

The Texas Behavioral Risk Factor Surveillance System

Turning Information
Into Health



Outline

- Texas Department of State Health Services (DSHS) Center for Health Statistics (CHS)
- 2005 Texas Behavioral Risk Factor Surveillance System (BRFSS)
- Adult Asthma History

Center for Health Statistics

- Established to provide a convenient access point for health-related data for Texas.
- Objective - to be a source of information for assessment of community health and for public health planning.
- Data used to support research, grant applications and policy development and to provide rapid needs response to health emergencies.
- Technical assistance in the appropriate use of the data we provide, and in the development of innovative techniques for data dissemination.
- Support the development and application of consistent standards for privacy and statistical validity
- CHS Website <http://www.dshs.state.tx.us/chs>

Center for Health Statistics

Ramdas Menon, Director

Health Information Resources

Collects, analyzes and disseminates health information for public health decision making in Texas.

Community Assessment

Manages and administers BRFSS and related surveys. Provides expertise in health data surveys, community assessments, and outcomes research.

Data Management and Dissemination

Develops data management methods and tools. Coordinates and maintains CHS's web resources. Provides comprehensive and prompt responses to data requests.

Health Research and Methods

Provides GIS, forecasting and demographic support. Provides technical expertise on research design and analytical methods.

Health Provider Resources

Collects, analyzes and disseminates health information for decision-making regarding health provider resources in Texas.

Hospital Data

Collects and reports hospital facility data, hospital charity care and community benefits data.

Health Professions Resource Center

Collects, analyzes and publishes employment, demographic, supply and educational trends for health professionals.

Nurse Workforce Data

Identifies and researches the types and sources of workforce data needed to address the current and future nurse workforce shortages in Texas.

Texas Health Care Information Council

Collects and reports on inpatient discharge data from hospitals and data from HMOs to enable individuals to make informed health care decisions.

Statewide Health Coordinating Council

Coordinates the Statewide Health Coordinating Council (SHCC).

Library and Information Services

Provides library and information services through the Audiovisual Library, the Medical and Research Library, the Funding Information Center and Records Management.

Institutional Review Board

Coordinates the Institutional Review Board at DSHS.

CHS Data Sources

- Vital Registries – Births, Deaths Marriage, Divorce Fetal Deaths, Abortions.
- Census - Population Data, Socioeconomic
- Hospital Discharge – Inpatient records
- Surveys

2005 Texas BRFSS

- CDC Core
- Optional Modules
- State-Added Questions

How 2005 is slightly different...

- Flu Supplemental
- Cardiovascular Health
- Heart Attack and Stroke
- Hurricane Impact Assessment Module

Adult Asthma History

- Optional Module
- Asked 2001-2005
- Asthma Control
- Few question changes

NAEPP Severity Scale

- NAEPP = National Asthma Education and Prevention Program
- Administered and coordinated by the National Heart, Lung, and Blood Institute (NHLBI).
- Asthma symptom severity classifications are based on criteria described by the NHLBI.

Asthma Symptom Severity Classifications

Classification	Symptoms	Lung Function
Step 1: Mild-Intermittent	Daytime ≤ 2 times per week Nighttime ≤ 2 times per month Brief exacerbations Asymptomatic between exacerbations Intensity of exacerbations varies	PEF Variability $< 20\%$ $FEV_1 \geq 80\%$ $PEF \geq 80\%$
Step 2: Mild-Persistent	Daytime > 2 times per week but < 1 time per day Nighttime > 2 times per month Exacerbations may affect activity	PEF Variability range of 20% to 30% $FEV_1 \geq 80\%$ $PEF \geq 80\%$
Step 3: Moderate-Persistent	Daytime symptoms daily Nighttime symptoms > 1 time per week Exacerbations affect activity Exacerbations ≥ 2 times per week Exacerbations last days Daily use of inhaled short-acting β_2 -agonists	PEF Variability $> 30\%$ $FEV_1 > 60\%$ but $< 80\%$ $PEF > 60\%$ but $< 80\%$
Step 4: Severe-Persistent	Daytime symptoms continual Nighttime symptoms frequent Symptoms limit physical activity Exacerbations frequent	PEF variability $> 30\%$ $FEV_1 \leq 60\%$ $PEF \leq 60\%$

PEF = peak expiratory flow, FEV_1 = forced expiratory volume in 1 second

Adapted from National Asthma Education and Prevention Program. *NIH*. 1997;97-4051:iii-86.

Kelly HW, et al. *Pharmacology: a Pathophysiologic Approach* 5th ed. New York: McGraw-Hill; 2002. p. 475-510.

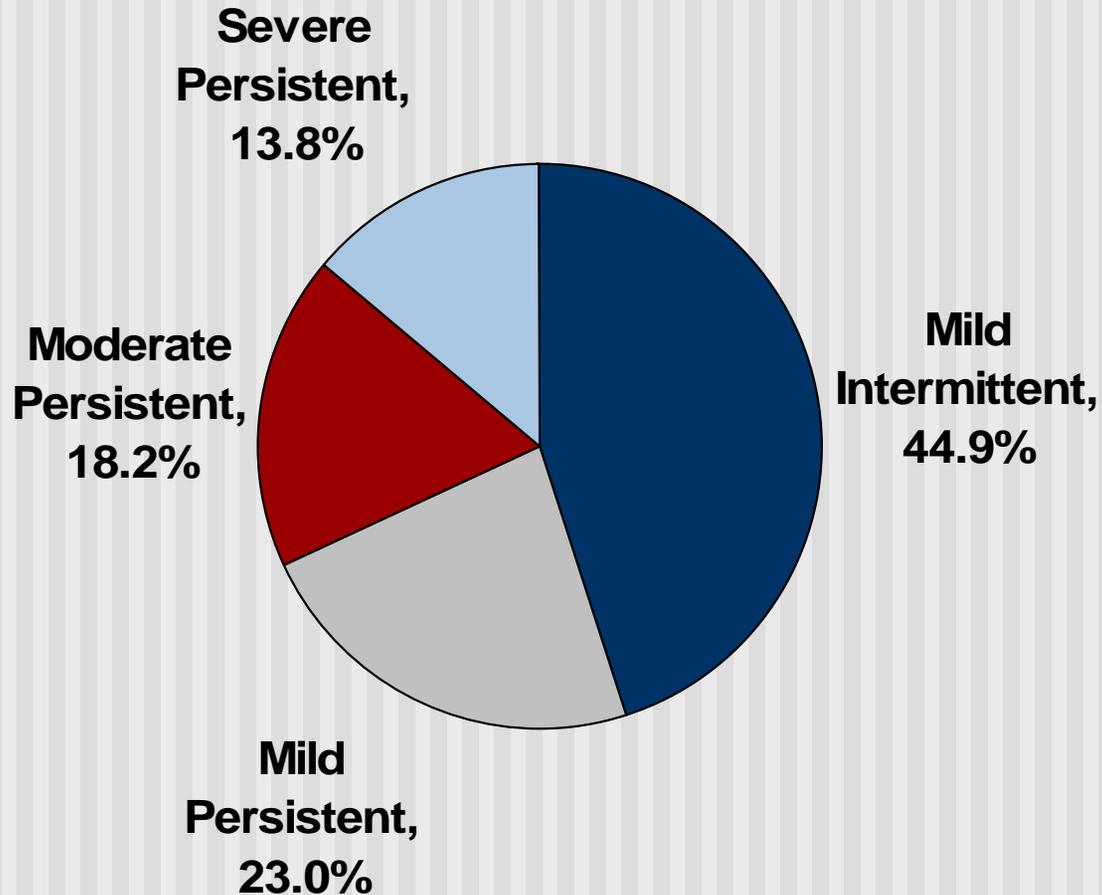
The BRFSS Scale

- The detailed severity scale value is the highest number from any of the four elements.
- Five questions are used to determine asthma symptom severity:
 - Q8: During the past 30 days, how many days did symptoms of asthma make it difficult for you to stay asleep?
 - Q7: ...During the past 30 days, how often did you have any symptoms of asthma?
 - Q6: During the past 12 months, how many days were you unable to work or carry out your usual activities because of your asthma?
 - Fourth element: $Q3 + Q4$
 - Q3: During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma?
 - Q4: During the past 12 months, how many times did you see a doctor, nurse or other health professional for urgent treatment of worsening asthma symptoms?

Methods

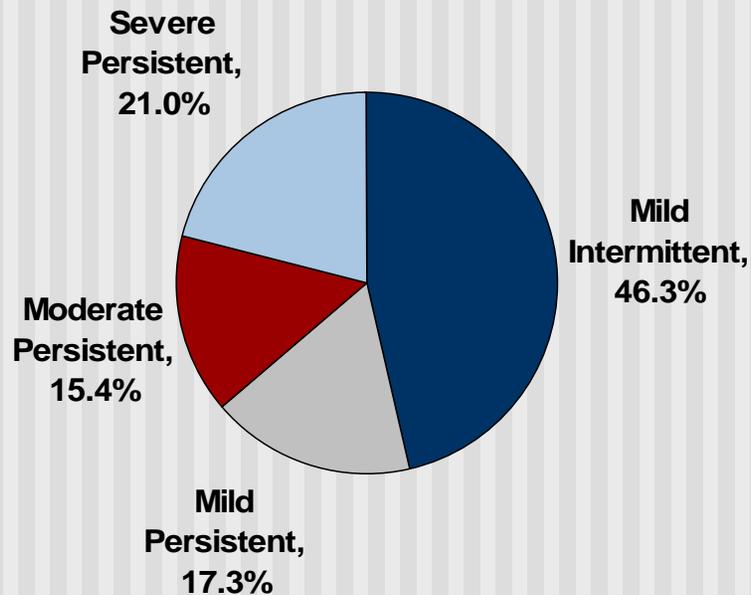
- 2004-2005 Combined
- 2005 Data Quality Question
- Question Change (Med Use)

NAEPP Symptom Severity Scale 2004-2005 Texas BRFSS

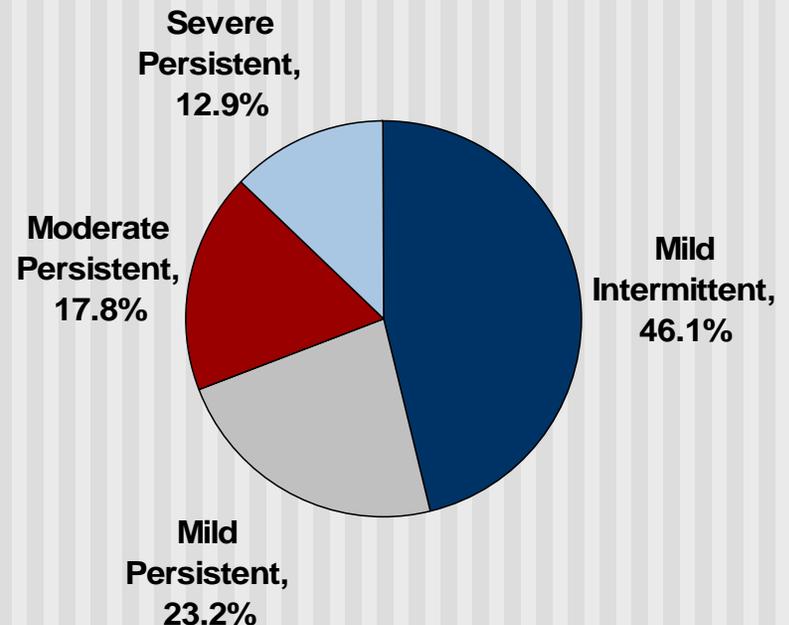


NAEPP Symptom Severity Scale 2004-2005 Texas BRFSS Border (32 La Paz) vs. Non-Border

Border

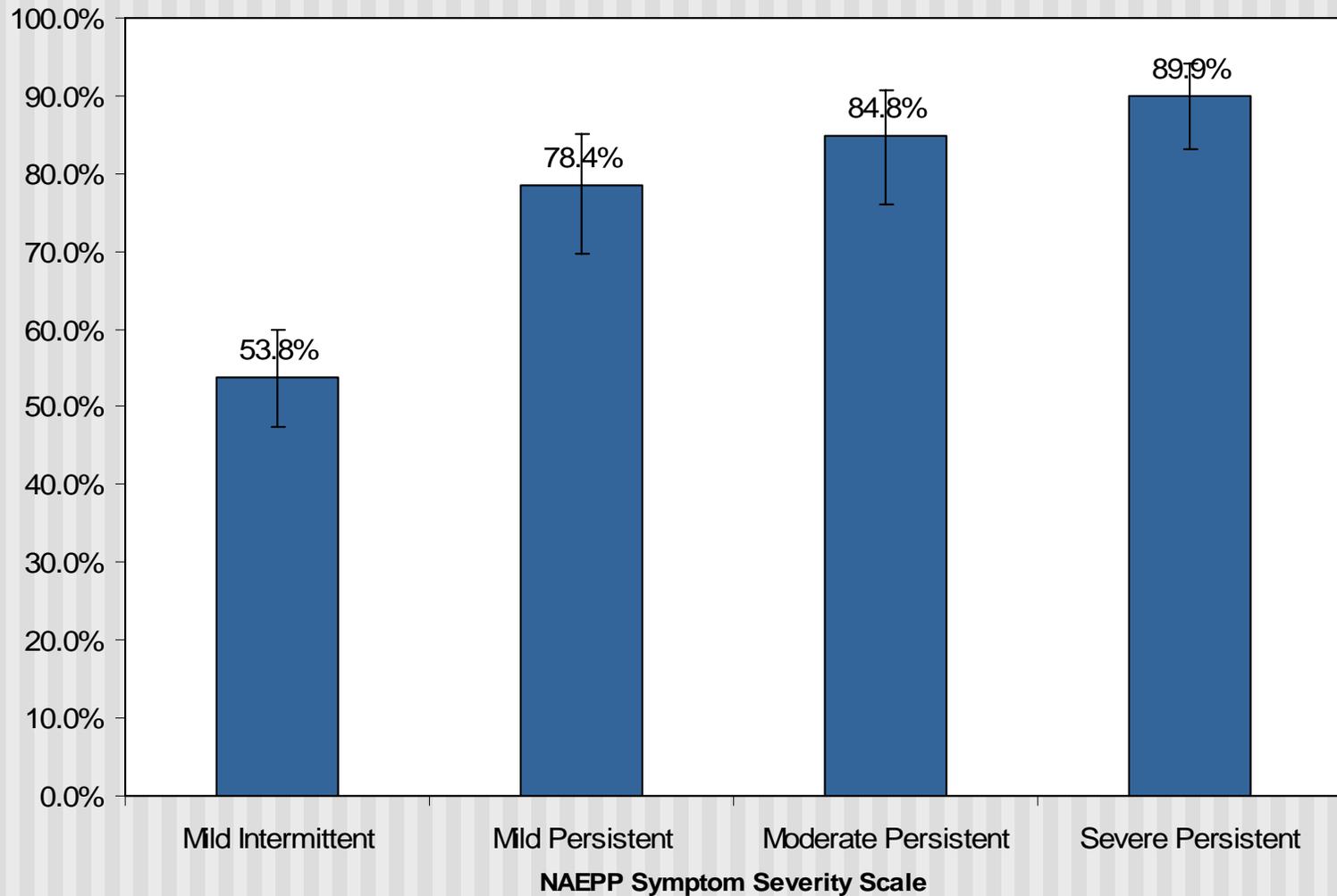


Non-Border

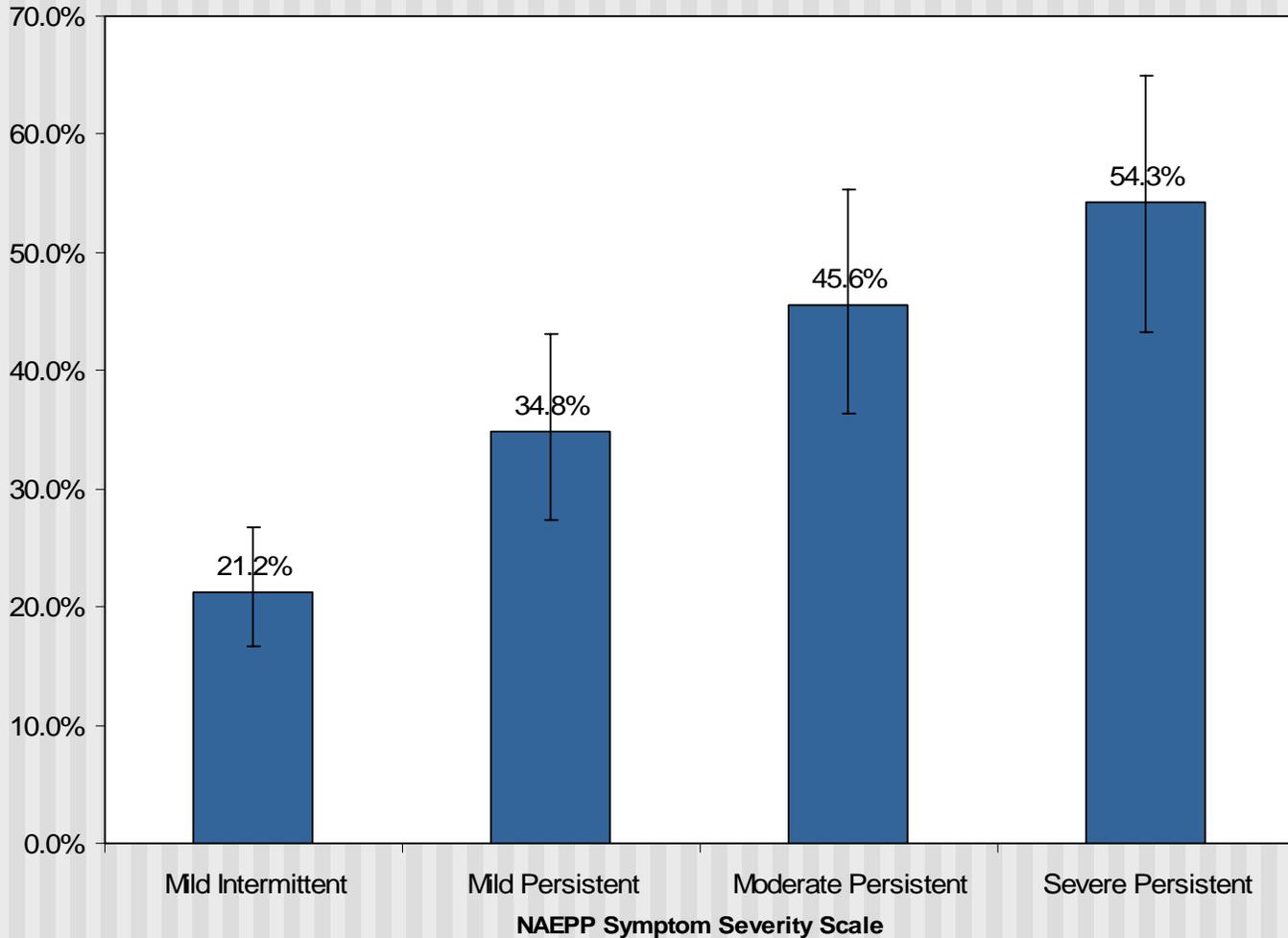


Medication Use by Asthma Symptom Severity Scale

2004-2005 Texas BRFSS

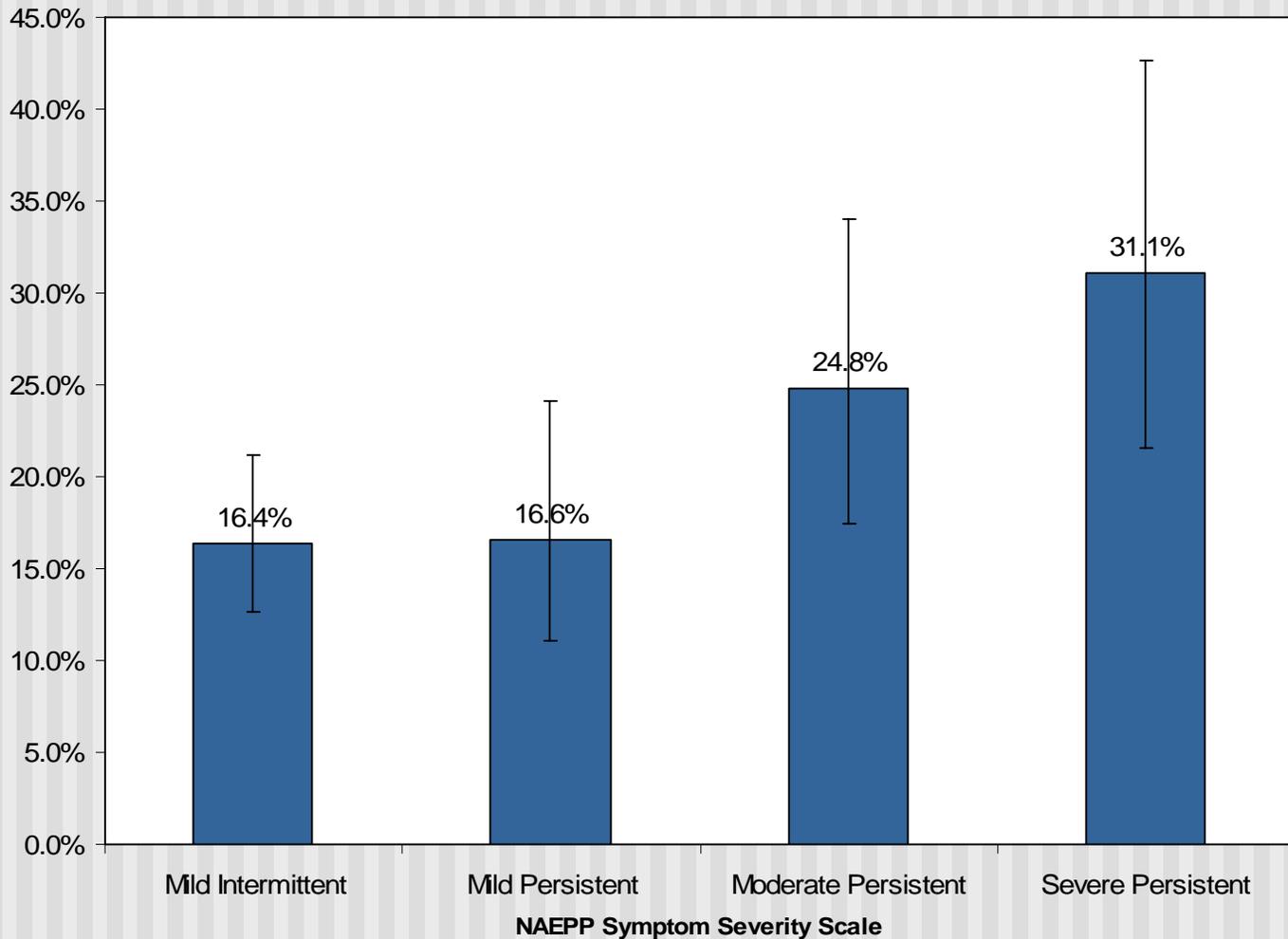


Fair or Poor General Health by Asthma Symptom Severity Scale 2004-2005 Texas BRFSS

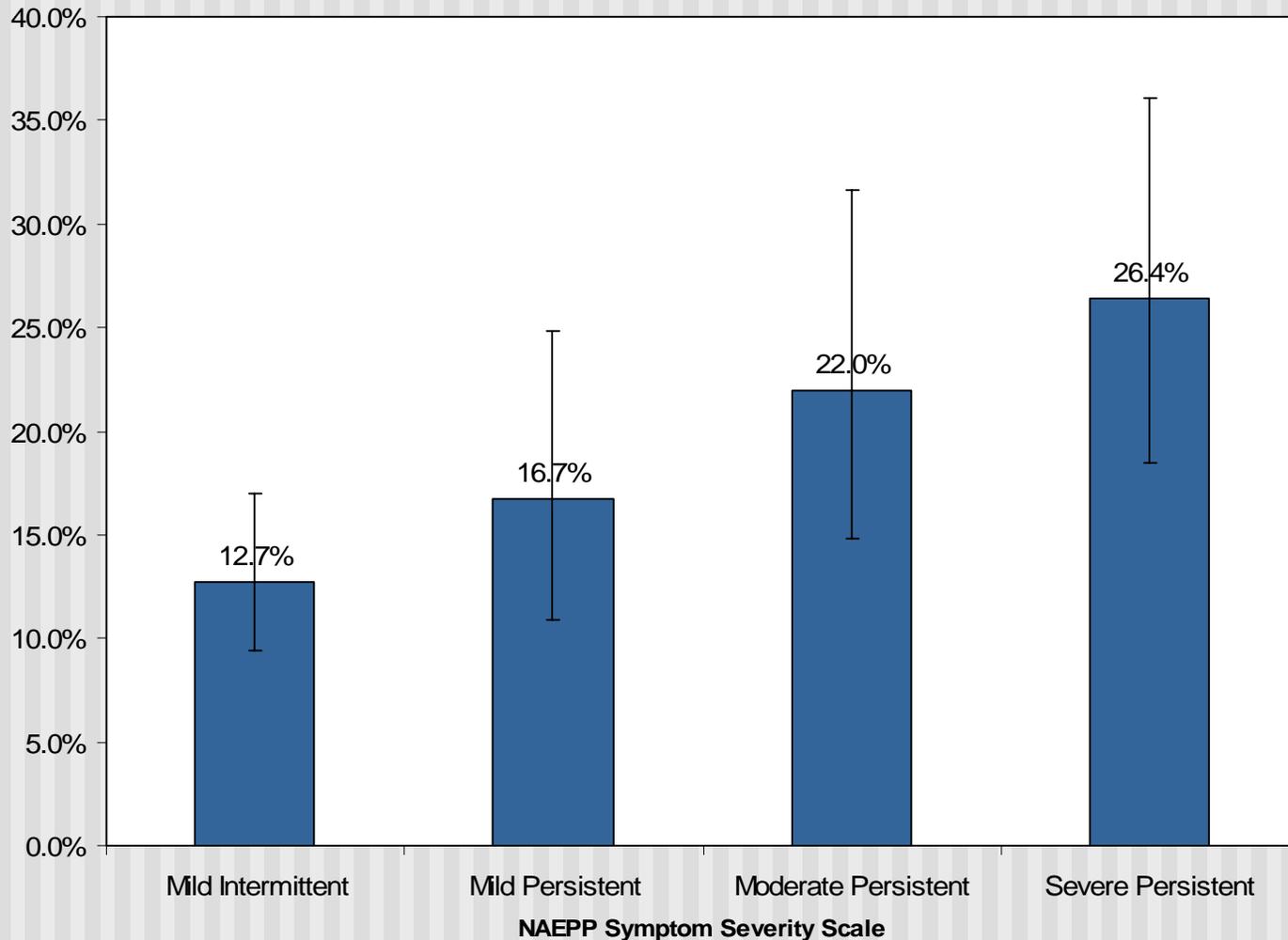


Current Smoking by Asthma Symptom Severity Scale

2004-2005 Texas BRFSS



No Moderate or Vigorous Physical Activity by Asthma Symptom Severity Scale 2004-2005 Texas BRFSS



Conclusions

- Current asthmatics who have more severe symptoms:
 - Increased Medication Use
 - Increased Fair/Poor Health
 - Are Current Smokers
 - Are Not Physically Active

Action Steps

- Reduce the number of people with current asthma who smoke.
- Other?

Presentation Opportunities

- 2008 Texas Public Health Association Meeting
 - Call for abstracts went out a couple weeks ago.
 - Due – early/mid-December
 - First week of March (over my birthday)
 - San Antonio, TX
- 2008 BRFSS Conference
 - Call for abstracts went out last week.
 - Due mid-December
 - Mid-March 2008
 - Orlando, FL
- 2008 APHA Annual Meeting
 - Call for abstracts not out yet.
 - October 2008
 - San Diego, CA

Contact Information

www.dshs.state.tx.us/chs/contact.shtm

Phone:

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Toll free in Texas (866) 239-7279
FAX Number (512) 458-7344

Regular Mail:

Center For Health Statistics
Department of State Health Services
1100 West 49th Street
Austin, Texas 78756-3199

[Email CHS](#)

Contacts by Topic:

Topic		Phone
Behavioral Risk Factors	Email	(512) 458-7261
Health Professions Resource Center	Email	(512) 458-7261
Map Requests/GIS Tech Assistance	Email	(512) 458-7261
Nursing Workforce Data Section	Email	(512) 458-6723
Vital Statistics Reporting Services	Email	(512) 458-7509
Population and Census Data Assistance	Email	(512) 458-7261

How to submit a data request:

Submit data requests by email or regular mail. Be sure to include the following information:

- Name and contact info
- The precise data value you need (births with no prenatal care, ...)
- Type of data (raw counts, rates, ...)
- Time period and time units (1999-2002 by year, 2001 by month, ...)
- Geographic coverage (all Texas, a particular county, ...)
- Aggregation unit (by county, by public health region, ...)
- Data breakdowns (age, gender, race/ethnicity, ...)