### The State of Asthma

American College of Chest Physicians
14th Annual ACCP Community Asthma and
COPD Coalitions Symposium
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# National Asthma Program NACP

### Components:

- Surveillance
- Partnerships
- Interventions



Quality of Life Mortality

Cost

Hospitalization

Causal Factors

Pharmacy

ED/Urgent Care

**Unscheduled Office Visits** 

Triggers

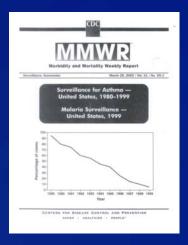
**Scheduled Office Visits** 

Asthma Prevalence/Severity

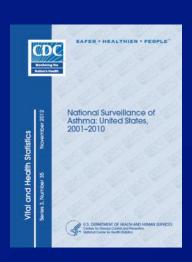
#### **National Asthma Surveillance Summaries**

- National Measures: current prevalence, attack prevalence, physician office visits, emergency department visits, hospital outpatient visits, hospital discharges, and mortality
- #4 New Format: NCHS Series 3 Report
- Publication: November 8, 2012

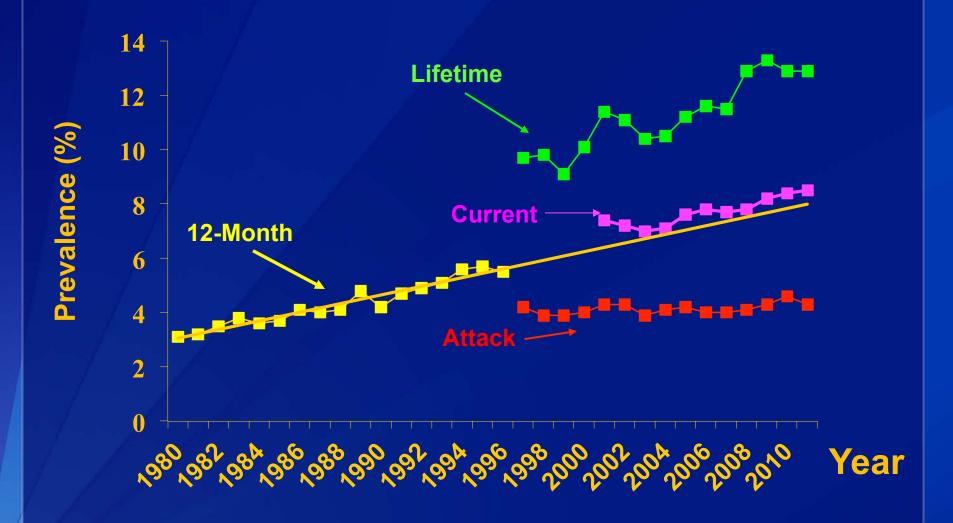






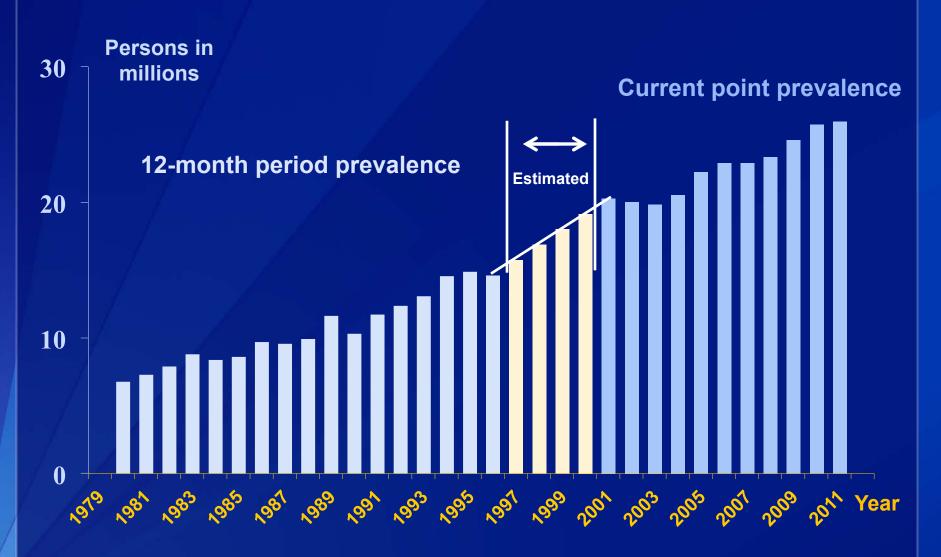


#### Asthma Prevalence: United States, 1980-2011



Source: National Health Interview Survey; National Center for Health Statistics

#### Asthma Prevalence: United States, 1980-2011



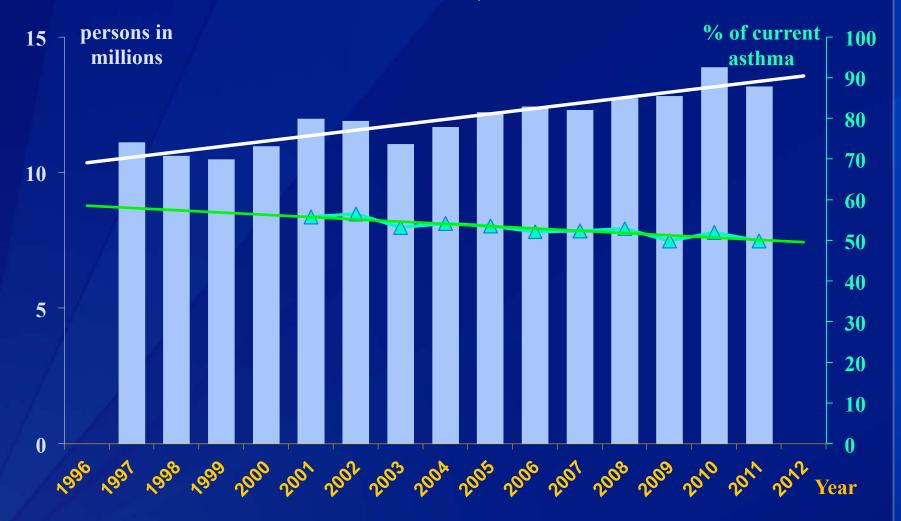
Source: National Health Interview Survey; National Center for Health Statistics

## Recent\* demographics

#### Prevalence is higher:

- in children than in adults
- in boys than in girls
- in adult women than in adult men
- in Puerto Ricans and in blacks than in whites
- in persons with family income below the federal poverty threshold than above
- in the Northeast and Midwest than in the South

## One or More Asthma Attacks: United States, 1997-2011



Source: National Health Interview Survey; National Center for Health Statistics

## Recent\* demographics

Among those with current asthma, attacks in the past year are reported more frequently:

- by children than by adults
- by women than men
- by those living in the South and West than those in the Northeast<sup>±</sup>
- by adults with income below 250% of the Federal poverty level than with higher income

<sup>±</sup> Opposite of prevalence

### Asthma Office Visits\* and Rates: United States, 1980 – 2009



Source: NAMCS; National Center for Health Statistics
\* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate

# Recent\* demographics: for risk-based rates

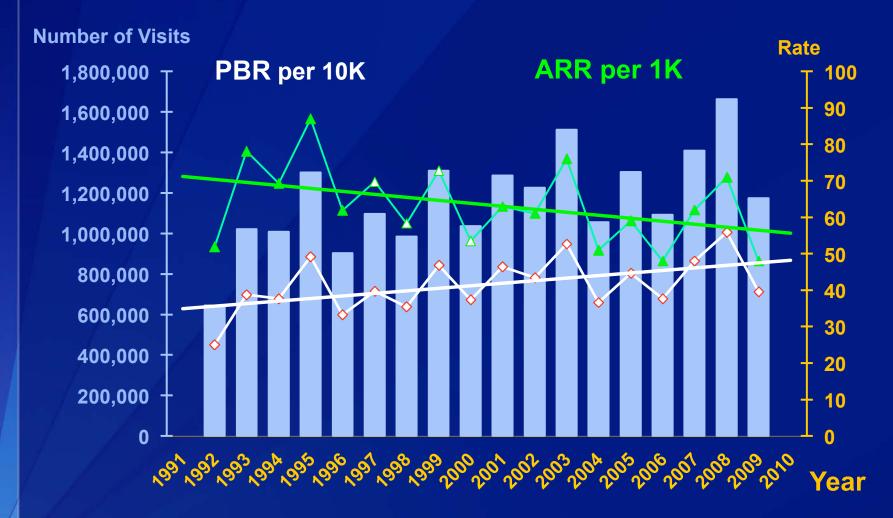
#### Asthma office visits are more frequent for:

- children than adults
- children aged 0-4 years than all other age groups
- persons living in the South than in the Midwest
- Hispanics than non-Hispanics

## There is no difference in asthma office visit frequency between:

- males and females
- whites and blacks

### Asthma Hospital Outpatient Visits\* and Rates: United States, 1992 – 2009



Source: NHAMCS; National Center for Health Statistics
\* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate

# Recent\* demographics: for risk-based rates

Asthma hospital outpatient visits are more frequent for:

- children than for adults
- children aged 0-4 years than all other age groups
- · blacks than for whites
- Hispanics than non-Hispanics

There is no difference in asthma outpatient visit frequency between:

- males and females
- geographic regions

### Asthma ED Visits\* and Rates: United States, 1992 – 2009



Source: NHAMCS; National Center for Health Statistics
\* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate

# Recent\* demographics: for risk-based rates

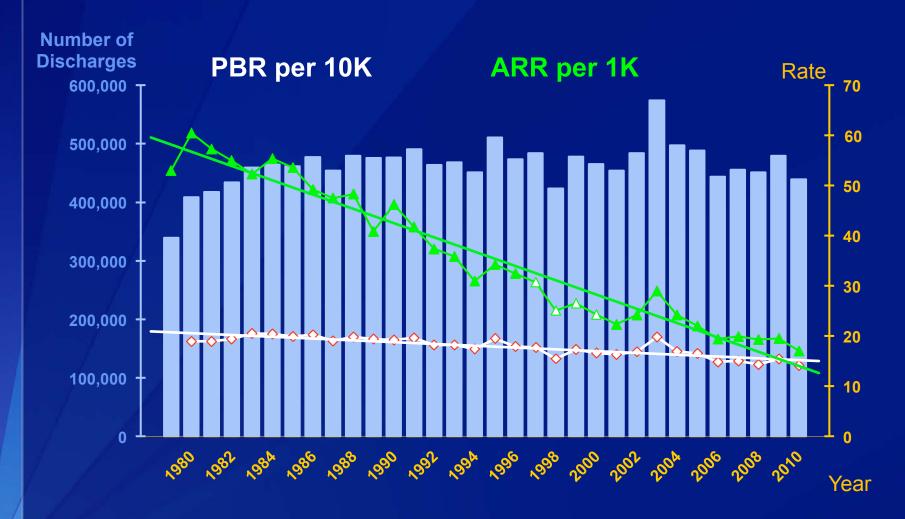
Asthma emergency department visits are more frequent for:

- children than for adults
- children aged 0-4 years than all other age groups
- blacks than whites
- Hispanics than non-Hispanics
- persons in the Northeast and in the South than in the West

There is no difference in asthma emergency department visit frequency between:

males and females

### Asthma Hospital Discharges\* and Rates: United States: 1979 - 2010



Source: NHDS; National Center for Health Statistics
\* First-listed diagnosis; PBR population-based rate; ARR at-risk-rate

# Recent demographics: for risk-based rates

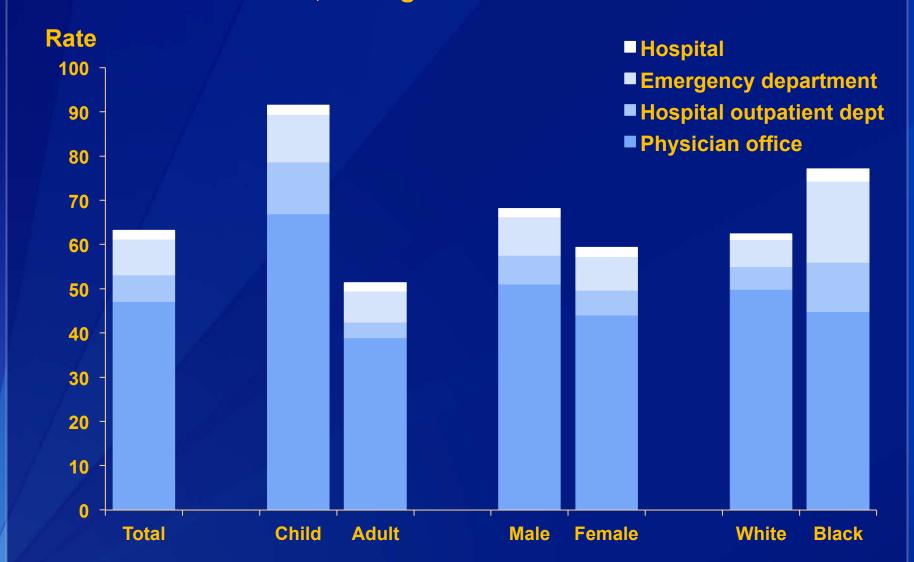
## Asthma hospital discharges are more frequent for:

- children aged 0-4 years and adults age 65+ than other age groups
- blacks than whites
- persons in the Northeast than in the Midwest

## There is no difference in asthma hospital discharge frequency between:

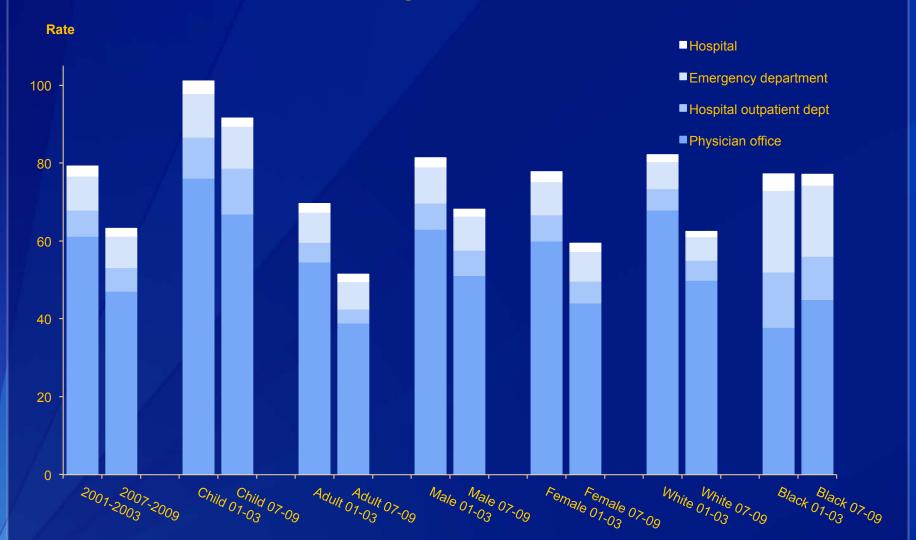
- children and adults
- · males and females

Health care encounter rates per 100 persons with asthma by age, sex, and race: United States, average annual 2007-2009



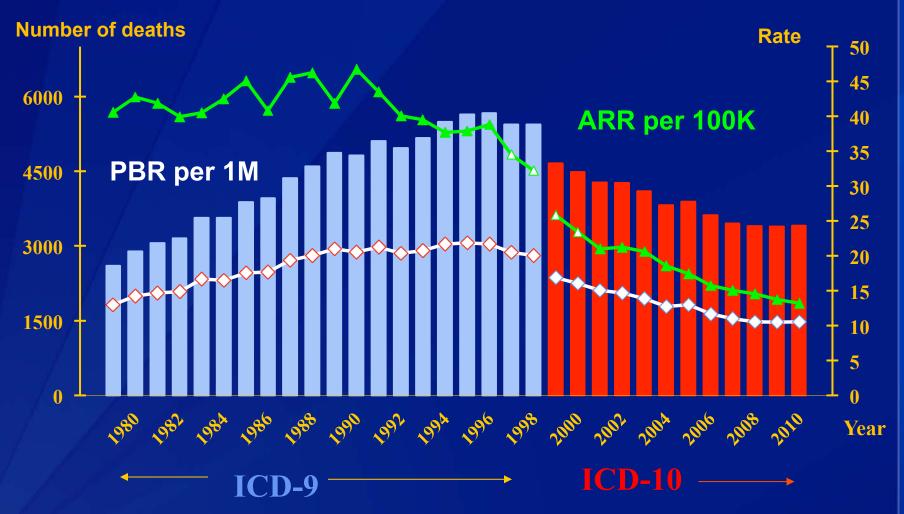
Source: National Surveillance of Asthma: United States, 2001-2010

## Health care encounter rates per 100 persons with asthma by age, sex, and race: United States, average annual 2001-2003 & 2007-2009



Source: National Surveillance of Asthma: United States, 2001-2010; National Surveillance for Asthma: United States, 1980-2004

## Asthma Deaths\* and Rates: United States, 1979-2010



Source; NVSS; National Center for Health Statistics
\*Underlying Cause of Death: PBR population-based rate; ARR at-risk-rate

# Recent\* demographics: for risk-based rates

#### **Asthma deaths are more frequent for:**

- adults than for children
- adults age 65+ than all other age groups
- females age 65+ than males age 65+
- blacks than whites
- non-Hispanics than Hispanics
- persons in the West and in the South than in the Midwest

## There is no difference in the frequency of asthma deaths between:

males and females under age 65

## **Summary**

Prevalence: number and prevalence percent increasing over time

Persons reporting attacks:

Number increasing over time Proportion among those with current asthma decreasing over time

#### **Health care encounters:**

Office visits and hospital outpatient department visits:

Number and Pop-based rate increasing over time
Risk-based rates decreasing over time
Emergency department visits and hospitalizations:

Number increasing very slightly over time
Pop-based rate level or decreasing very slightly
Risk-based rate decreasing markedly

Mortality: number, pop-based and risk-based rates <u>decreasing</u> since 1998

## Conclusion

Decreases in all the risk-based rates provide indirect evidence of improvement in asthma management during a long period of increasing asthma prevalence.

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## For more data: http://www.cdc.gov/asthma/asthmadata.htm

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

