NIH
- Active University Planning/Health Collaborations



**Richard J. Jackson, MD, MPH**

**Director**

**National Center for Environmental Health  
Centers for Disease Control and Prevention**

**[RJJackson@cdc.gov](mailto:RJJackson@cdc.gov)**

**770-488-7000**



**<http://www.cdc.gov/nceh>**

