

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.



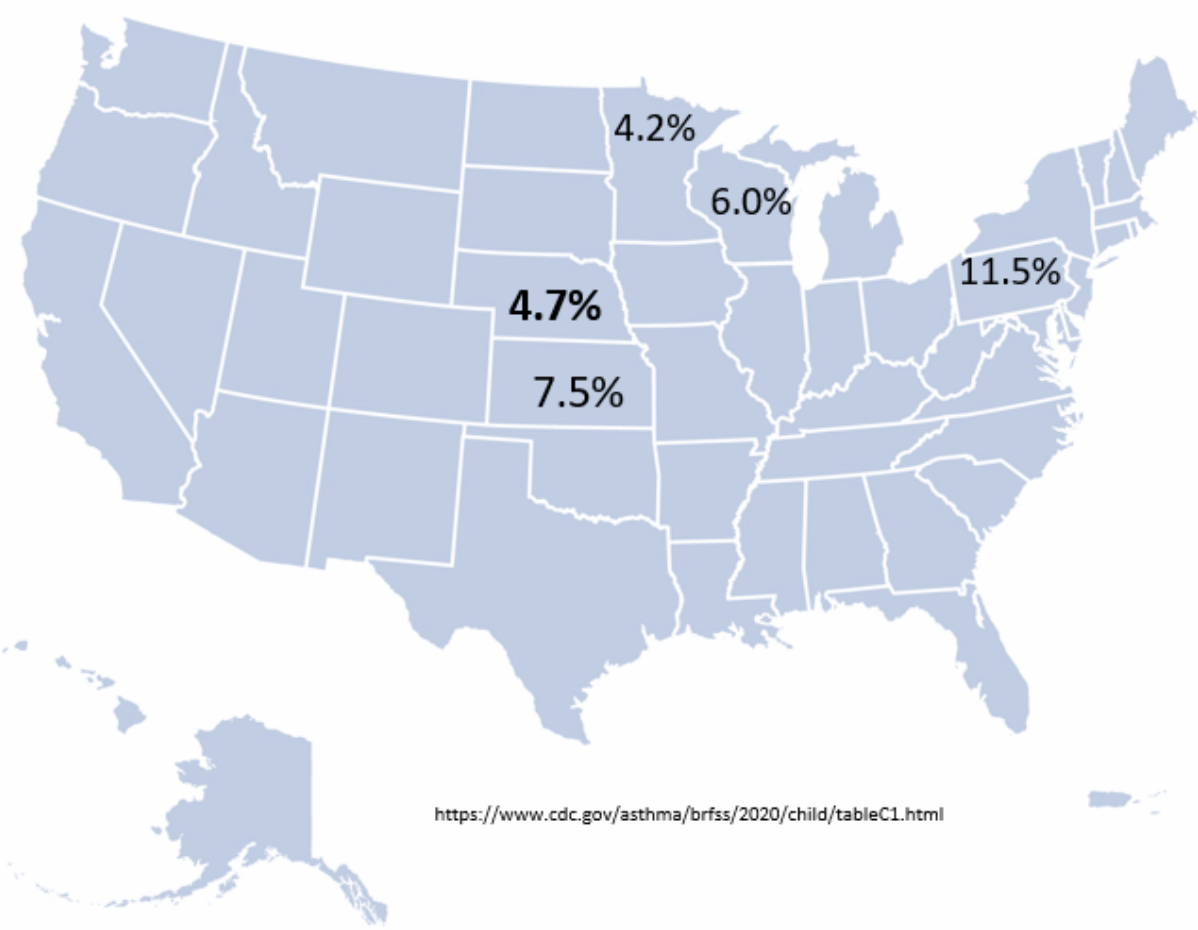
In childhood asthma, the lungs and airways become easily inflamed when exposed to certain triggers. Such triggers include inhaling pollen or catching a cold or other respiratory infection. Childhood asthma can cause irritating daily symptoms that interfere with play, sports, school and sleep. In some children, unmanaged asthma can cause dangerous asthma attacks.



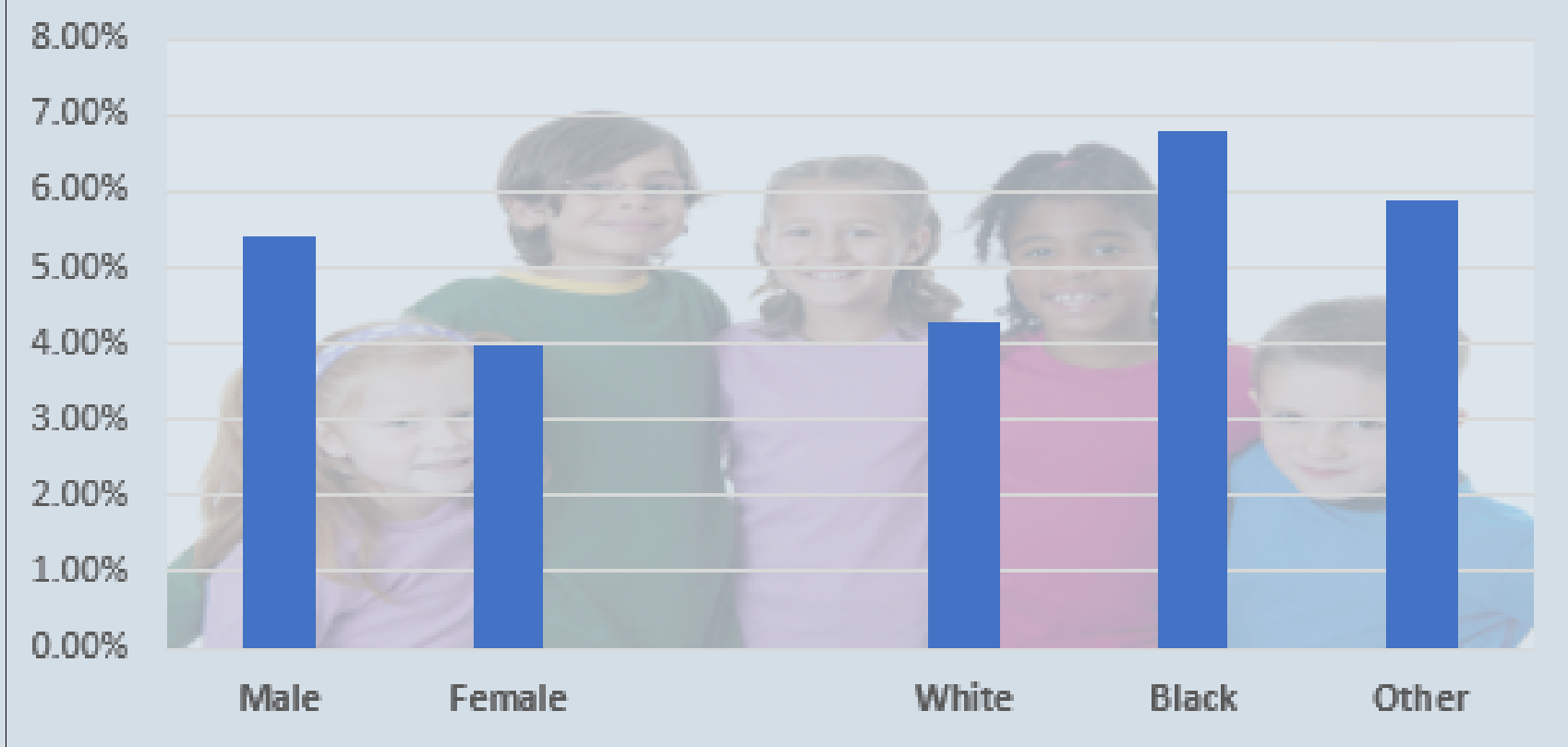
FACTS & FIGURES

Prevalence of Pediatric Asthma in 2020 (n = 30). High and Lowest States and Midwest States reporting data.¹

Pediatric asthma prevalence in 2020 U.S was 7.5%¹

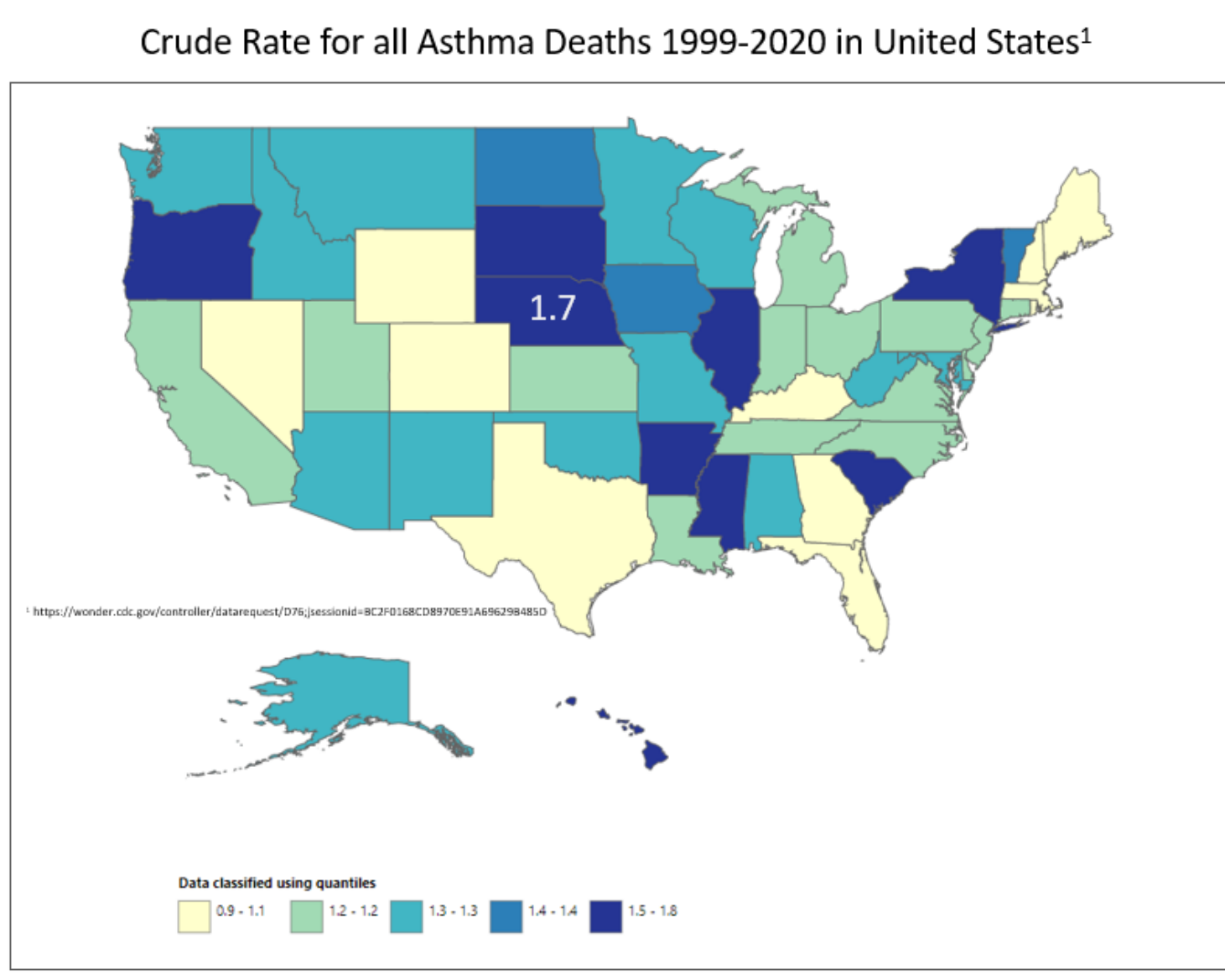
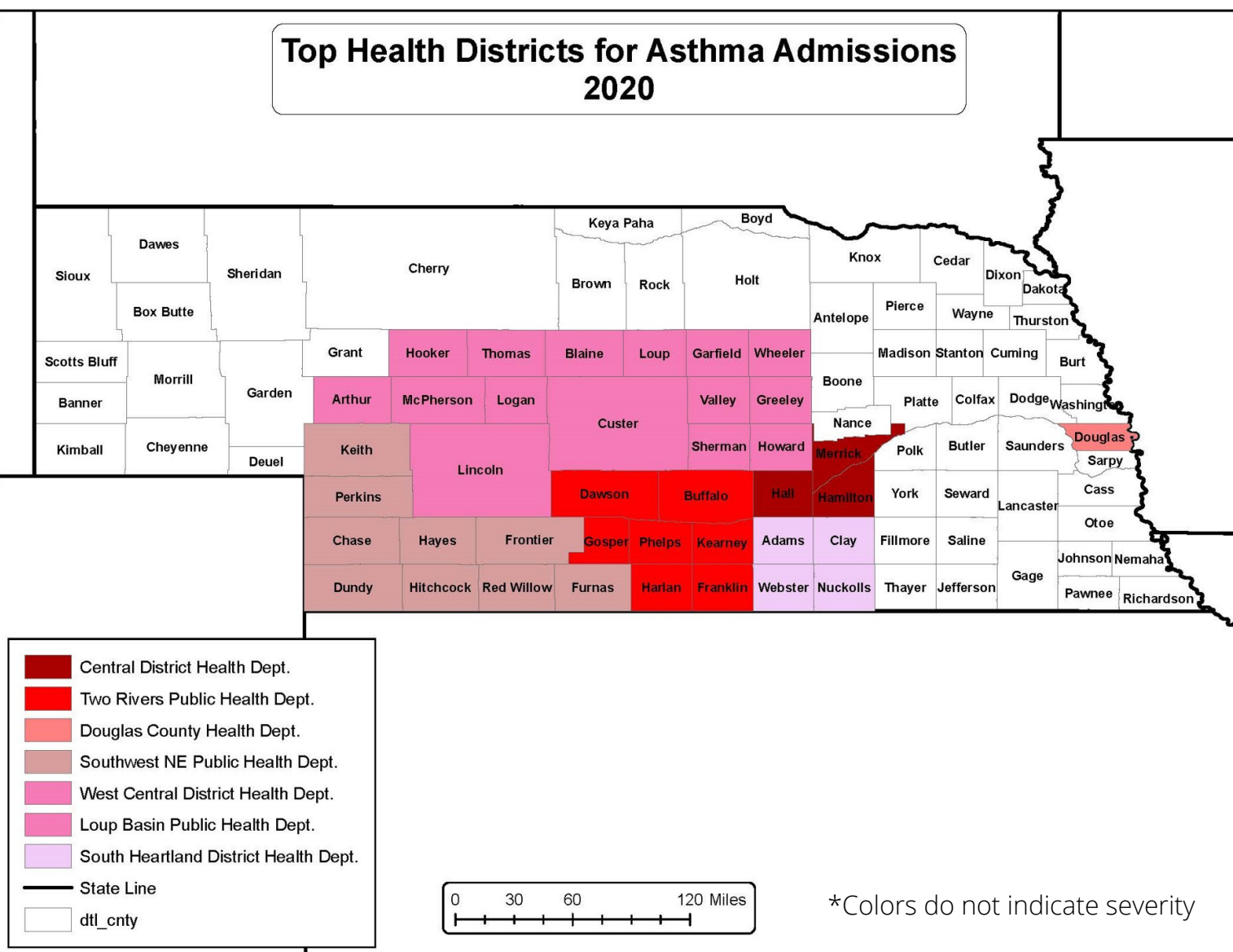


Prevalence of Pediatric Asthma in Nebraska 2020¹



- 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 Dept.
 - 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% FERV1, and $< 60\%$ FEV1 are critical levels for persistent.

Medications: Rank Scale for Persistent: Inhaled coritcosteroids low dose, ICS low plus Long-Acting Bronchodilator (LABA), ICS medicum, 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).