

Impact of Chronic Diseases - Maine

Dora Anne Mills, MD, MPH

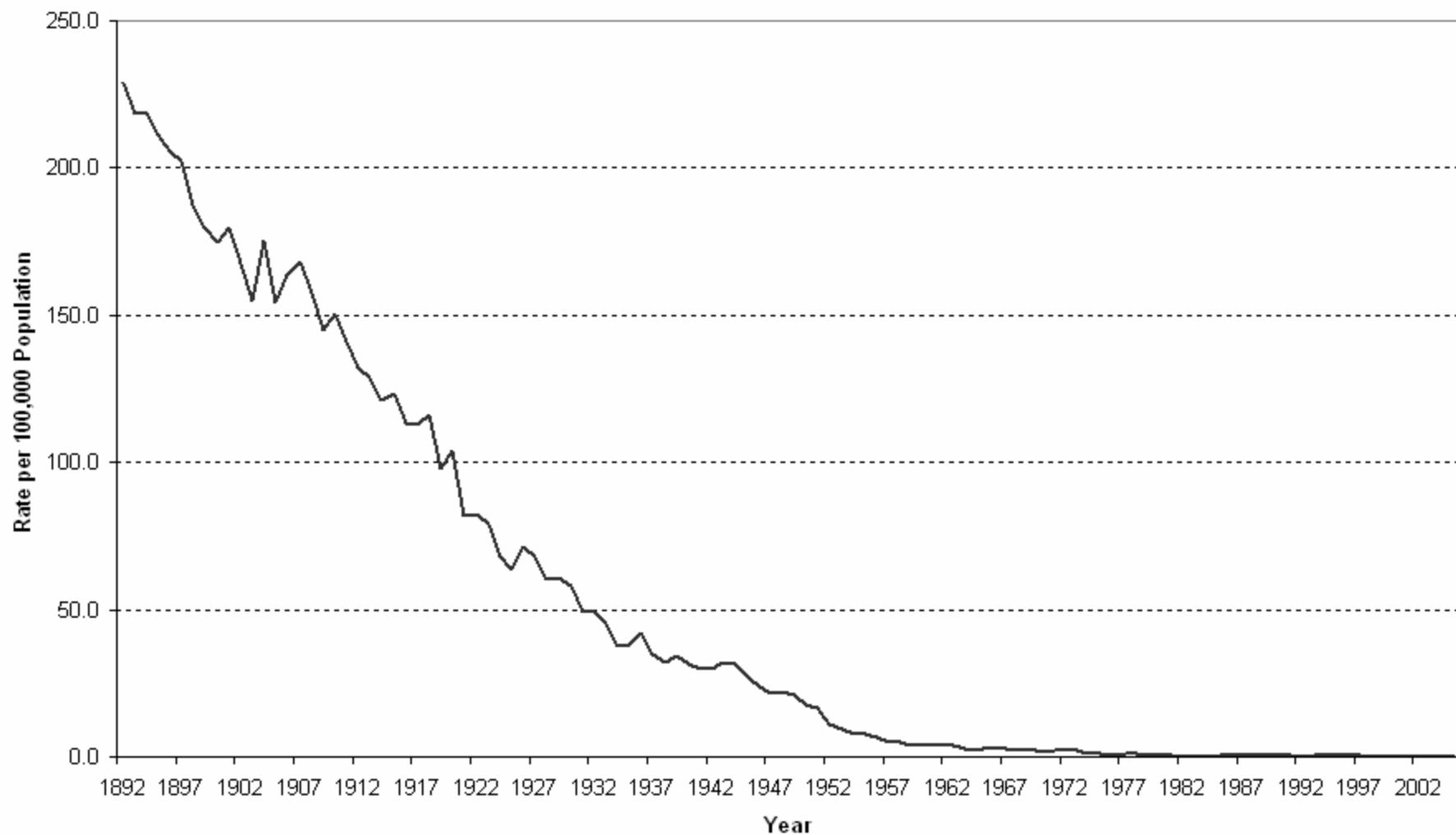


Maine

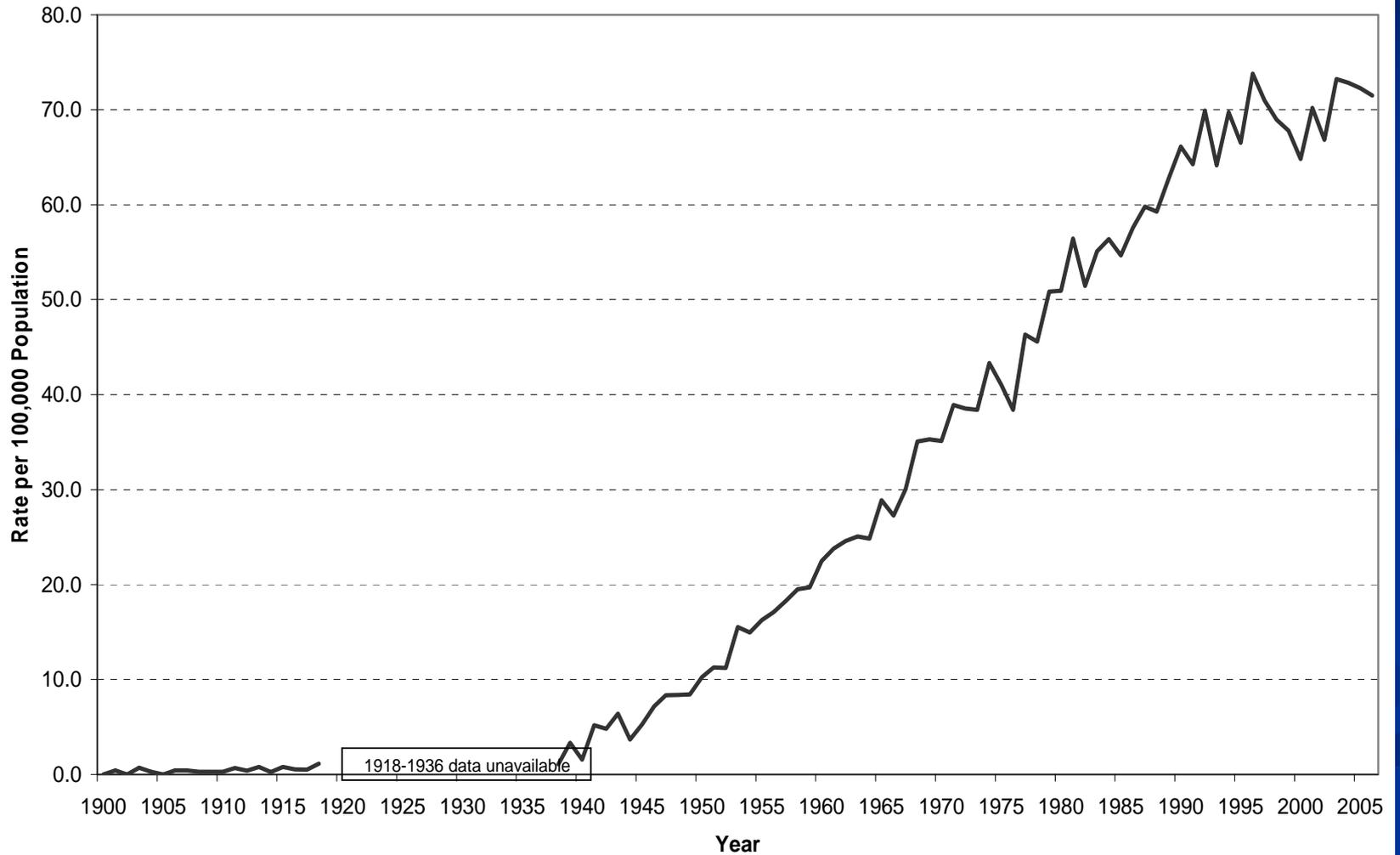
- Population 1.3 million
- 96% White
- 4% Native American, African American, Hispanic
- Rural
- Poor

Impact of Chronic Disease in Maine

Tuberculosis Deaths per 100,000 Population Maine, 1892-2005



Lung Cancer Deaths per 100,000 Population Maine, 1900-2005



What Are Chronic Diseases?

- Cardiovascular Disease
(heart disease and stroke)
- Cancer
- Chronic Lung Disease
(emphysema and asthma)
- Diabetes

Other Chronic Diseases?

- Dental Disease
- Depression

Chronic Diseases

- Leading causes of death and disability
- 75% of Mainers will die from 1 of 4 diseases – CVD, Cancer, Diabetes, Chronic Lung Disease
- Mostly preventable – Tobacco and Obesity
- Direct health care costs = 40% of Maine's Health Care Budget

Cardiovascular Disease

- #1 cause of death and disability
- 40% of all deaths
- 25% of all hospital costs

Cancer

- #2 cause of death
- 65% due to Tobacco or Obesity
- Most are curable if screened, detected, and treated early

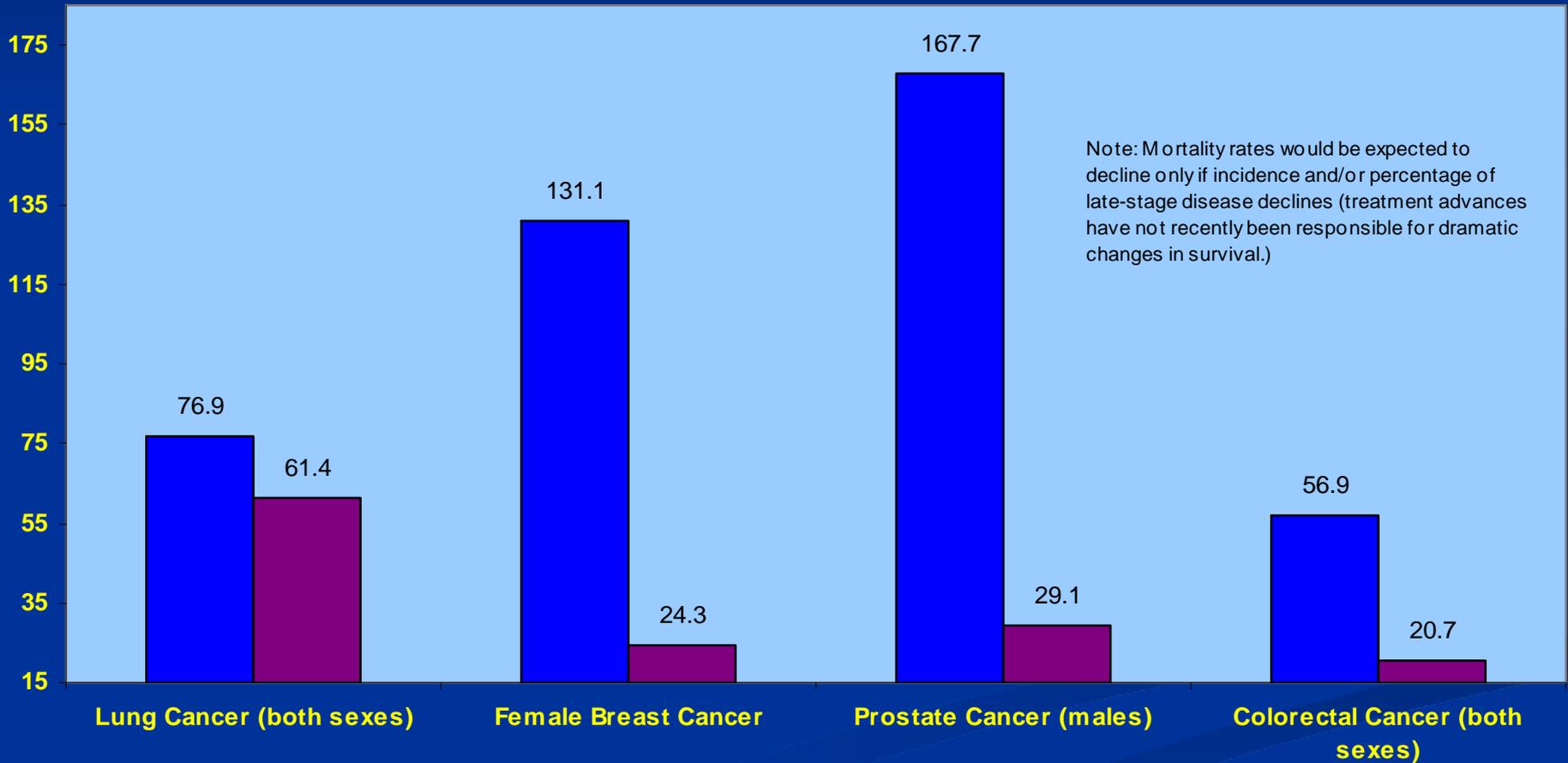
Leading 4 Cancers That Kill Maine People Incidence And Mortality Rates

Age-Adjusted Rate Per 100,000 Population

Maine 2001-2003

■ Incidence

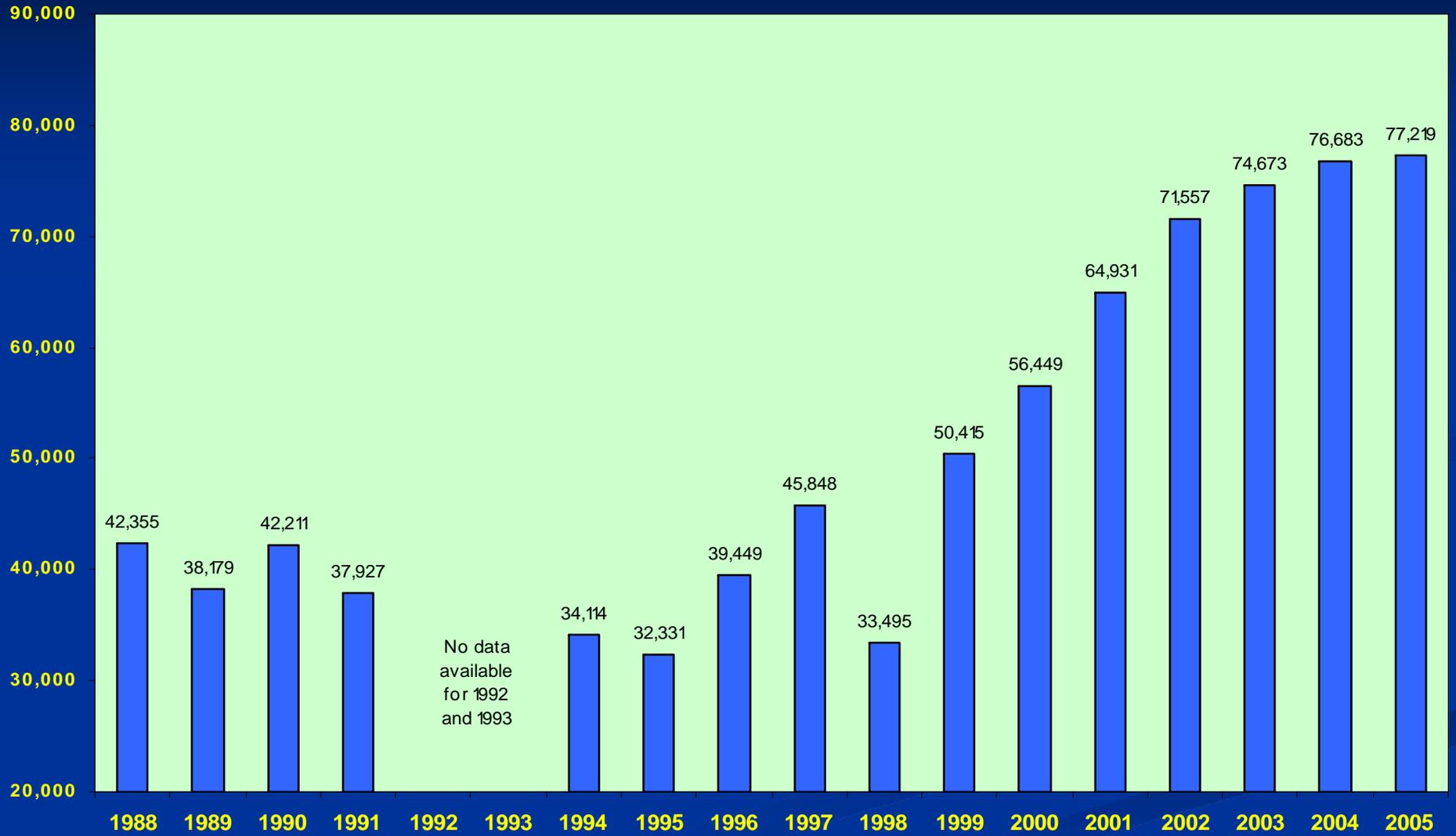
■ Mortality



Diabetes

- 8% of adult Mainers now have diabetes

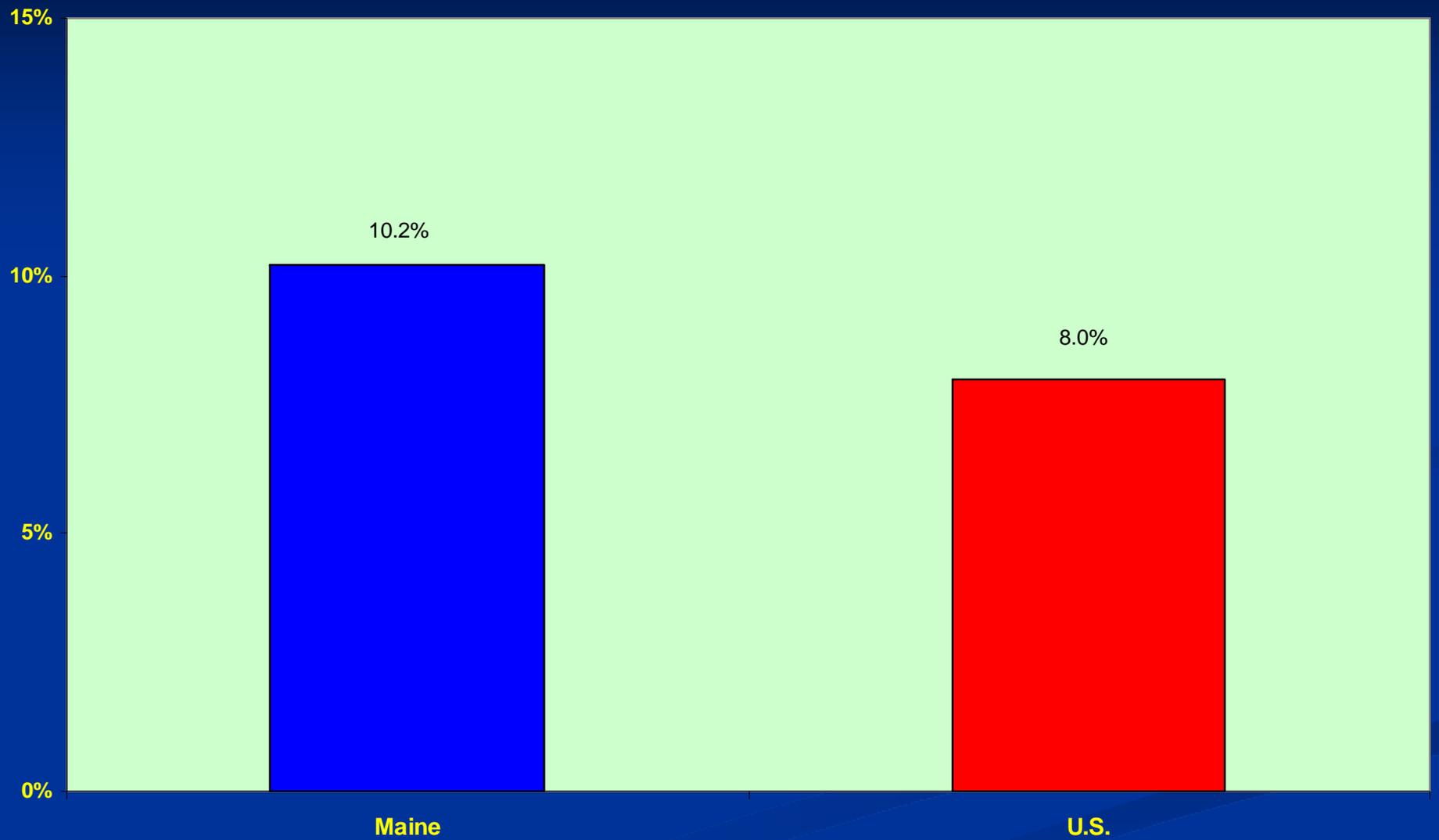
Mainers with Diabetes 1988-2005



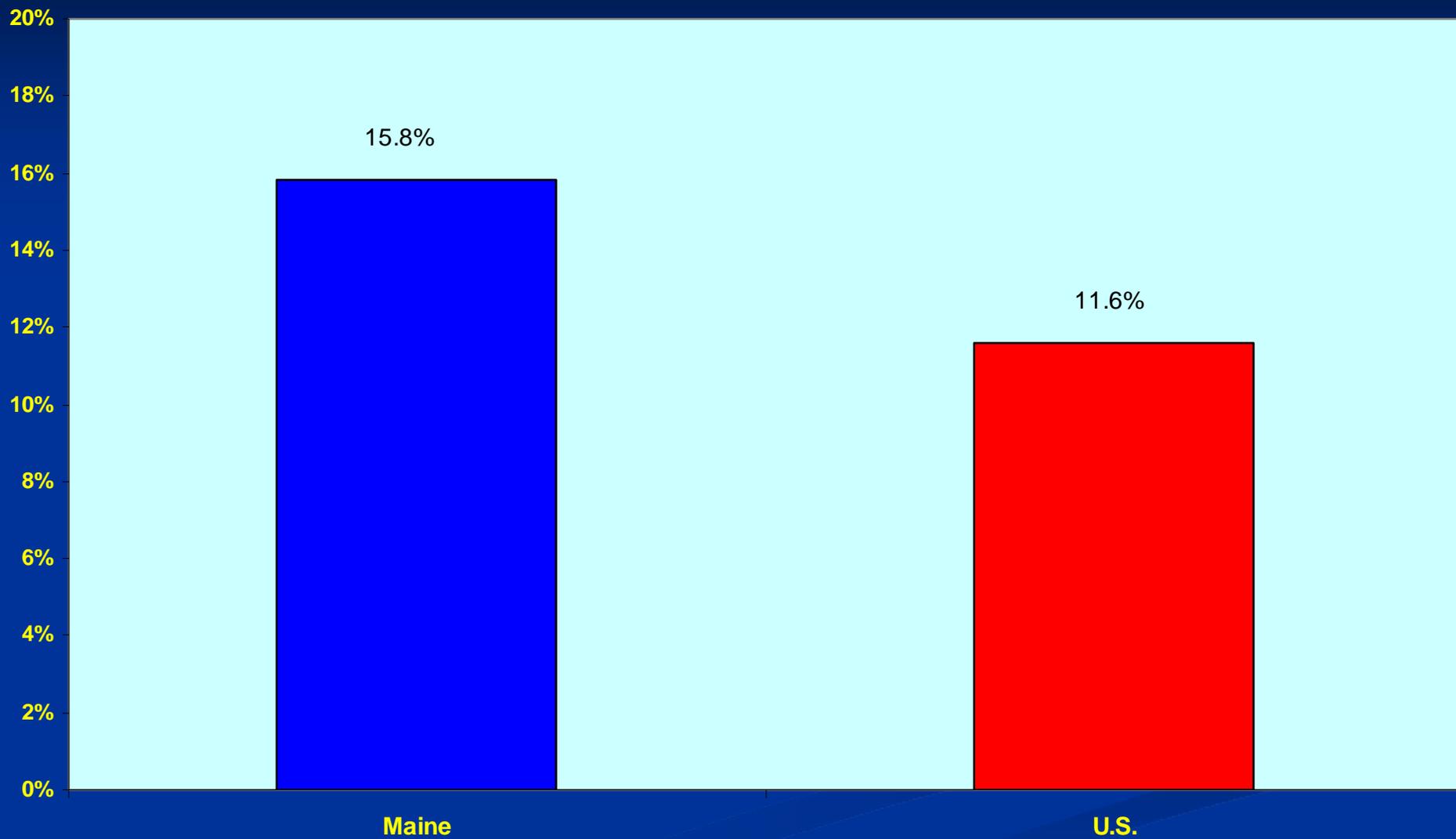
Lung Disease

- Asthma
- Emphysema, Chronic Obstructive Pulmonary Disease

Proportion of Adults With Asthma Maine and U.S. - 2005



Proportion of Children With Asthma 2004



Dental Disease

- 1 in 3 Mainers over age 65 have lost all their teeth
- 40% of Maine 3rd graders have tooth decay
- Highly associated with other chronic diseases

Depression



Mainers suffering from frequent mental distress are **twice as likely to:**

- Have Diabetes
- Be Tobacco Addicted
- Have Asthma

Effective Strategies

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Primary Prevention Strategies

- Tobacco
- Physical Inactivity
- Poor Nutrition

Primary Prevention Strategies

- State and Community Interventions
- Health Communication
- Treatment
- Surveillance and Evaluation

1. State and Community Interventions

Statewide Interventions

Tobacco Tax

1991 \$0.37

1997 \$0.74

2001 \$1.00

2004 \$2.00

1997 – Some Tobacco Tax Revenues (\$3 per capita) put aside for first state funds for tobacco prevention

1999 – \$18 million (\$17 per capita) from Tobacco Settlement Funds set aside for state funds for Tobacco and Obesity prevention

Laws Banning Smoking

1981	Public meetings
1983	Court houses
1985	Stores
1986	Most workplaces
1989	Hospitals, except psychiatric patients and hospitals
1999	Restaurants
2003	Bars
2005	All loopholes closed

2005 – All Indoor Public Places in
Maine are Smokefree

**Breathe easy, you're in
Maine.**

**All indoor public places
are smoke-free.**

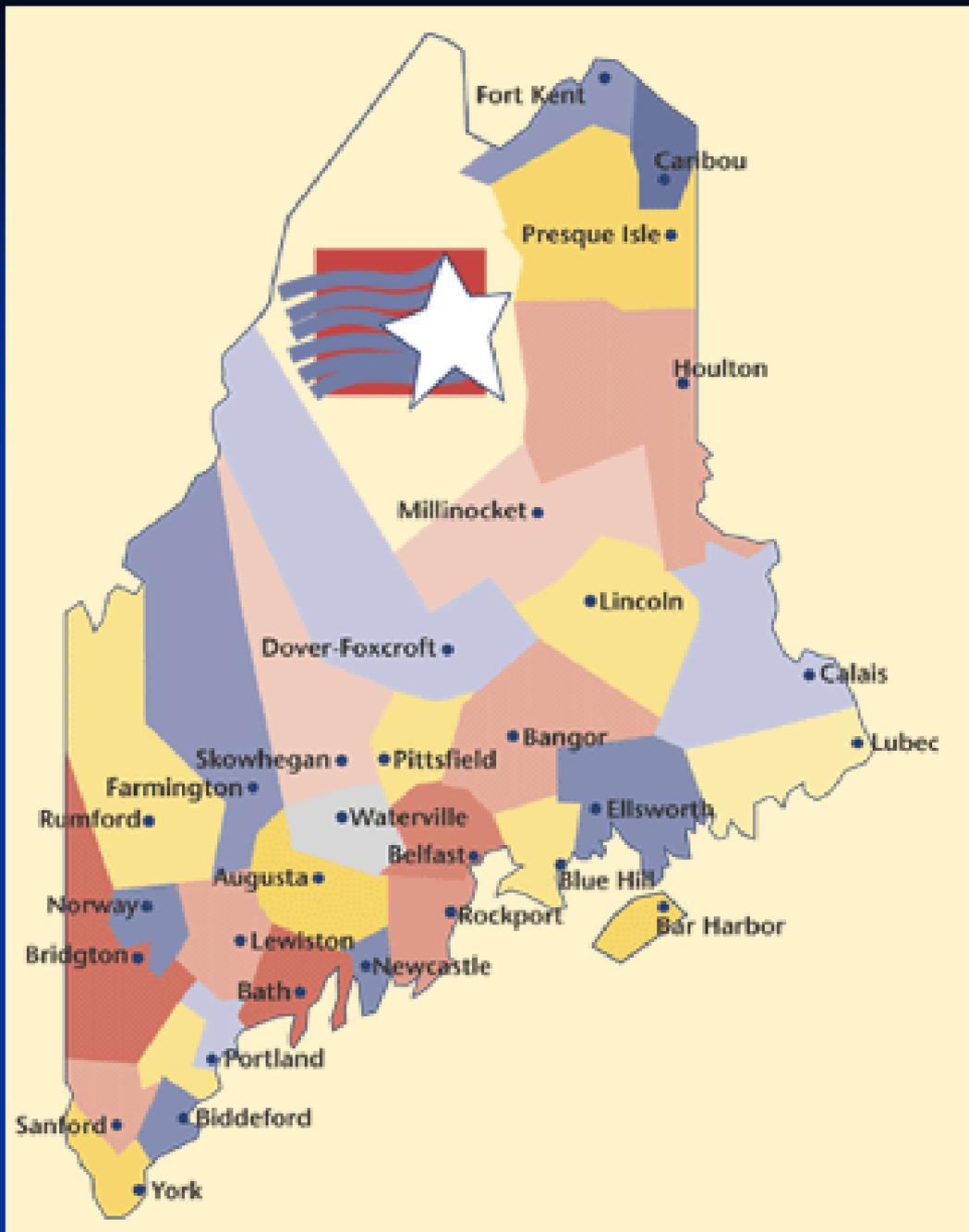
2007 – Outdoor School Grounds
are Smokefree

Community Interventions

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2000 – Healthy Maine Partnerships

Maine's Community Network for
Chronic Disease Prevention



Healthy Maine Partnerships

- 28 Comprehensive Community Health Coalitions
- Cover all of Maine
- Funded with Tobacco Settlement and Federal Funds
- Tobacco, Obesity, Substance Abuse community interventions

Obesity Interventions

City/Town ordinances for walkable communities



Food policies for organizations



Bans on school vending machines



2. Health Communication

Goals

- Change culture
 - Secondhand smoke
 - Children watching TV
 - Walking
 - Portion Sizes
- Support community and statewide interventions
- Promote quitting Tobacco

A MESSAGE TO EVERY MAINE PARENT

We're just getting started.

When it comes to giving you the facts about maintaining a healthy weight, we're just getting started.

And for good reason: Over half of Maine adults are obese or overweight, and nationally, the obesity rate for children has increased by 100% in just the last 20 years. With that comes heart disease, diabetes, high blood pressure and other serious health complications for our kids.

Excessive "screen" time contributes to childhood obesity. Overweight children are more than twice as likely to have high blood pressure, high blood cholesterol or early heart disease.

The only good news about childhood obesity is that it's preventable. That's why we launched Maine's Healthy Weight Awareness campaign, so Maine parents could know about the vast amounts of sugar and empty calories in soda that contribute to obesity and being overweight. We recommended you cut back on your soda consumption or switch to healthier beverages.

Fact is, drinking excessive amounts of soda is one of several factors contributing to an epidemic of unhealthy weight among youth. Excessive consumption of fast foods and

large portions are also to blame.

It gets worse: Our youth are less active than ever before, due mostly to excessive "screen" time--spending too much time before a television, a computer or playing video games.

When you consider all this, is it any surprise that obesity is an epidemic among children?

In the weeks ahead, we'll continue to give Maine parents more helpful information about keeping kids healthy and active.



THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY

Healthy Maine Partnerships

Maine Cardiovascular Health Program
in collaboration with the **Maine Nutrition Network**
Bureau of Health, Department of Human Services





These are athletic shoes.

Physical activity can be a flop.

Physical activity is a walk on the beach. A stroll around the yard. A trip around the block. And your heart will become stronger for it. In fact, anything you do—no matter how small—can begin to improve your health. It's that simple.

THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY
 **Healthy Maine Partnerships**
The people dedicated to helping us live longer and healthier.
Bureau of Health, Department of Human Services

For more ways to get healthier in your community,
go to www.healthymainewalks.org



This is an exercise machine.

**Simple
steps toward
better
health.**



**When
you have the chance,
take the stairs. Your
heart will beat faster. Your
legs will get stronger. And
your health will start to improve.
In fact, anything you do—no
matter how small—can begin to
improve your health.
It's that simple.**

THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY
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The people dedicated to helping us live longer and healthier.
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For more ways to get healthier in your community,
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(camera moves through house freezing on everyday items)

Maine has a weight problem. But we can do something about it. Start with the stairs. Take them. That's physical activity. Yeah, I know, it doesn't seem like much, but it is. Your heart beats faster, your legs get stronger. Got chores? Picking up around the house, that's good, too. You like music? Put some on and move around. It all counts. It's all physical activity. Anything you do—no matter how small—can begin to improve your health.

It's that simple.



150 useless calories.

We may drink it like water, but a twelve ounce serving of cola can contain up to ten teaspoons of sugar and 150 empty calories. No wonder obesity is an epidemic among children.

This is not water.

Cut the calories.

A soda now and then is okay, but don't overdo it—cut back or switch to a healthier beverage.

THIS HEALTHY WEIGHT AWARENESS MESSAGE IS BROUGHT TO YOU BY
 **Healthy Maine Partnerships**
The people dedicated to helping us live longer and healthier.
Bureau of Health, Department of Human Services

3. Treatment Interventions

Effective Treatments

- Behavioral Counseling
- Medications
- Brief Messages by Health Professionals
- Intensive Interventions by Professionals
- Insurance Benefit Coverage

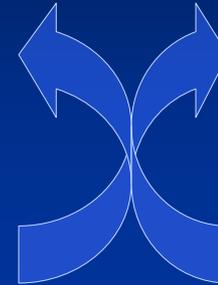
PTM Treatment Components

- Maine Tobacco HelpLine
- Medication Voucher Program
- Tobacco Treatment Training
- Chronic Disease Initiative

Social Support

Counseling

Medications



Health Professionals
and Community

Telephone
Counseling / NRT

Tobacco Specialists



Treatment Basics
Training

HelpLine

Treatment Specialist
Training

Clinical Outreach

Medication Vouchers

Certification (A.L.A.)

Motivate Tobacco Users to Quit



Assist Tobacco Users to Quit



When you're ready to quit, just call.

1-800-207-1230

THE MAINE TOBACCO HELPLINE

 **Healthy Maine Partnerships**
The joint effort to bring us to a healthier future.
Partnership For A Tobacco-Free Maine
Bureau of Health, Department of Human Services

The HelpLine offers support that can help you stay tobacco-free for life.

The Quit Kit can help by giving you:

- Quitting tips, like how to manage stress without tobacco
- Tips on helping someone else quit
- Things to do instead of using tobacco
- Information on nicotine replacement medication
- How to cope with cravings
- Facts about secondhand smoke
- Tips to help you *stay* tobacco-free

1-800-207-1230

THE MAINE TOBACCO HELPLINE



Healthy Maine Partnerships

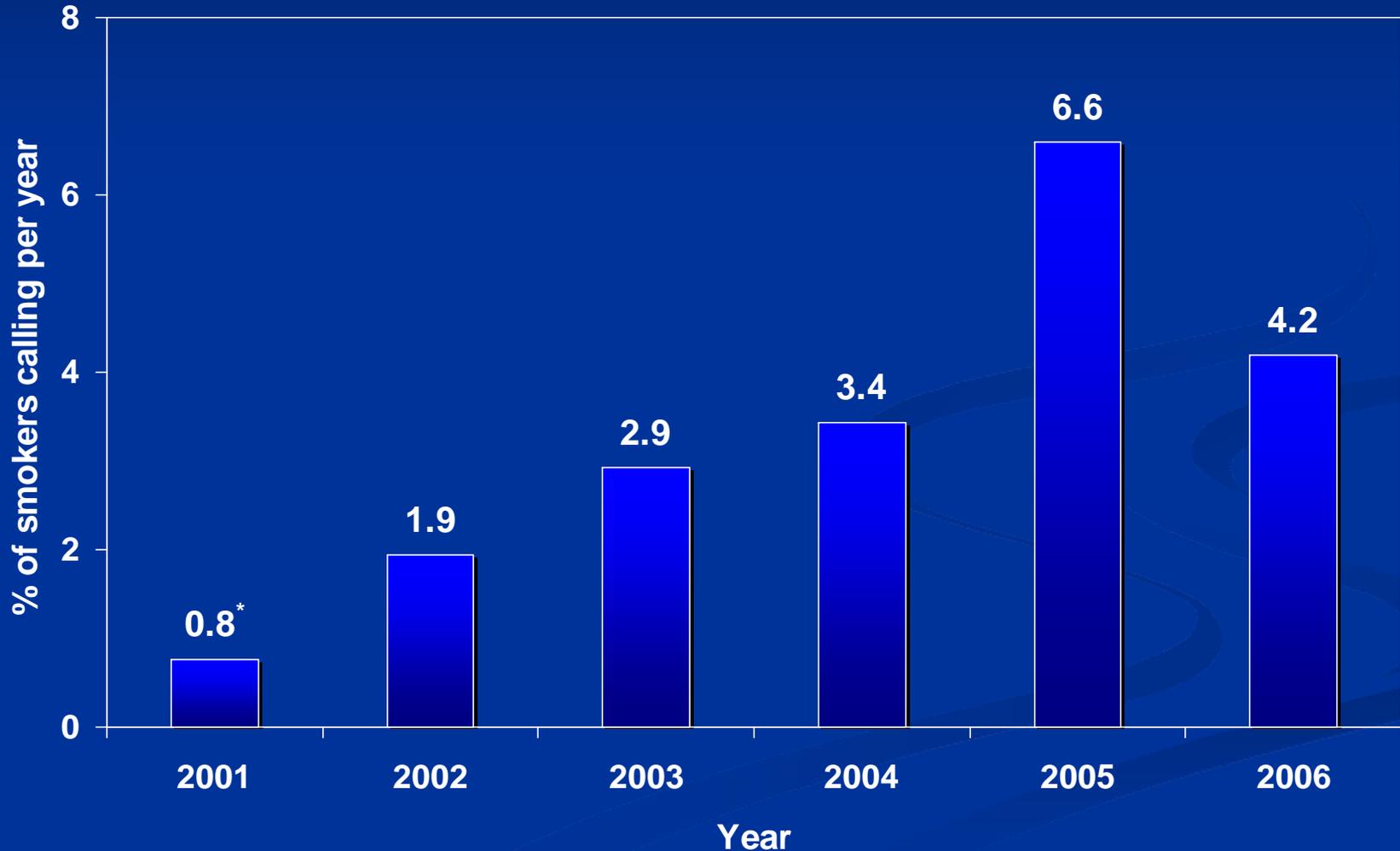
Partnership For A Tobacco-Free Maine

Bureau of Health, Department of Human Services

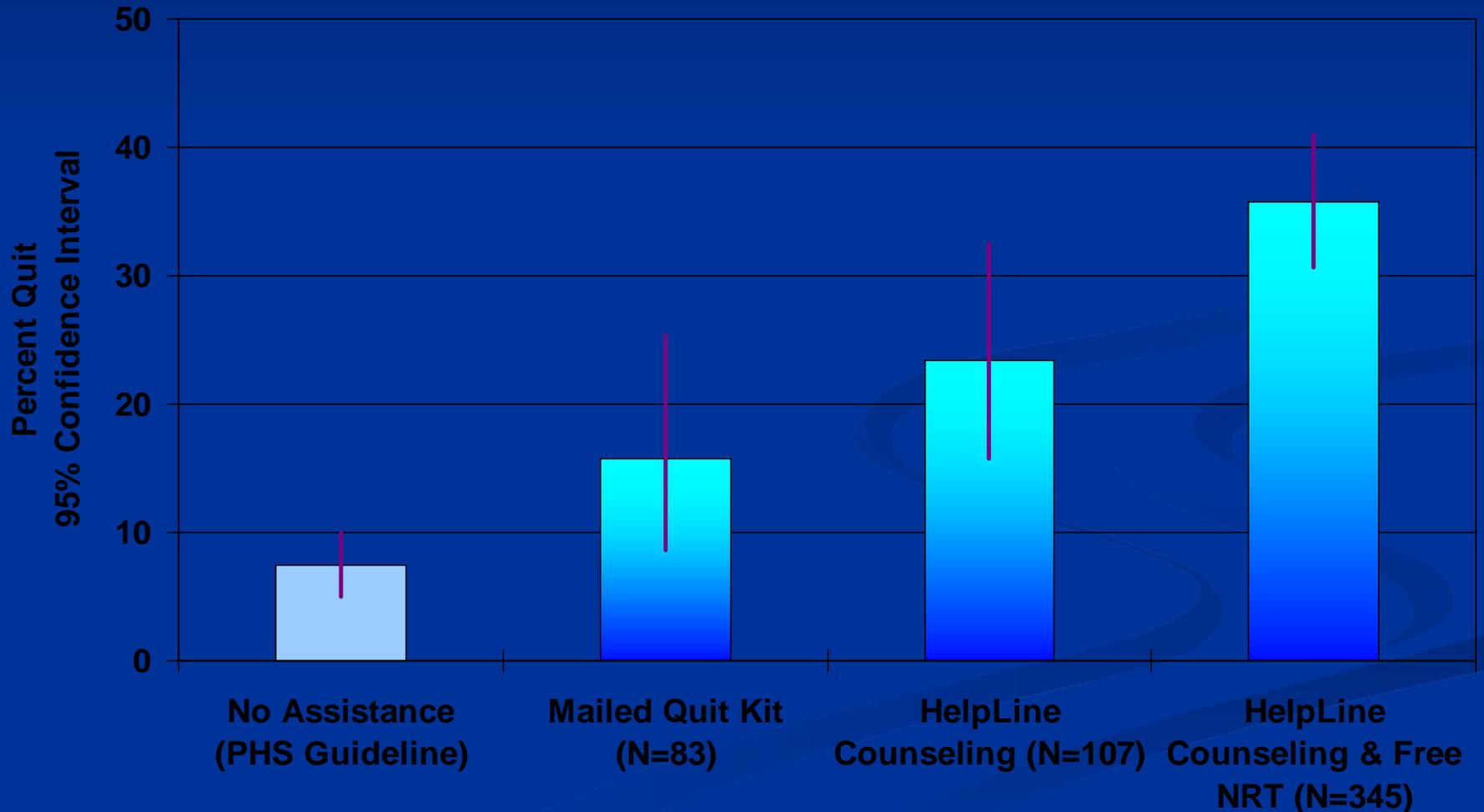
HelpLine Services

- For any Maine resident
- Ready to Quit 30 days → Specialist
- 4 counseling sessions total
- Not Ready to Quit now – materials
- 7 days a week – 8am – 8pm

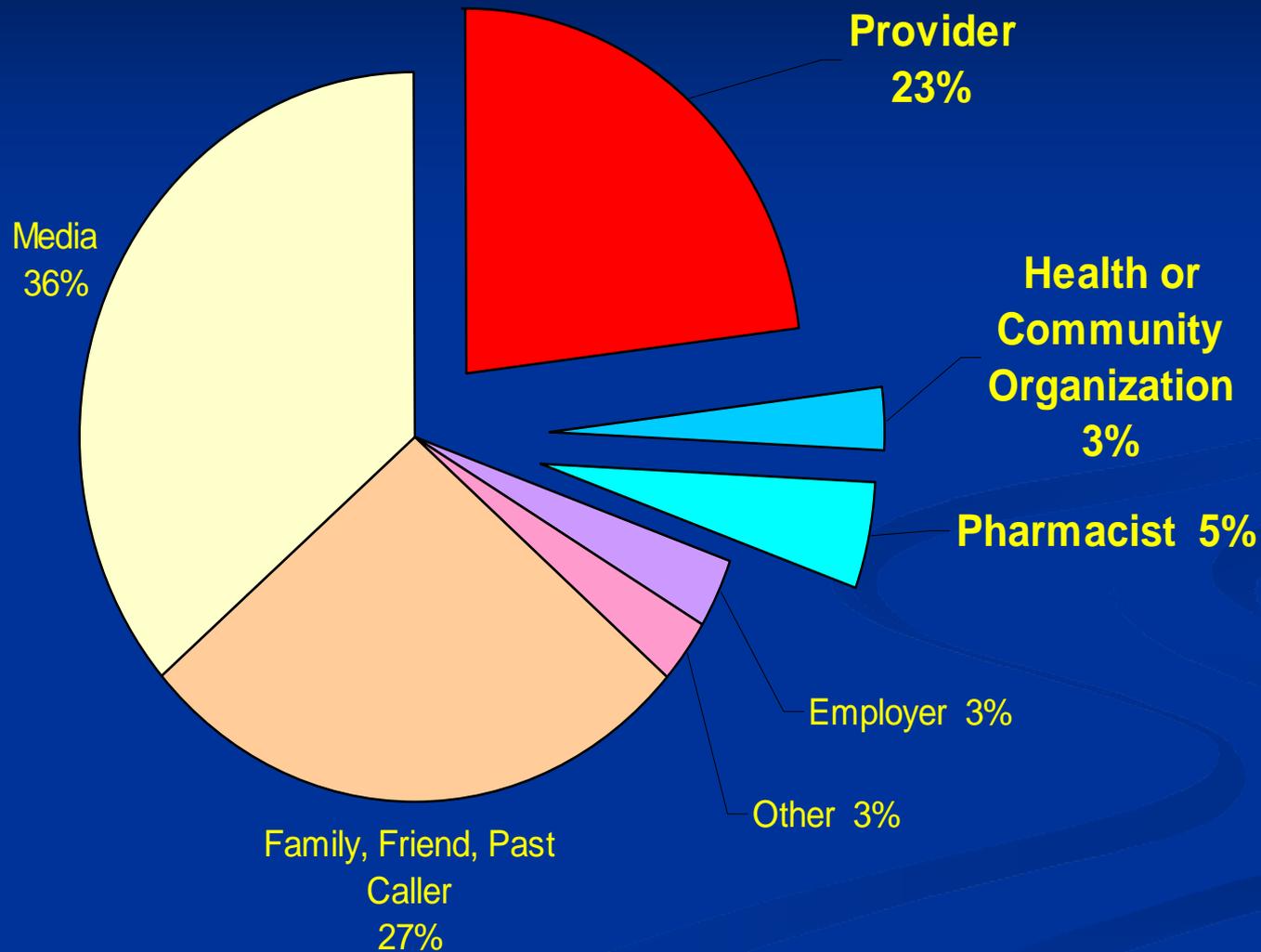
Percent of Adult Smokers in Maine Calling the Tobacco HelpLine each year, 2001–2006



Six-month Quit Rates by HelpLine Services Delivered



"How Did You Hear About the HelpLine?"



www.tobaccofreemaine.org

Improved Treatment of Chronic Diseases

Care Model

- Decision Support
- Information Systems
- Self-Management Support

Diabetes



Decision Support & Information Systems

- Diabetes Registries
- Learning Collaboratives

Self-Management Support

- Diabetes Educators
- Diabetes Support Groups

4. Surveillance & Evaluation



Tobacco and Obesity

- Comprehensive Adult Tobacco Survey
(phone – every 3 years)
- Behavioral Risk Factor Surveillance Survey
(phone – every year)
- Comprehensive Youth Tobacco Survey
(in schools – every 3 years)
- Simplified Youth Risk Behavior Survey
(in schools – every 2 years)

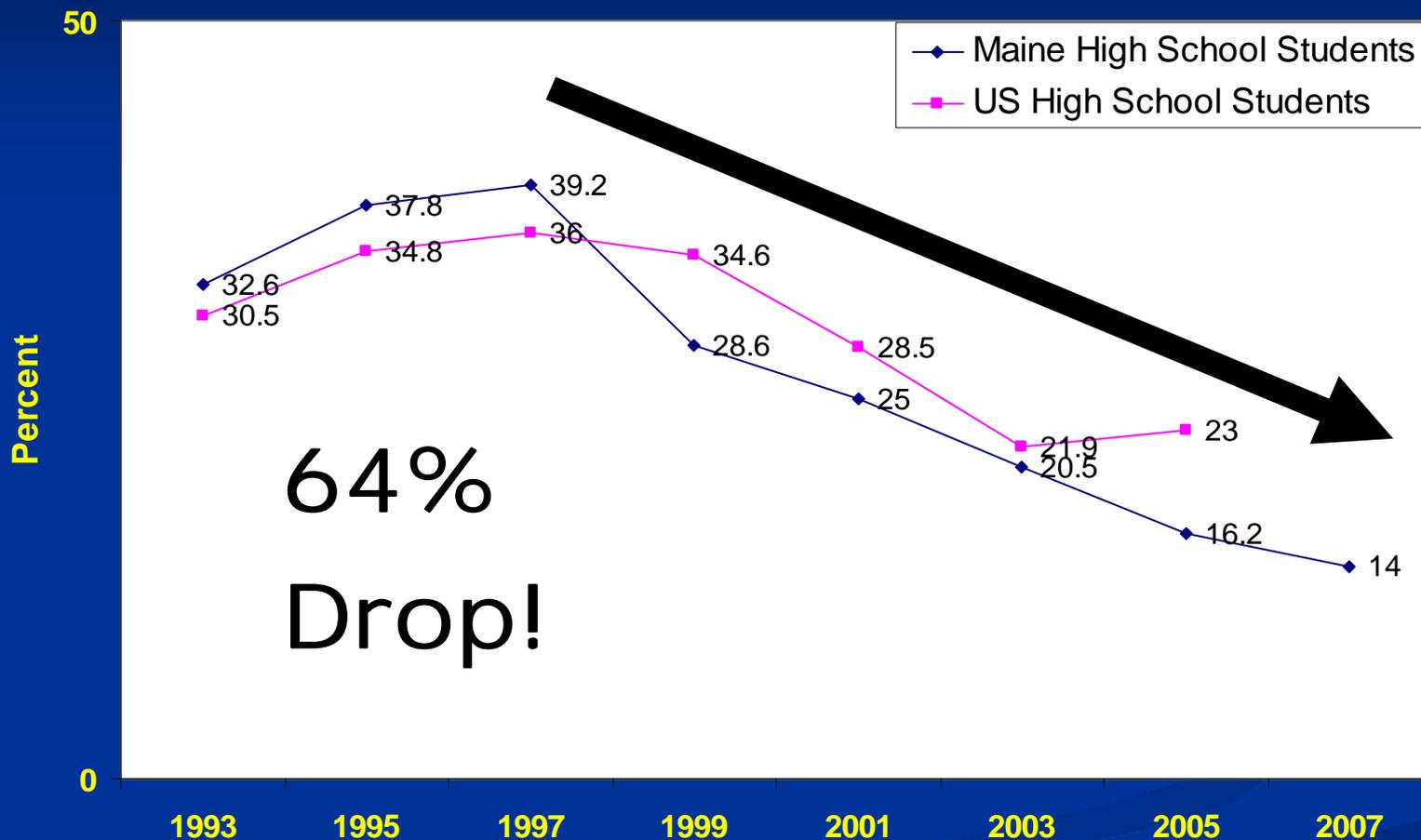
Disease Surveillance

- Cancer – Registry and Vital Records
- Cardiovascular Disease – Hospitalizations and Vital Records
- Diabetes – Behavioral Risk Factor Surveillance System Survey and Vital Records
- Asthma – Behavioral Risk Factor Surveillance System Survey and Hospitalizations

Evidence of Impact

Tobacco Successes

Smoking Rates - High School Students Maine & US, 1993-2007

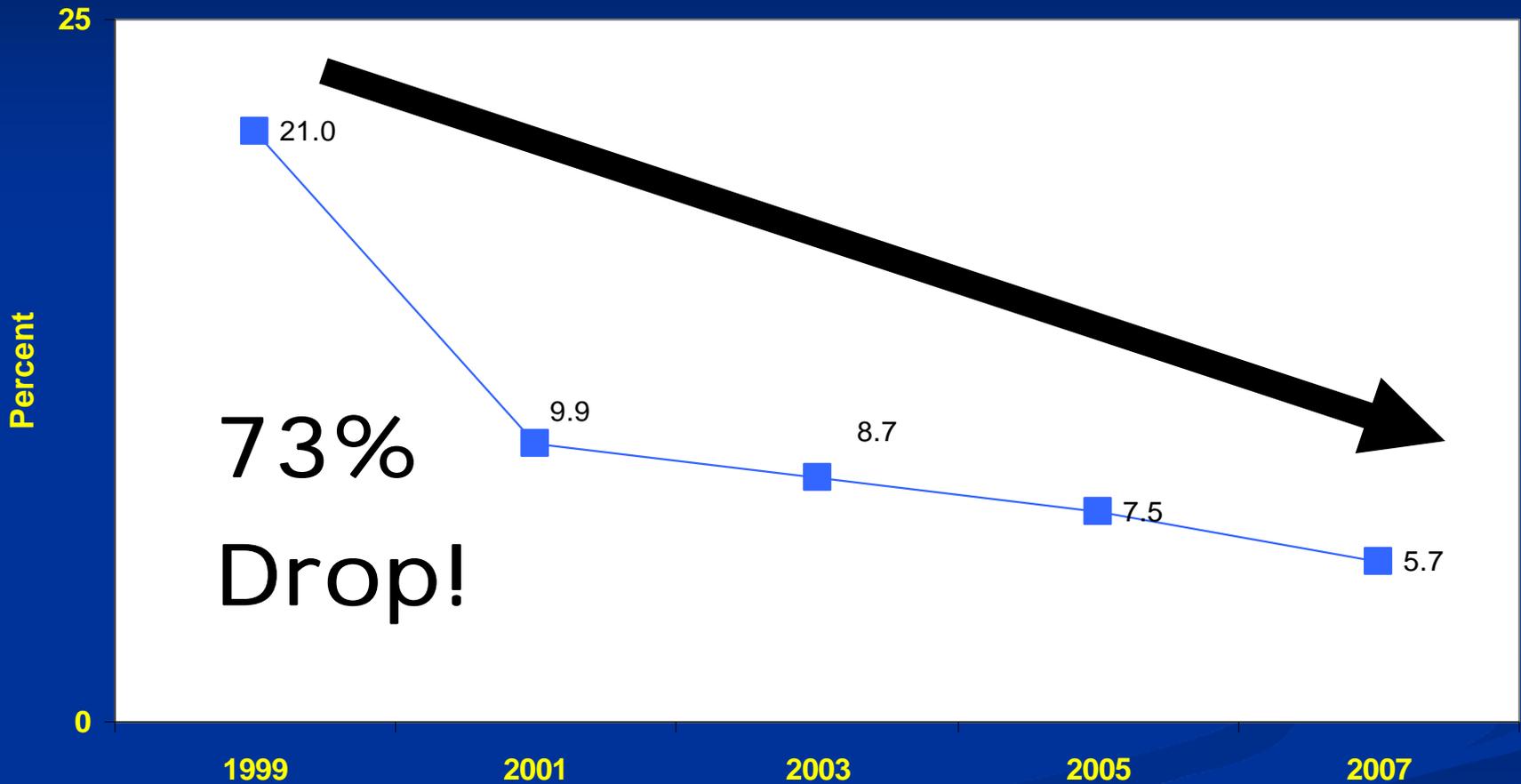


Smoking Rates - High School Students, Maine & US, 1993-2007

Source: Maine Department of Education, Youth Risk Behavior Survey, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007

1999 data is unweighted.

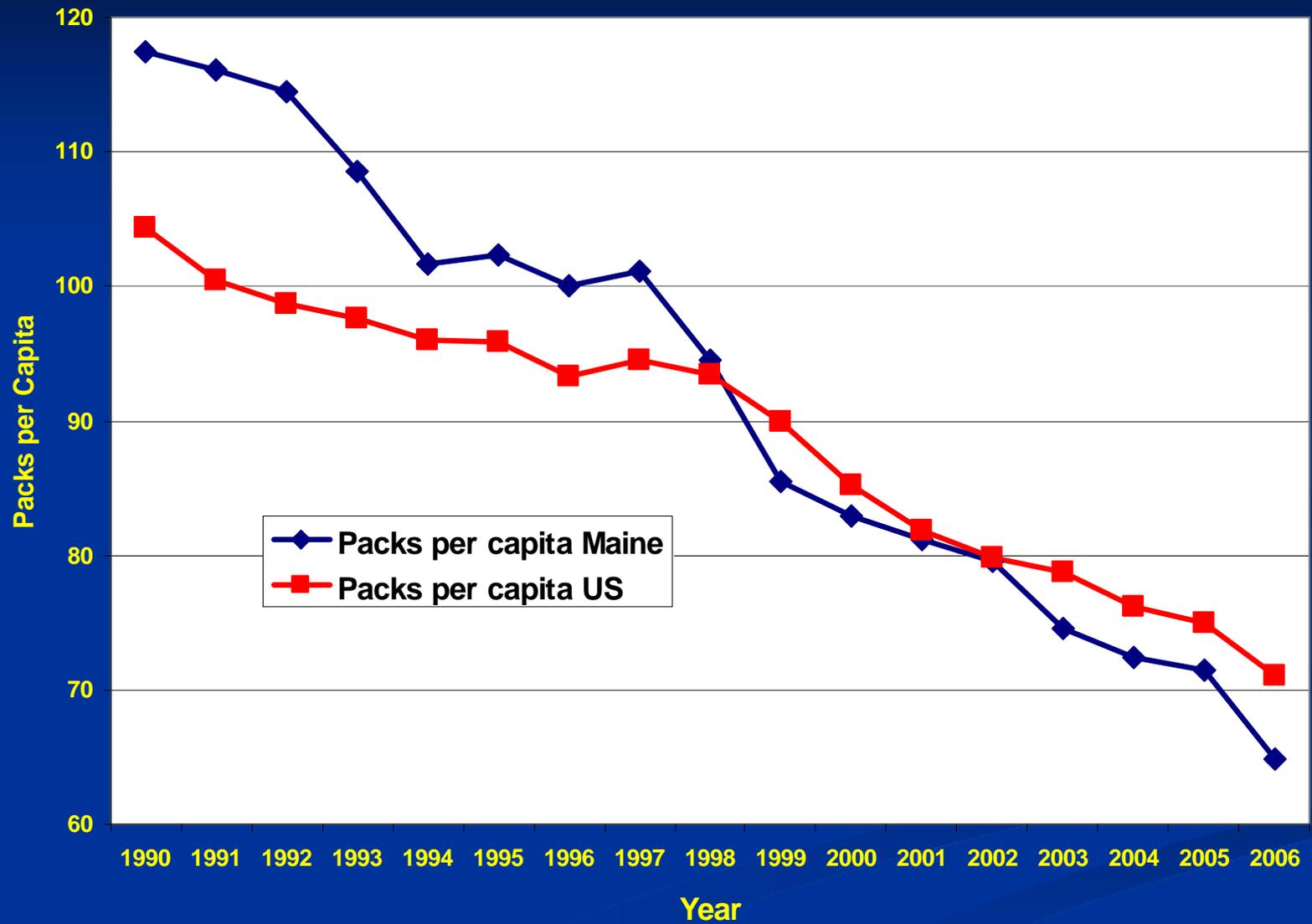
Smoking Rates - Middle School Students Maine 1997-2007



Smoking Rates, Middle School Students, Maine 1997-2007

Source: Maine Department of Education, Youth Risk Behavior Survey, 1997, 2001, 2003, 2005, 2007

Cigarette Consumption - Packs Sold Per Capita Maine and US 1990-2006



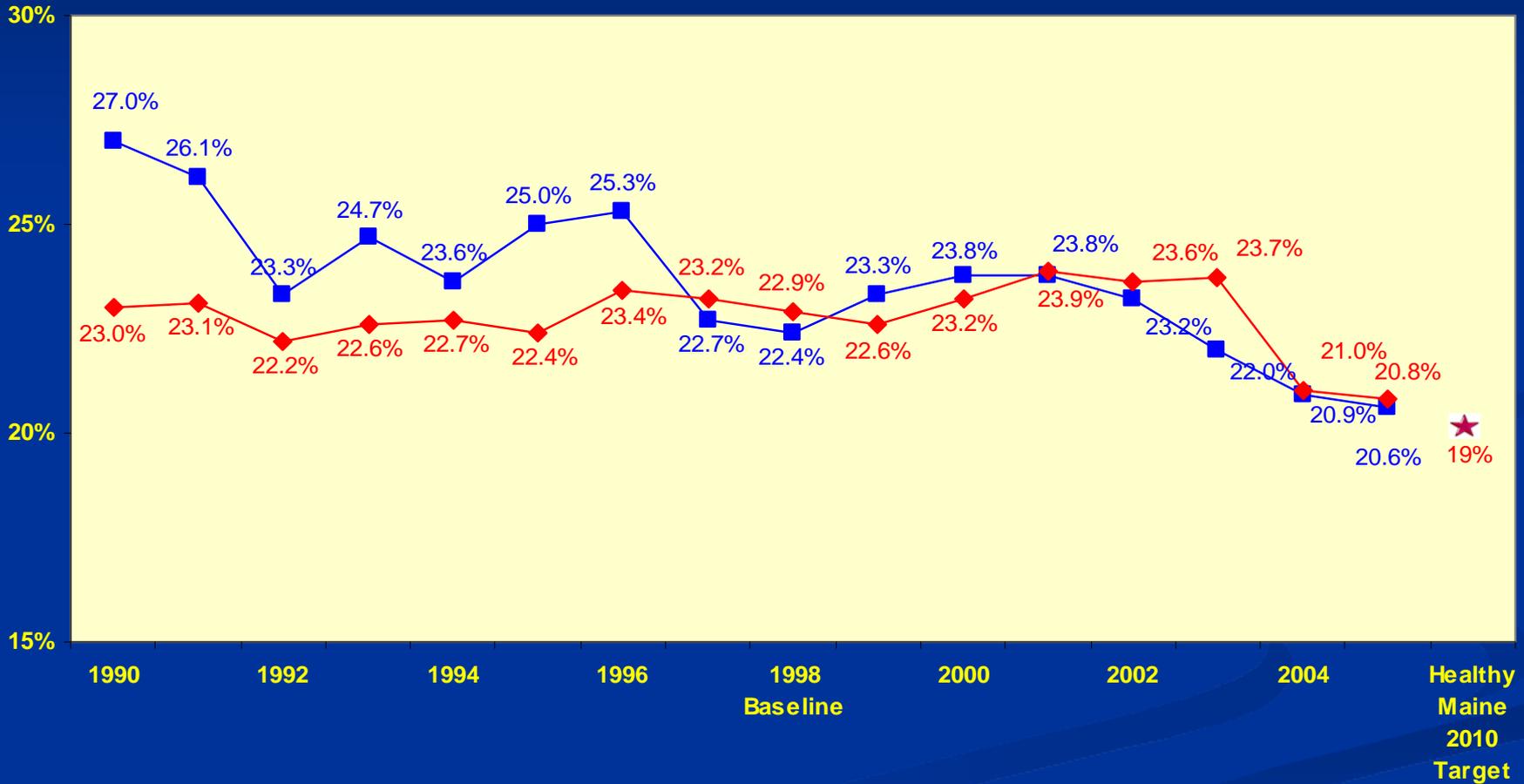
Source: The Burden on Tobacco, Orzechowski and Walker

Maine Consumption of Cigarettes, Packs per Capita Sold



Cigarette Smoking Adults Maine And US 1990-2005

■ Maine Adults ◆ US Adults



Obesity

Obesity is a complex, chronic disease that is a leading cause of death and disability in the United States.

It is characterized by an excessive accumulation of body fat, which can lead to a variety of health problems, including:

• Type 2 diabetes

• Heart disease

• Stroke

• Sleep apnea

• Osteoarthritis

• Depression

• Anxiety

• Infertility

• Pregnancy complications

• Liver disease

• Kidney disease

• Gallbladder disease

• Hypertension

• High cholesterol

• Atherosclerosis

• Coronary artery disease

• Heart failure

• Angina

• Myocardial infarction

• Sudden cardiac death

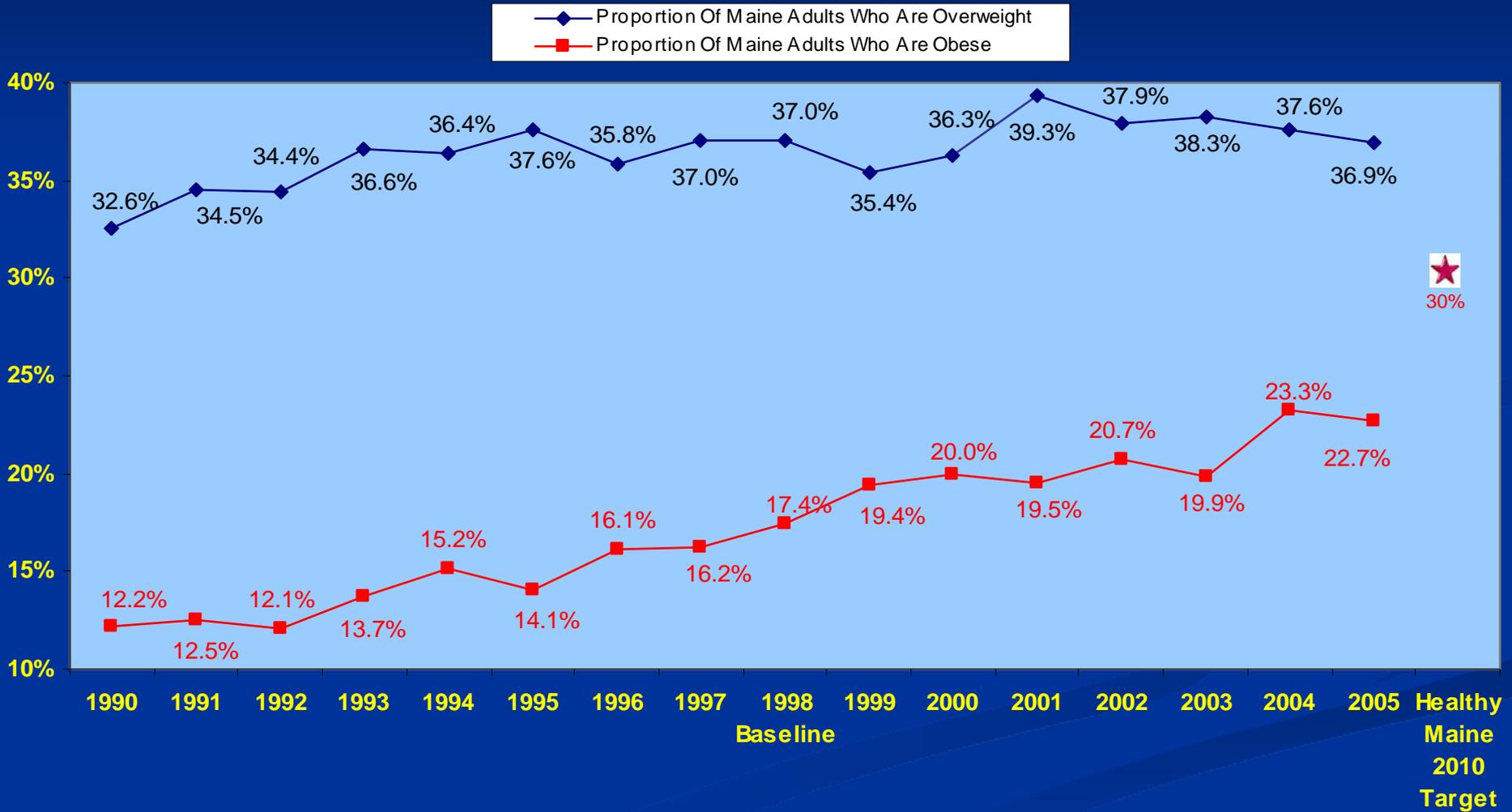
• Atrial fibrillation

• Ventricular hypertrophy

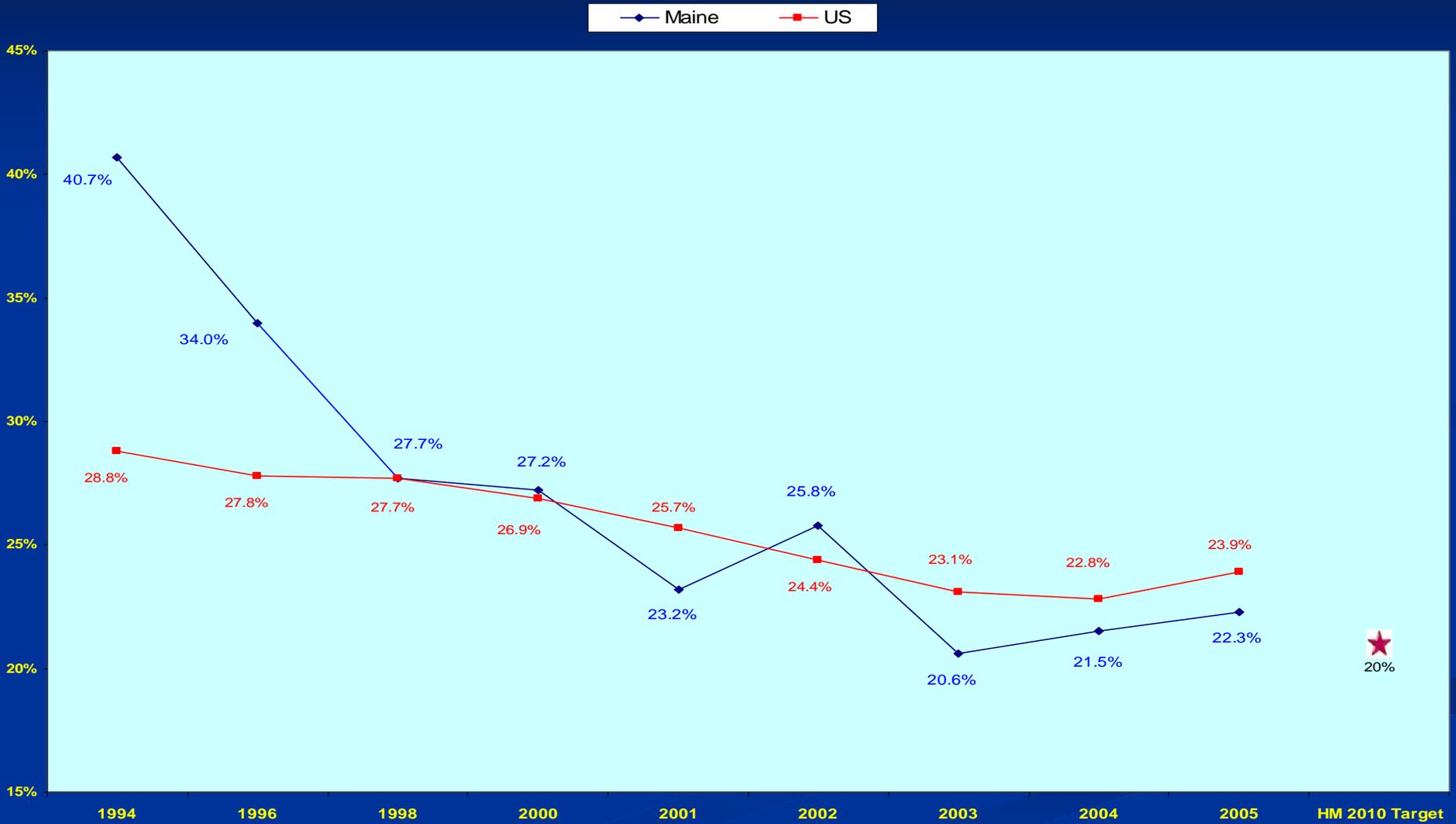
• Heart failure with preserved ejection fraction

• Heart failure with reduced ejection fraction

Proportion Of Maine Adults Age 18 And Older Who Are Obese Or Overweight 1990-2005

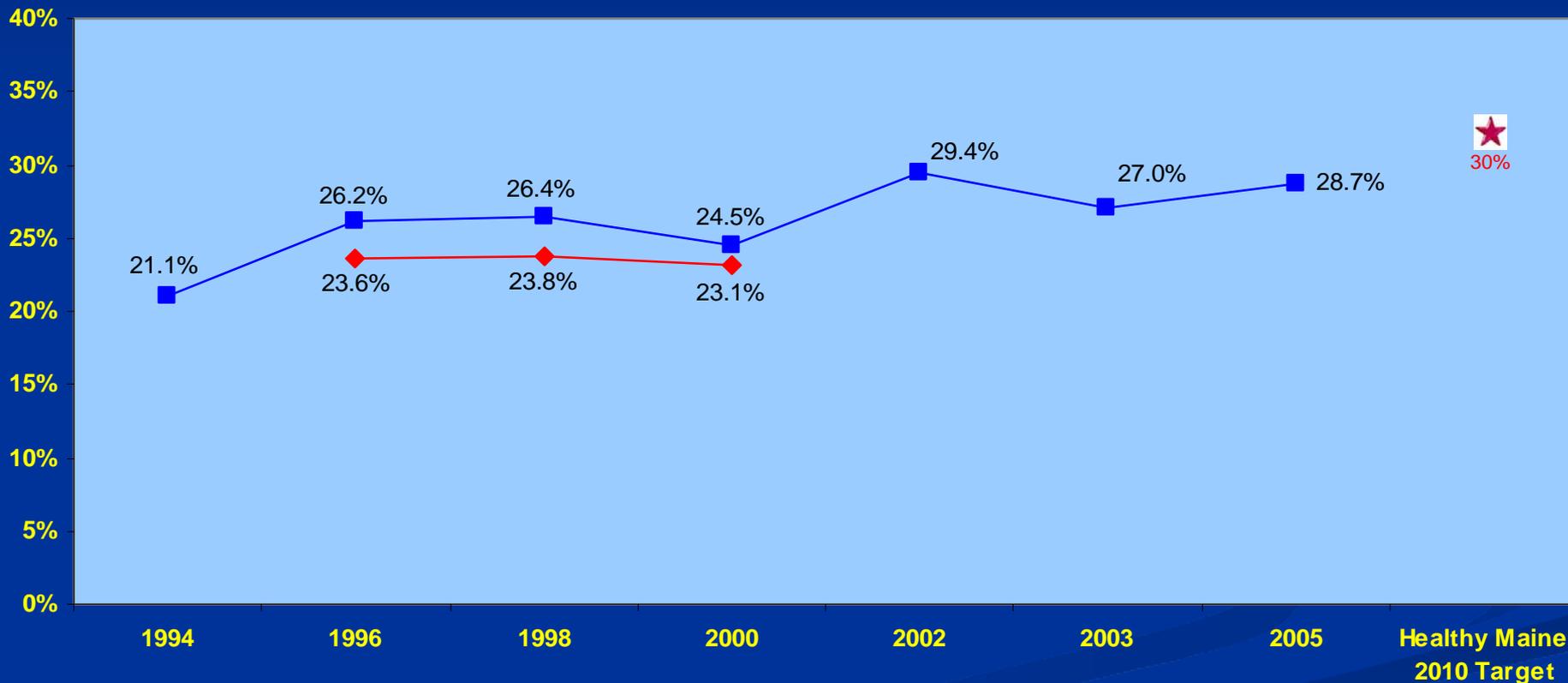


Proportion of Maine and US Adults Who Engage in No Leisure Time Physical Activity 1994-2005



Proportion Of Maine And US Adults Consuming At Least 5 Or More Servings Of Fruits And Vegetables A Day 1994-2005

—■— Proportion Of Maine And US Adults Consuming At Least 5 Or More Servings Of Fruits And Vegetables A Day
—◆— Proportion Of US And US Adults Consuming At Least 5 Or More Servings Of Fruits And Vegetables A Day



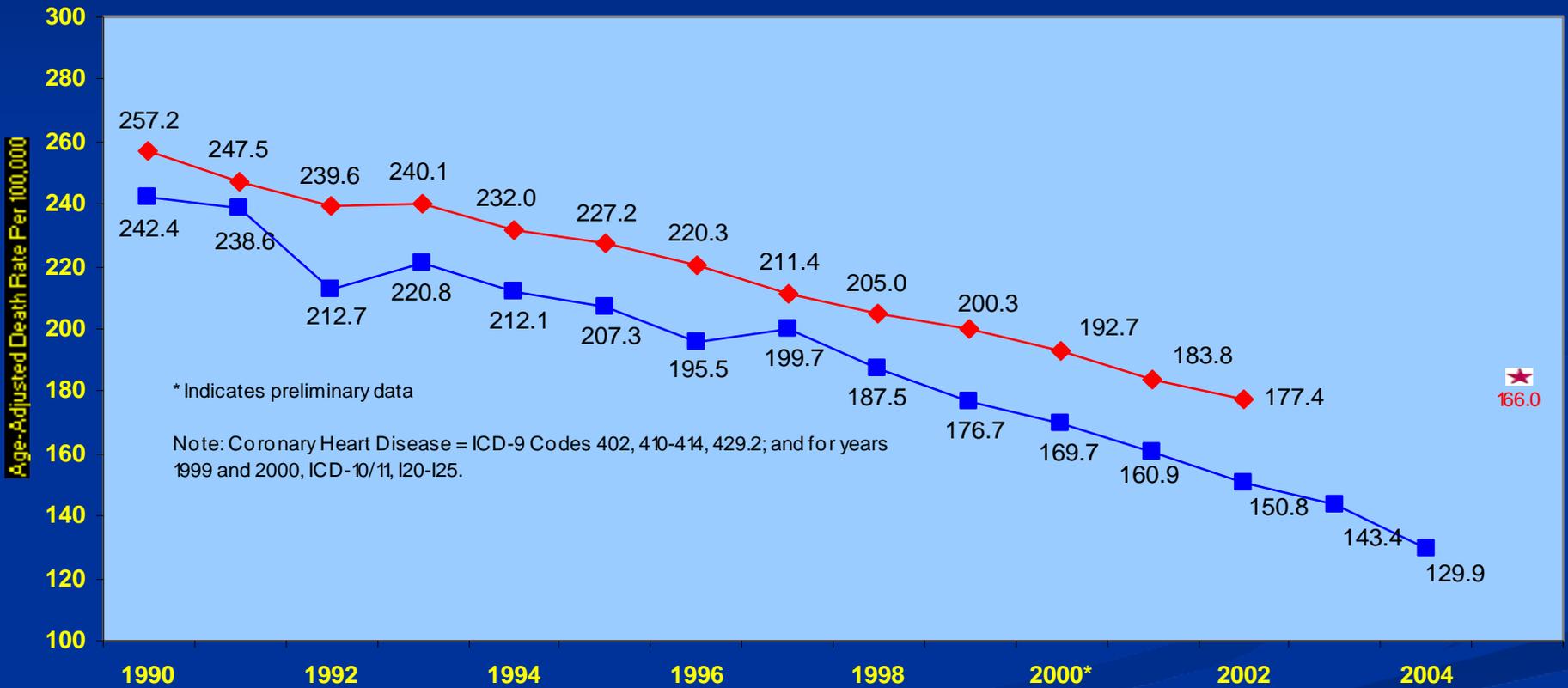
Source: Maine Department of Human Services, Bureau of Health, Maine Behavioral Risk Factor Surveillance System. 1994, 1996, 1998 and 2000. National data: Behavioral Risk Factor Surveillance System 1990-2000, Centers for Disease Control and Prevention.

Cardiovascular Disease



Coronary Heart Disease Deaths Age-Adjusted Rate Per 100,000 Population Maine And US Selected Years 1990-2004

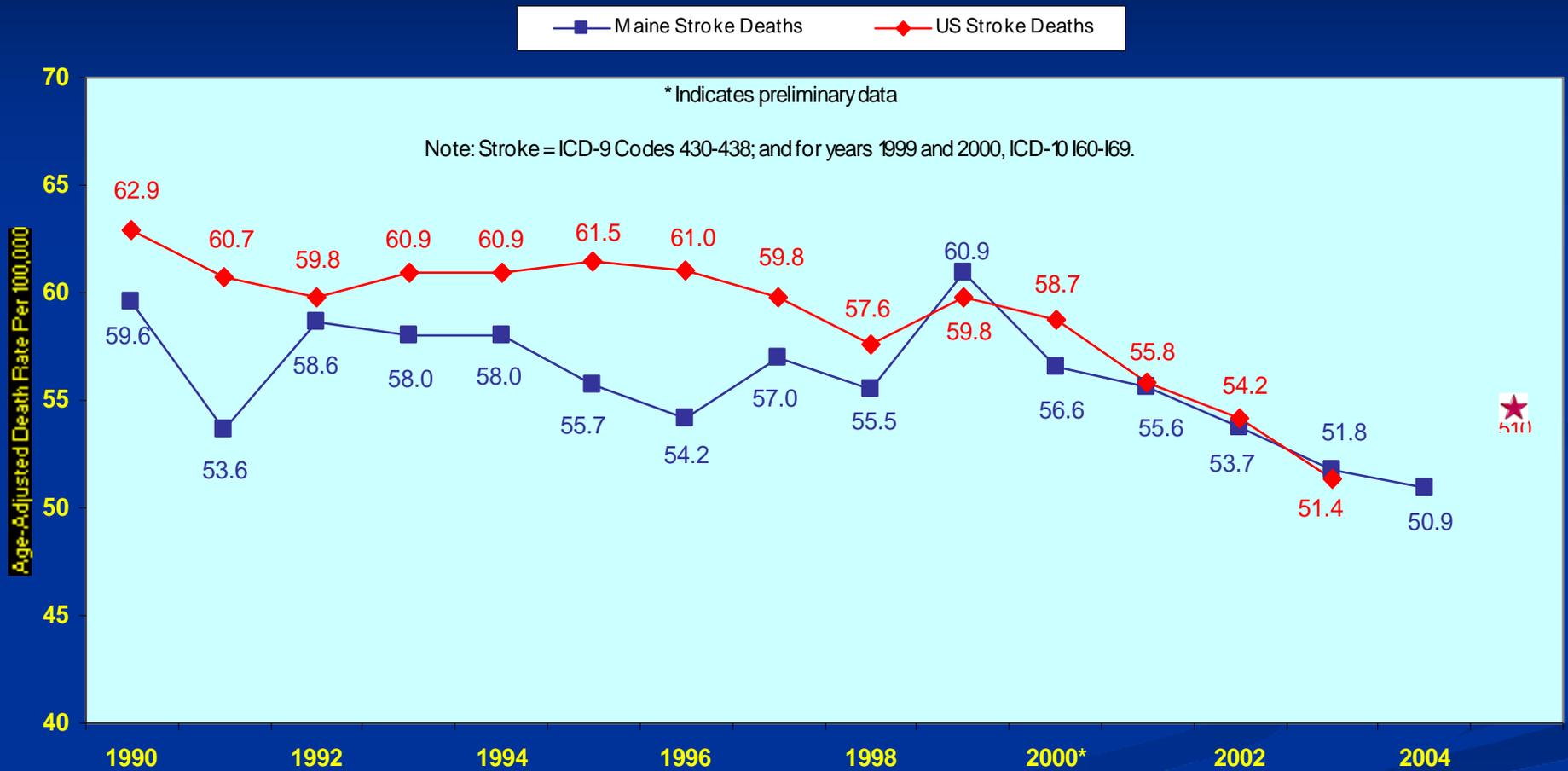
■ Maine Coronary Heart Disease Deaths ◆ US Coronary Heart Disease Deaths



Stroke Deaths

Age-Adjusted Rate Per 100,000 Population

Maine And US 1990-2005



Cancer

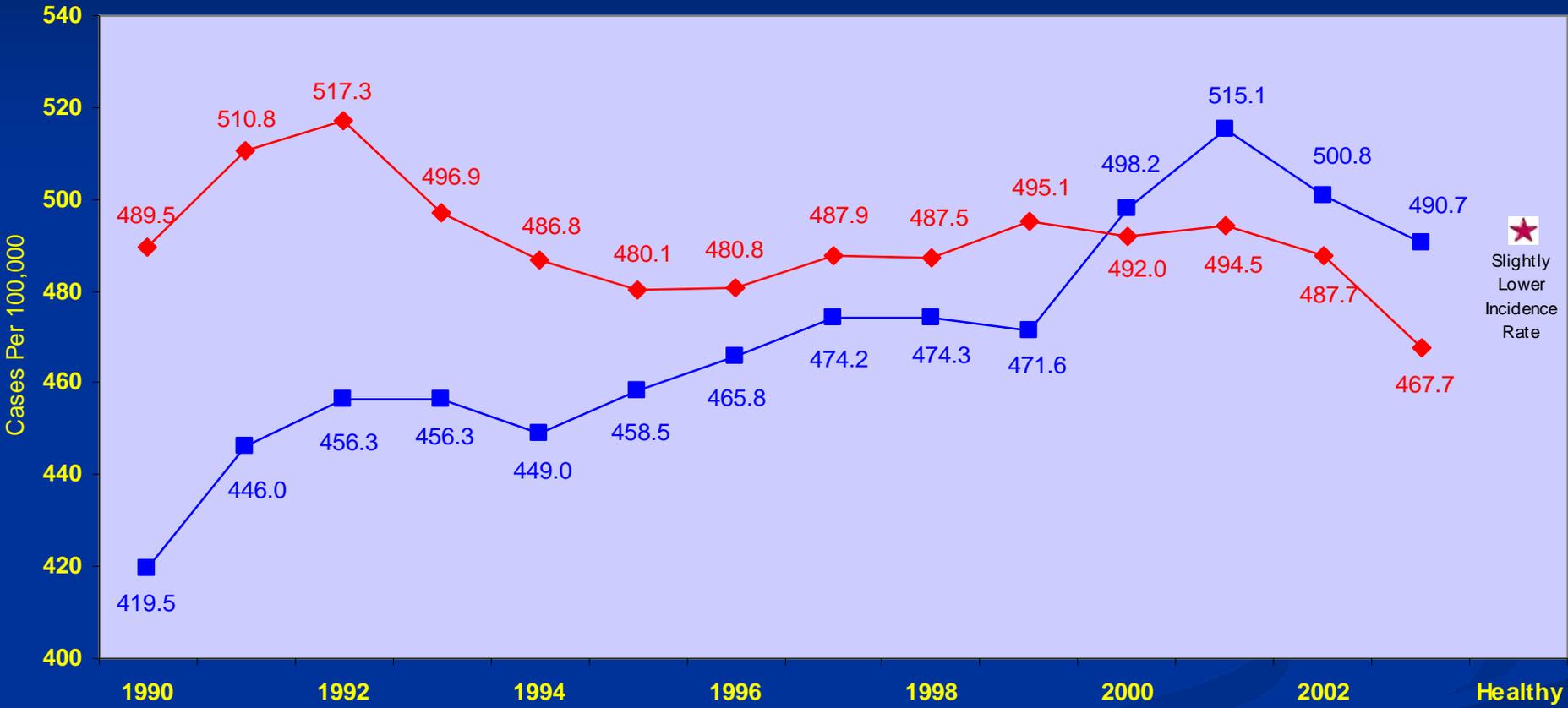


Overall Cancer Incidence Rates

Age-Adjusted Rate Per 100,000 Population

Maine And US 1990-2003

■ All Cancers, Total Maine ◆ All Cancers, Total US



★ Slightly Lower Incidence Rate

Healthy Maine 2010 Target

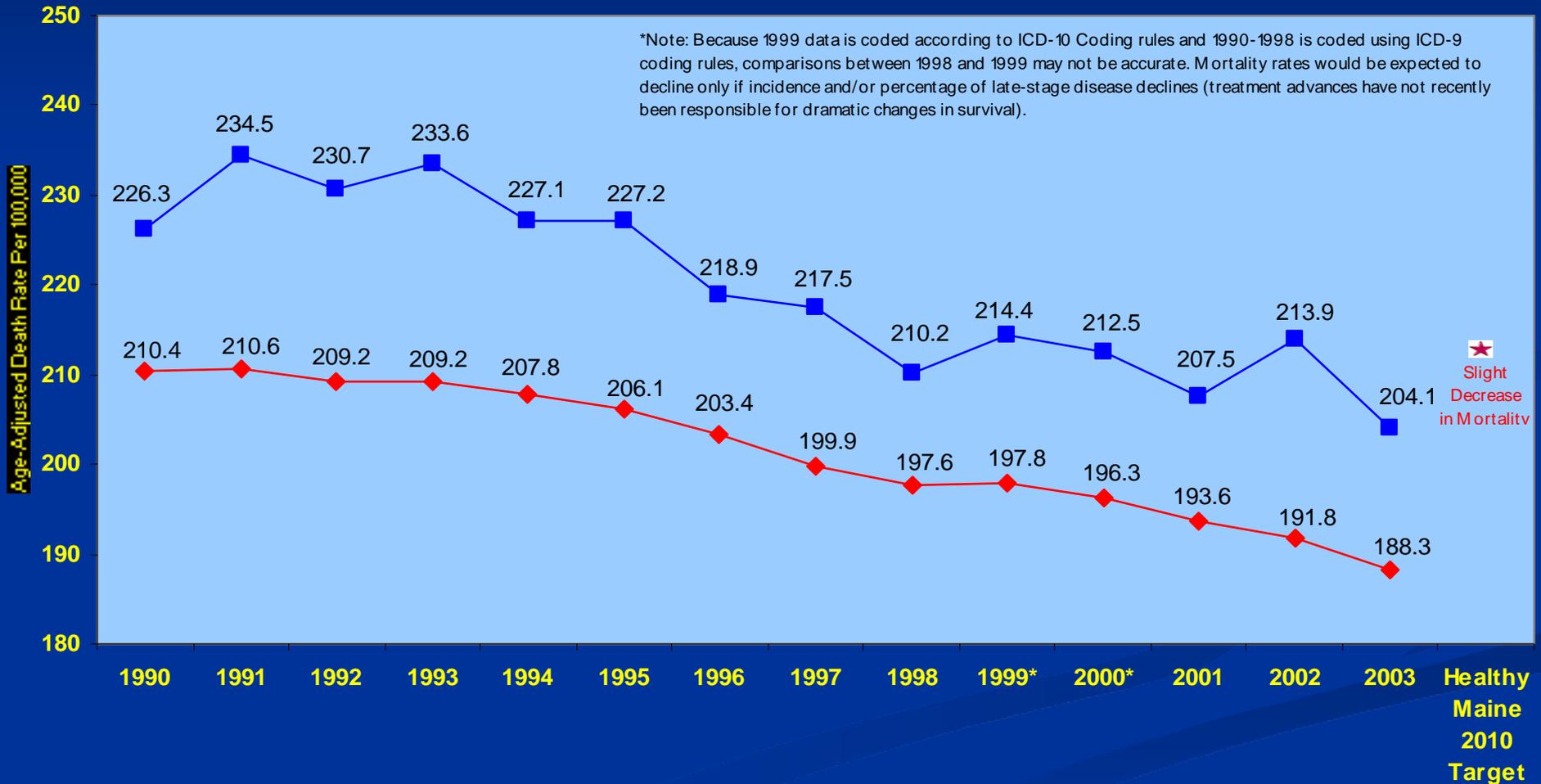
Source: Maine Department of Human Services, Bureau of Health, Maine Cancer Registry, SEER (Surveillance Epidemiology and End Results) - whites only, NCHS (National Center for Health Statistics) - for Maine and for US whites at <http://wonder.cdc.gov>; Age-adjusted rate per 100,000.

Overall Cancer Deaths

Age-Adjusted Rate Per 100,000 Population

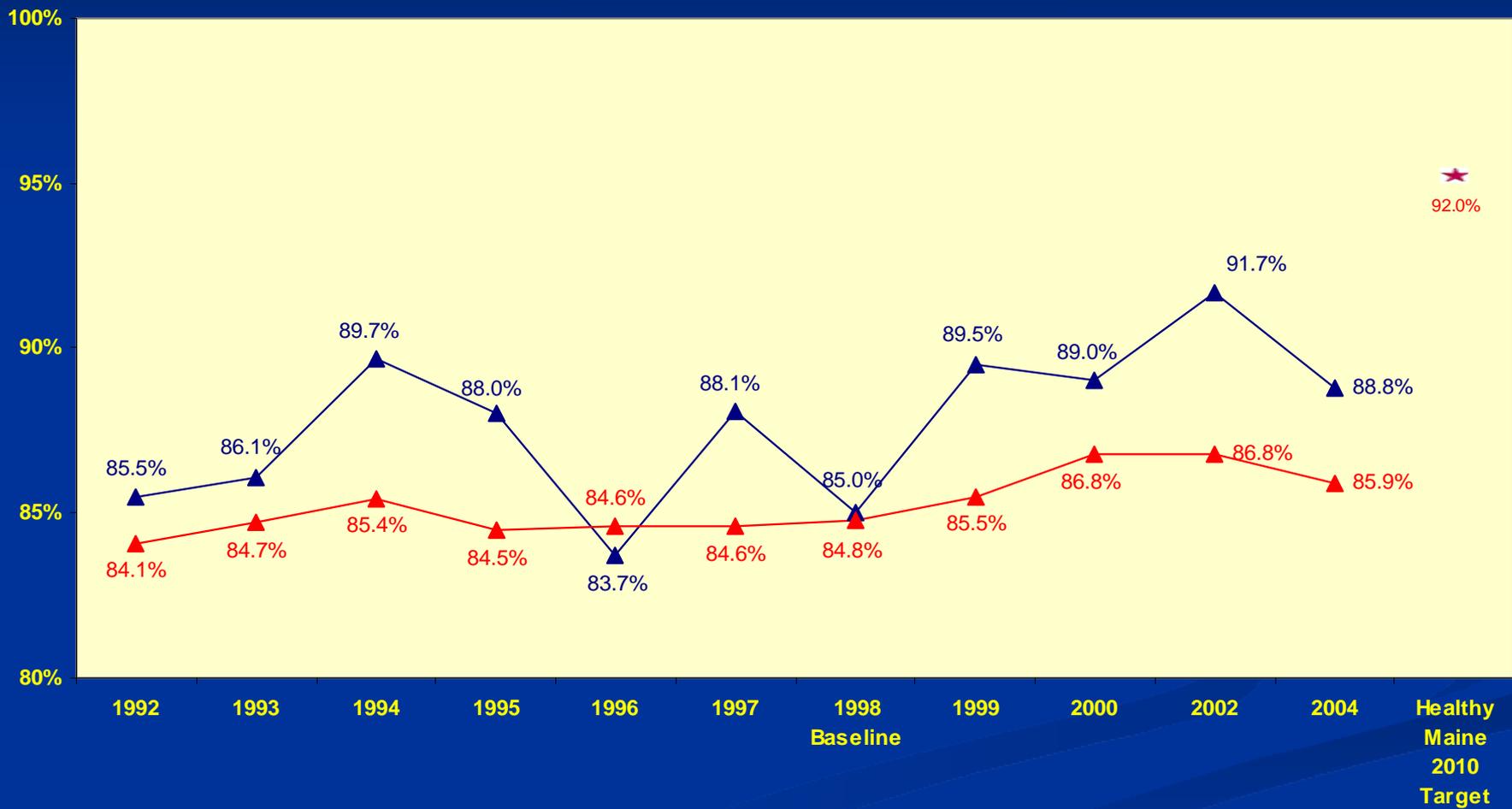
Maine And US 1990-2003

■ Maine Overall Cancer Deaths
 ◆ US Overall Cancer Deaths

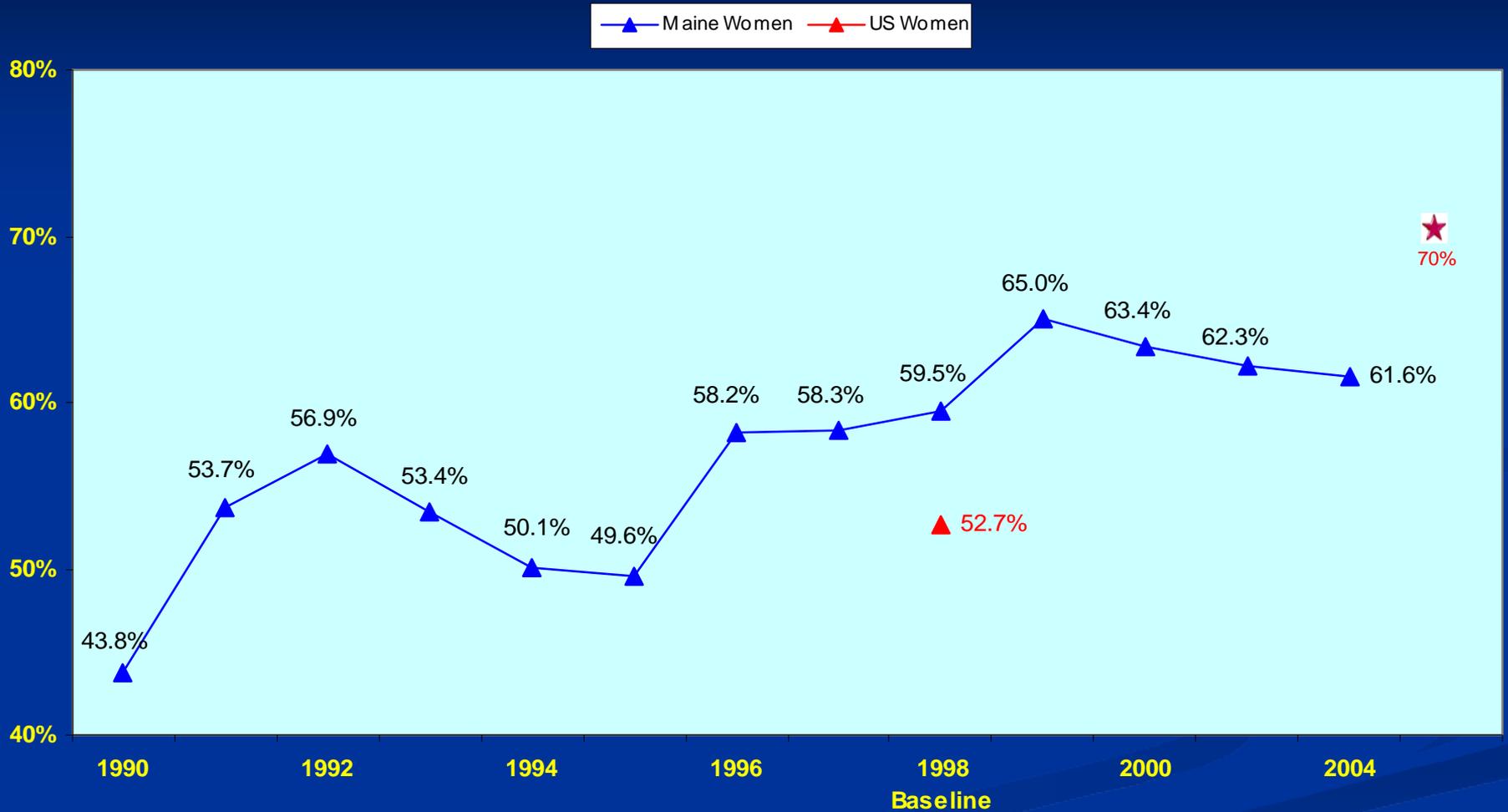


Proportion Of Women Aged 18 And Older Receiving A Pap Smear In The Past 3 Years Maine and US 1992-2004

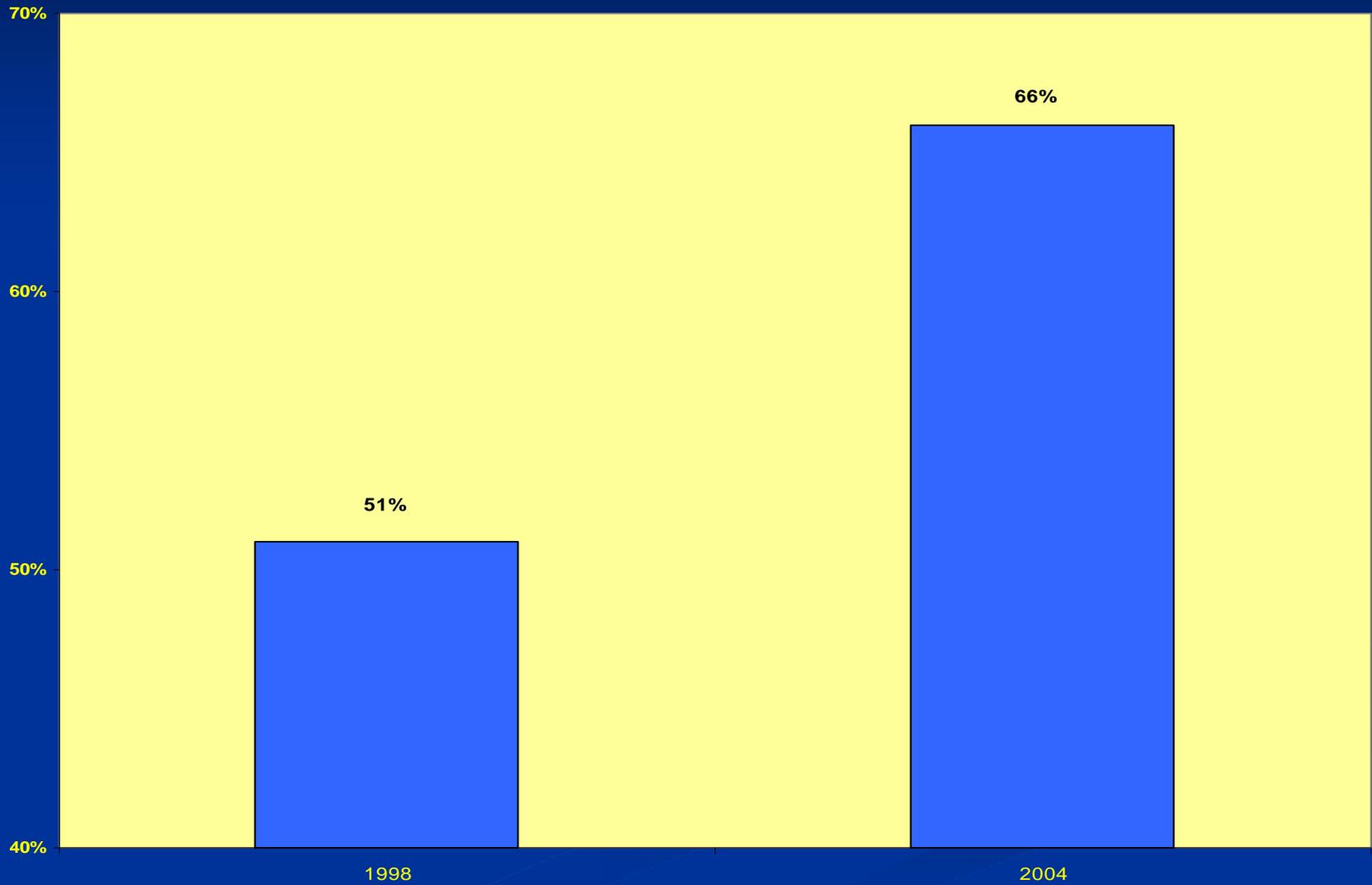
—▲— Maine Women —▲— US Women



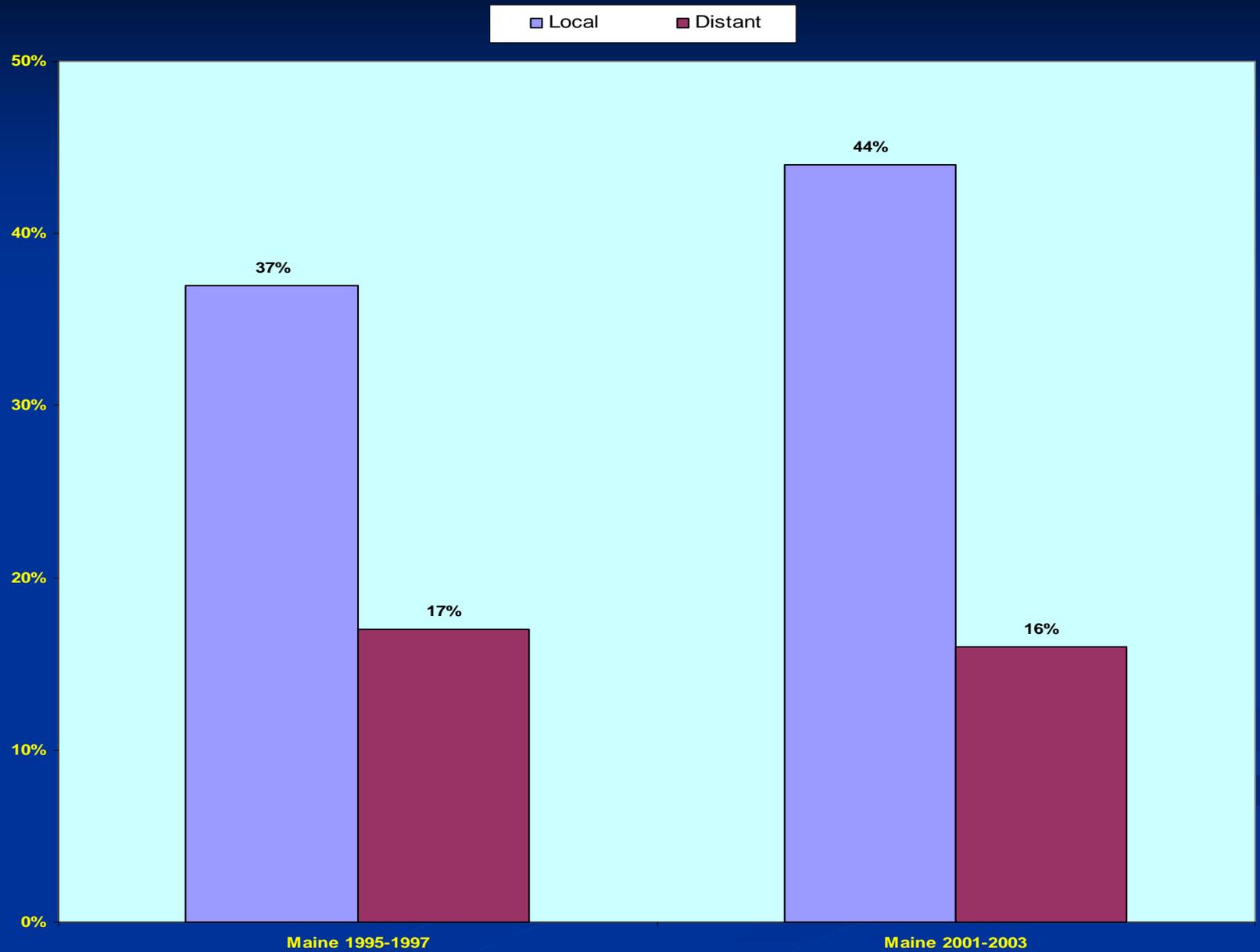
Mammogram And Clinical Breast Exam Women Aged 50+ Proportion Receiving Both Within The Preceding Year Maine 1990-2004 and US 1998



**Proportion of Adults Aged 50+ Who Report Having
Colon Cancer Screening (Fecal Blood Test Within 2 Years
or Sigmoidoscopy/Colonoscopy Within 5 Years)
Maine 1998 and 2004**



Percent of Cancer Diagnosed in Local vs. Distant Stages - Colorectal Cancer



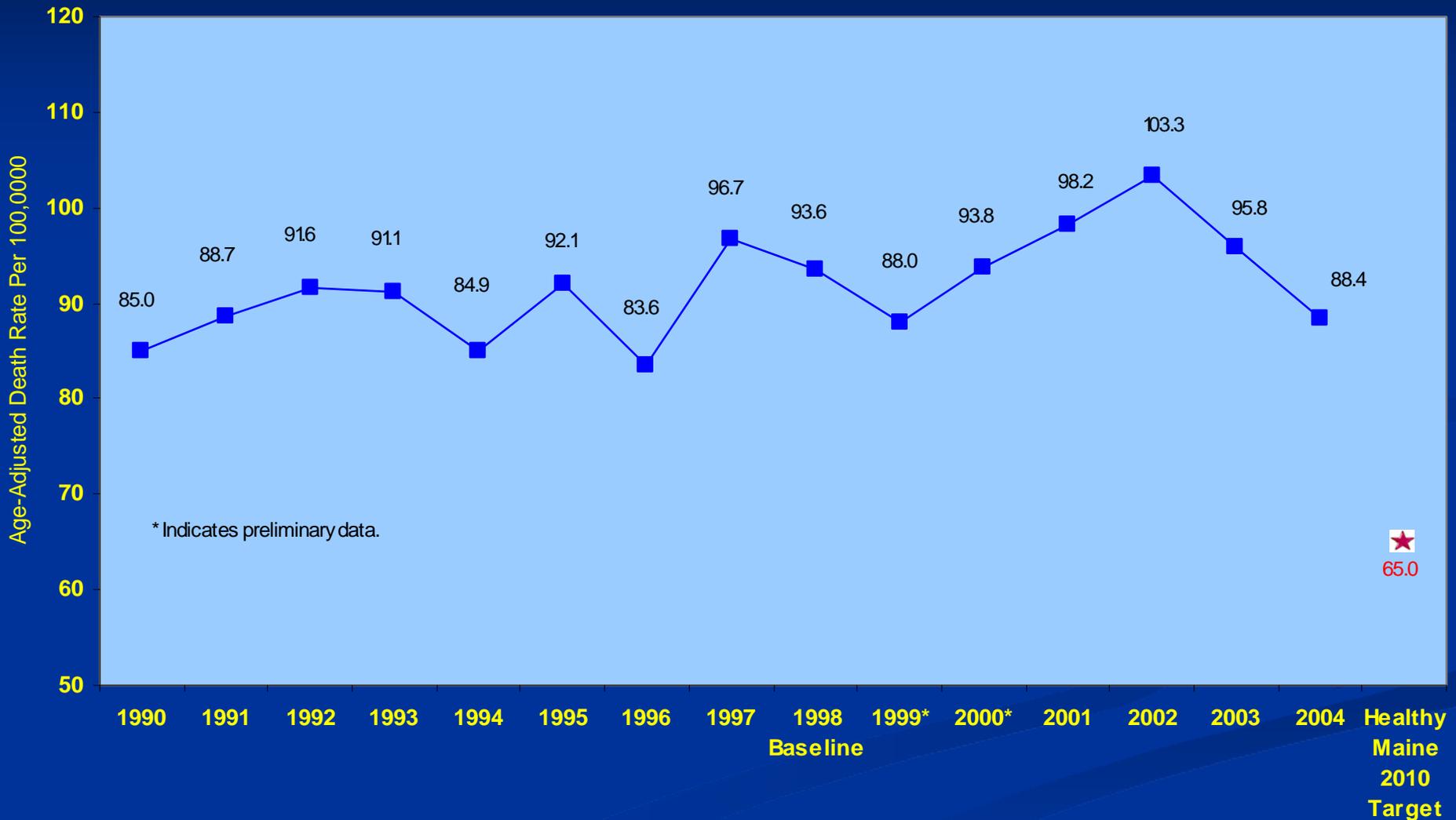
Diabetes



Diabetes Deaths

Age-Adjusted Rate Per 100,000 Population

Maine 1990-2004



Respiratory Disease

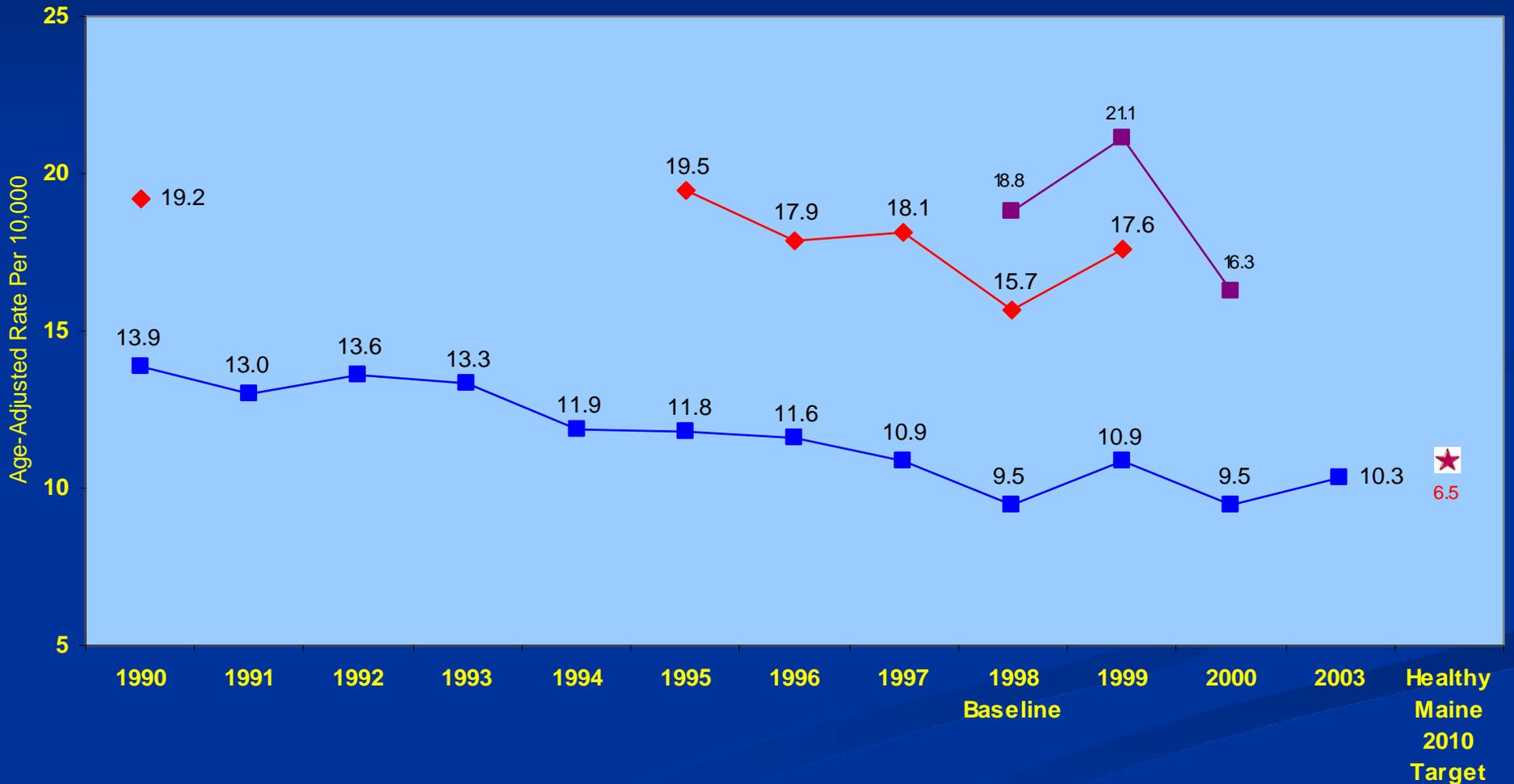


Asthma Hospitalization Rates

Age-Adjusted Rate Per 10,000 Population

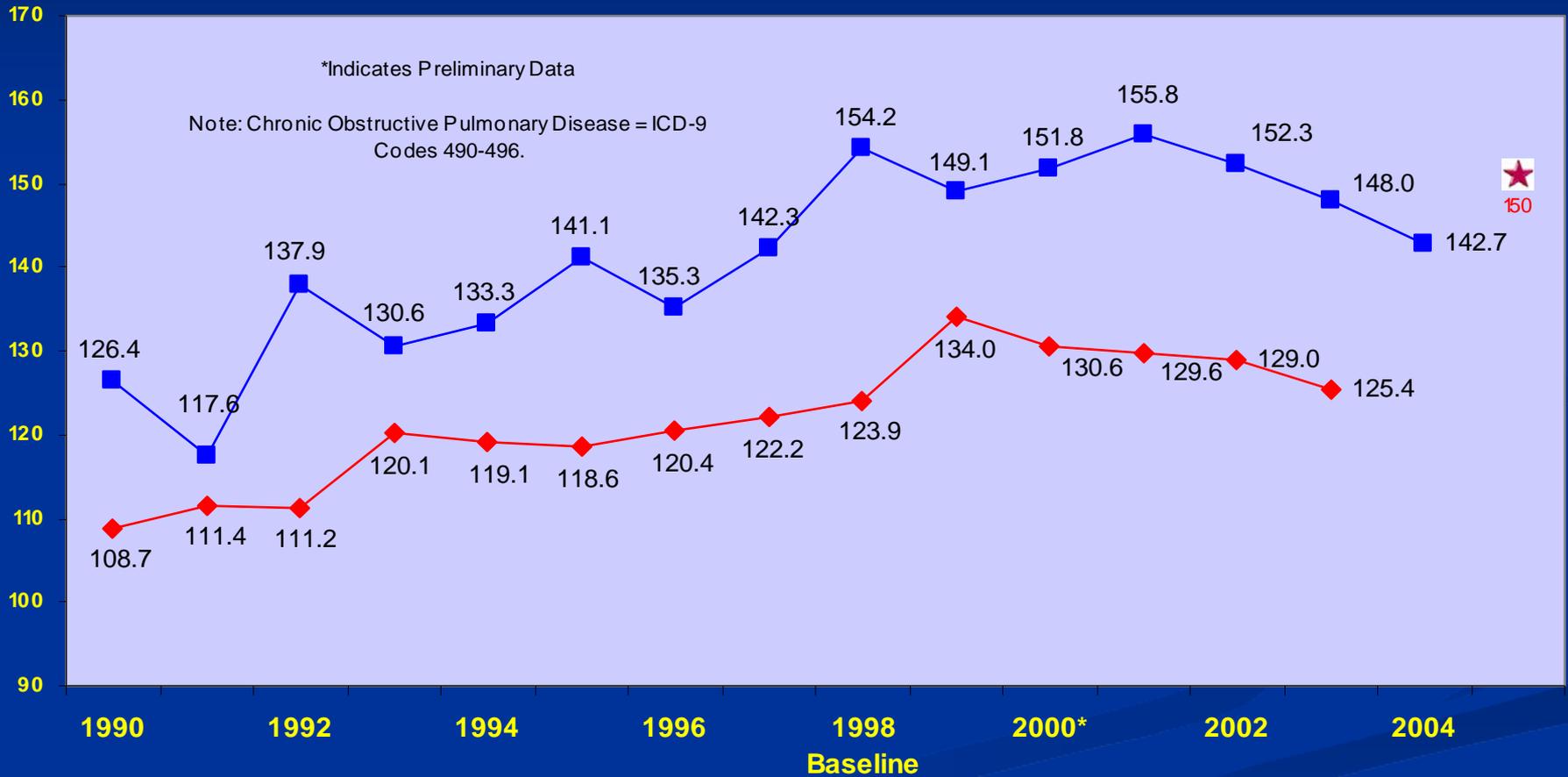
Maine and US Selected Years 1990-2003

—■— Maine —■— Maine Medicaid —◆— US



Chronic Obstructive Pulmonary Disease Deaths Age-Adjusted Rate Per 100,000 Population Maine and US 1990-2004

■ Maine Chronic Obstructive Pulmonary Disease (COPD) Deaths
◆ US Chronic Obstructive Pulmonary Disease (COPD) Deaths



www.mainepublichealth.gov

Questions & Answers