

ASTHMA IN NEBRASKA



What is Asthma?

Asthma is a chronic lung disease that affects an estimated 16.4 million adults and 7.0 million children in the United States, regardless of age, sex, race, or ethnicity.

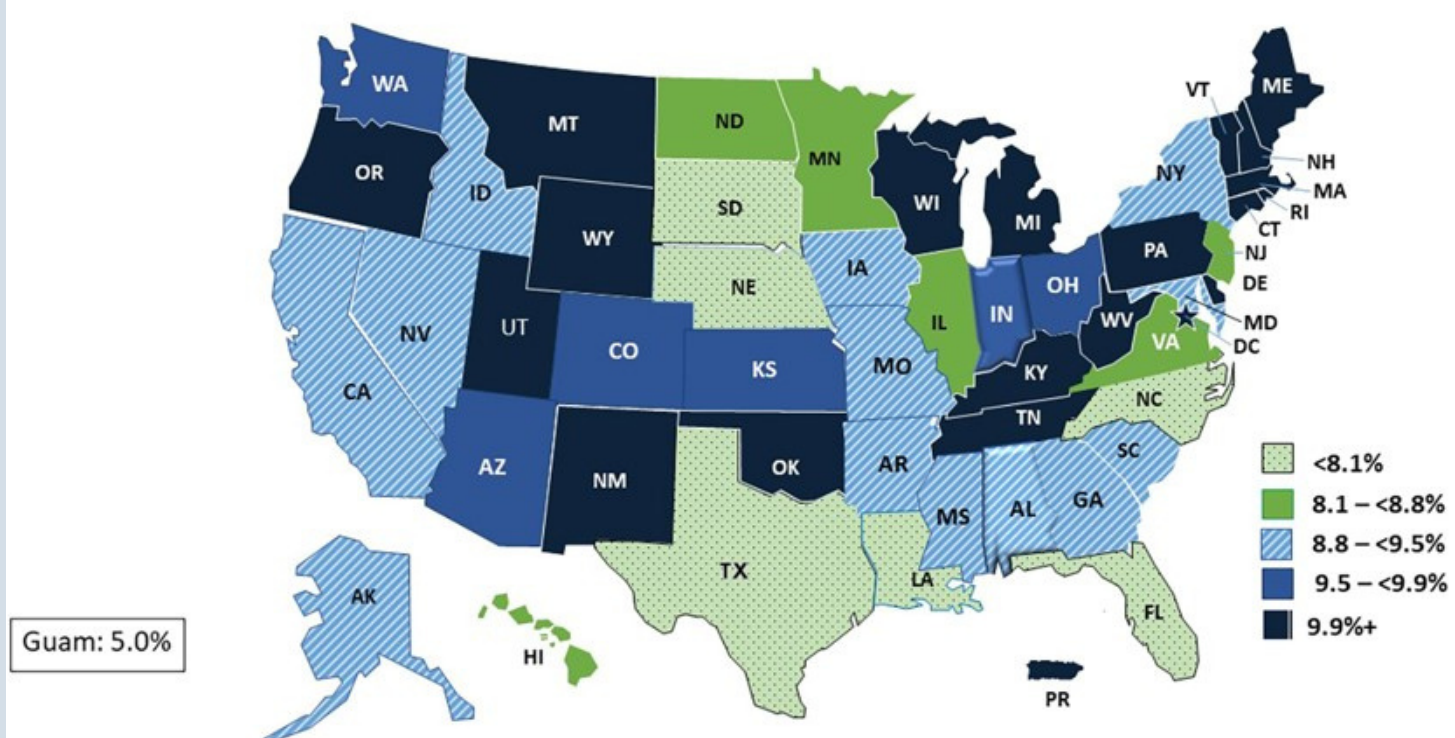


When asthma symptoms appear and are diagnosed in adults older than age 20, it is typically known as adult-onset asthma. About half of adults who have asthma also have allergies. Adult-onset asthma also may be the result of commonplace irritants in the workplace (called occupational asthma) or home environments, and the asthma symptoms come on suddenly.



FACTS & FIGURES

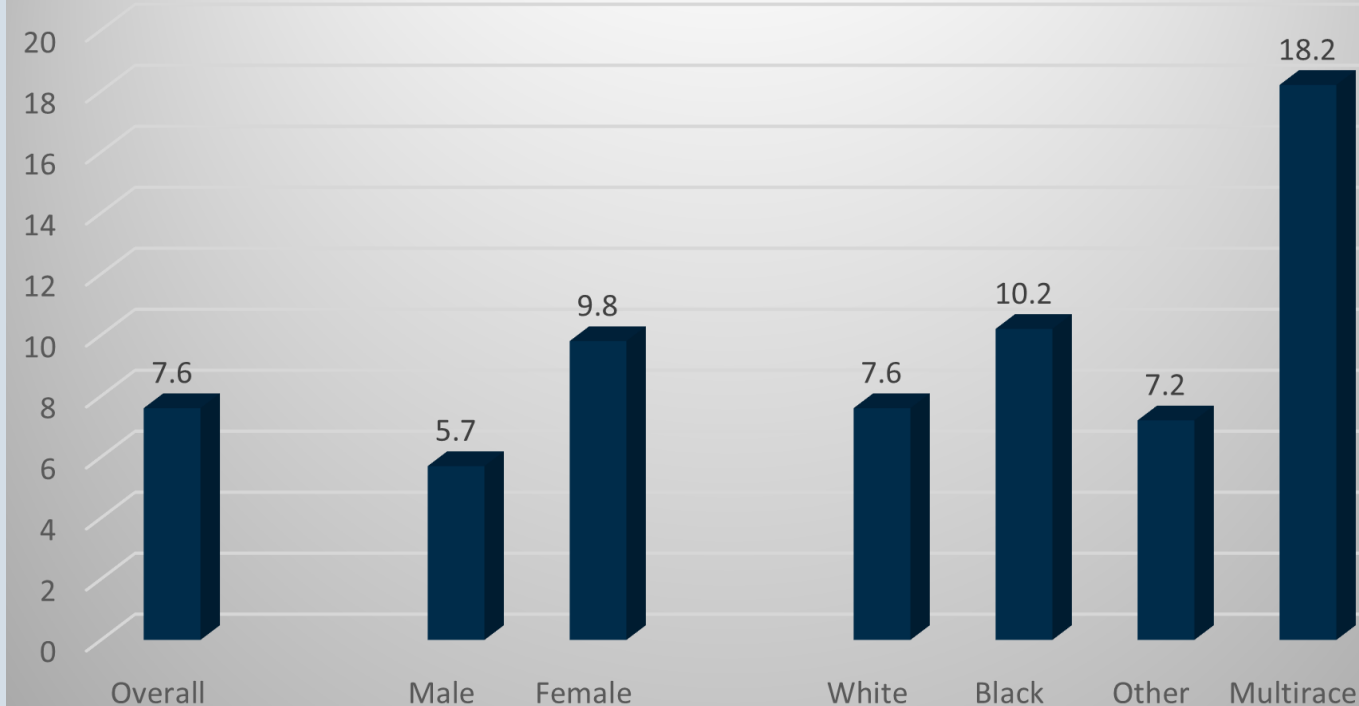
Adult^a Current Asthma^b Prevalence, BRFSS 2020



^aAged 18+ years
^bCurrent asthma question: "Do you still have asthma?"
 Legend: percentiles of the overall current asthma prevalence estimates from year 2011 data: 0%, 20%, 40%, 60%, 80%, 100%

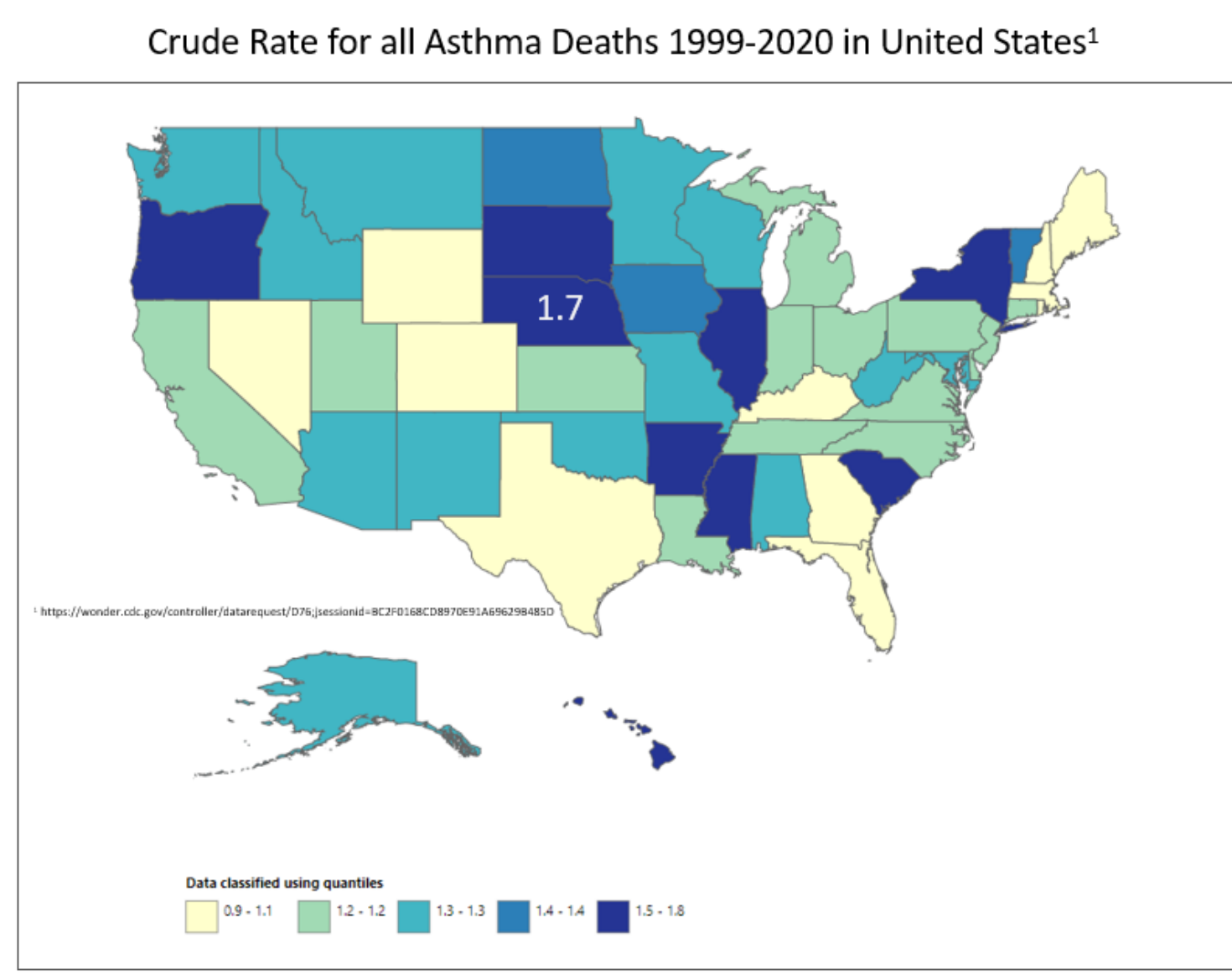
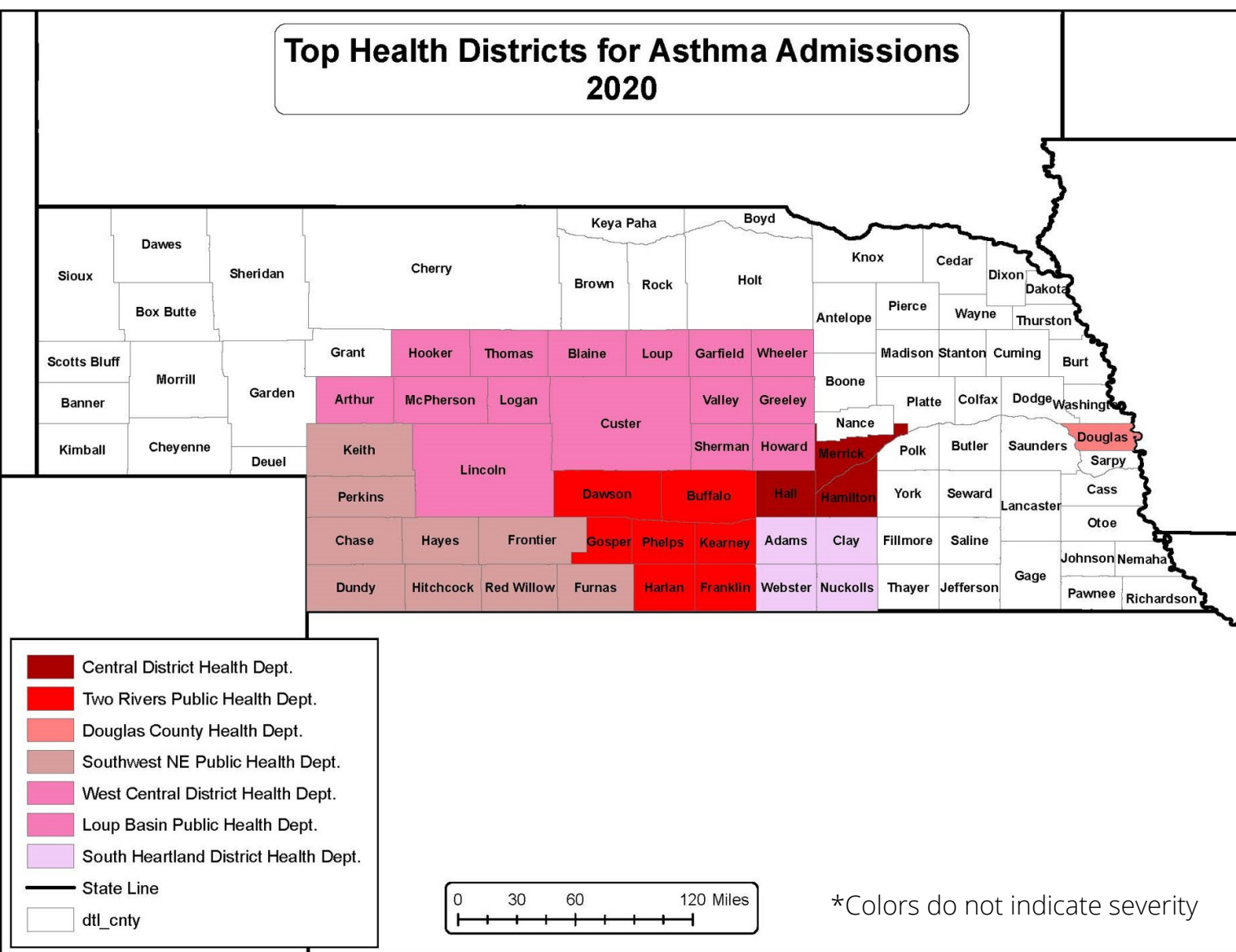
Asthma and Community Health Branch, National Center for Environmental Health
 Centers for Disease Control and Prevention

Nebraska Asthma Prevalence in 2020 for Age 18+



- Nebraska has a high population adjusted asthma death rate from 1990-2020.
- Nebraska currently does not have Federal Asthma grant funds.
- In 2019, asthma admissions were most common in the following health districts:
 - Central District Health Department
 - Two Rivers Health Department
 - Southeast District
 - Douglas County
 - West Central Health Department.

- In 2020, asthma admissions fell compared to 2019, largely due to COVID restrictions. The top districts for admissions were:
 - Central District Health Department
 - Two Rivers Health Department
 - Southeast District
 - Douglas County
 - West Central Health Department
 - Southwest Nebraska Public Health Department
 - Loup Basin



ASTHMA INFORMATION FOR PHYSICIAN AND HEALTH CARE PROVIDERS

In the United States asthma severity and medication guidelines have been provided from the National Heart, Lung and Blood Institute Guidelines. The EPR-3 guidelines are available at:

<https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma>.

A brief summary is listed below:

SEVERITY: Intermittent, mild persistent, moderate persistent, severe persistent:

Additive for severity: asthma symptoms, nocturnal awakening, use of albuterol (if already prescribed), ability to do exercise or activities.

Severity: Exacerbations having required oral corticosteroids: ≤ 2 in 12 months is persistent.

Severity: Pulmonary function test for all patients capable of performing. Forced Expiratory Volume at 1 second (FEV1) and FEV1/FVC (Forced Vital Capacity) are the critical components: Age range and levels in guidelines. $> 80\%$ FEV1 $60-80\%$ FERVI, and $< 60\%$ FEV1 are critical levels for persistent.

Medications: Rank Scale for Persistent: Inhaled corticosteroids low dose, ICS low plus Long-Acting Bronchodilator (LABA), ICS medium, ICS medium + LABA, ICS high +LABA.

Medications: Leukotriene modifiers (LM), Theophylline, short or long acting muscarinic antagonists, Biologics are add-on therapies based on severity and/or allergies (LM).