

Kentucky Asthma Data




Kentucky Asthma Management Program

May 4, 2022



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Kentucky Asthma Management Program (KAMP)

-  KAMP formed in 2007 after receiving state and CDC funding
 - Preventive Health and Health Services Block Grant
 - EXHALE Grant
-  Analyzes state data on asthma prevalence and burden
-  Supports educational opportunities for health professionals, school nurses, community health workers and health educators



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Kentucky Asthma Management Program (KAMP)

- ◆ Promotes public awareness of asthma
- ◆ The Kentucky Asthma Partnership (KAP) is a 501c3 providing staff facilitation and support
 - All volunteer organization with representatives from clinical practices, universities, schools, hospitals, public health, pharmacy, business organizations, advocacy organizations and people with asthma
 - Supports policy changes to reduce the burden of asthma



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Kentucky Asthma Data Overview

- ◆ One in ten Kentucky adults report having asthma, similar to the U.S.*



- ◆ Health disparities include gender, race, education and income level*
- ◆ Asthma produces ~\$500 million in costs from emergency department visits, hospitalization, clinical care, medications and missed work and school each year in Kentucky (CDC)

*Source: Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance Data and KyBRFS data and Youth Risk Behavior Survey.

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Kentucky Child Asthma Data

- 🛡️ In Kentucky, current asthma prevalence for children has trended downward from 10.2% in 2012 to 6.8% in 2020*
- 🛡️ Youth Risk Behavior Survey (YRBS) 2019 data indicated 23.9% of high school students in Kentucky report having been told they have asthma*
- 🛡️ Kentucky Department of Education (KDE) 2020 data lists asthma as the most common chronic disease in schools with over 46,000 children in Infinite Campus



*Source: Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance Data and KyBRFS data and Youth Risk Behavior Survey.

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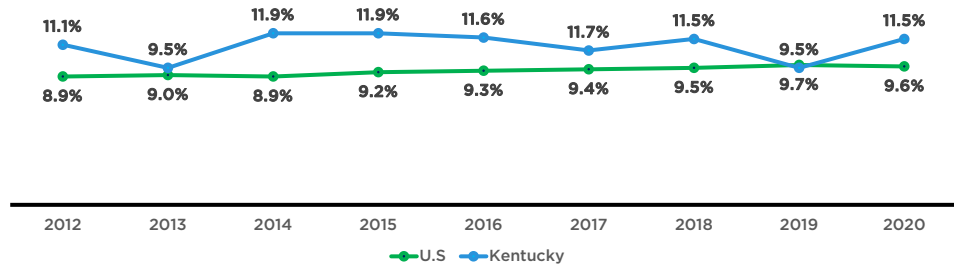
Kentucky Asthma Data Sources

- 🛡️ Office of Health Data and Analytics (OHDA)
 - Hospitalization and emergency department visits
- 🛡️ KyBRFS and BRFS
- 🛡️ Environmental Public Health Tracking Network (EPHTN) publishes BRFS and OHDA data
- 🛡️ Kentucky Department of Education (KDE) Infinite Campus
 - Published by county
- 🛡️ Kentucky YRBS (KDE)
- 🛡️ NSSP ESSENCE data

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Kentucky Asthma Data

Trends In Current Asthma Prevalence Among Adults



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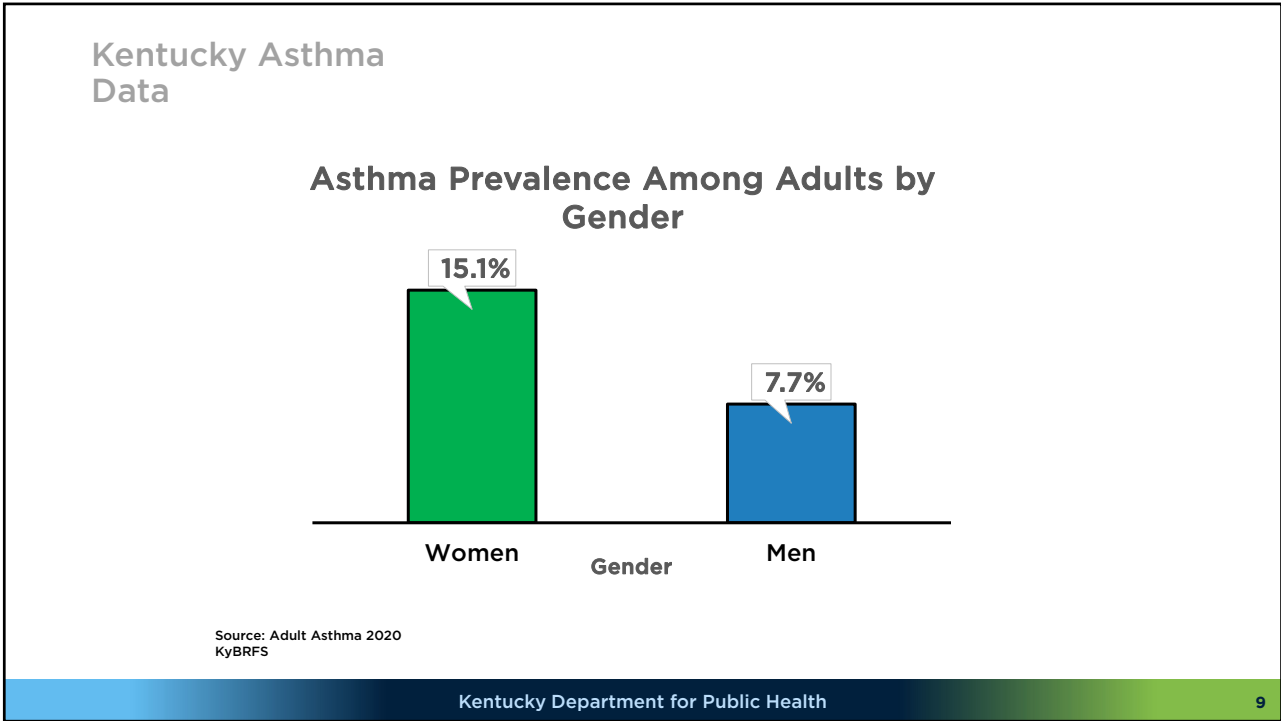
Kentucky Asthma Data

Asthma Prevalence by Region

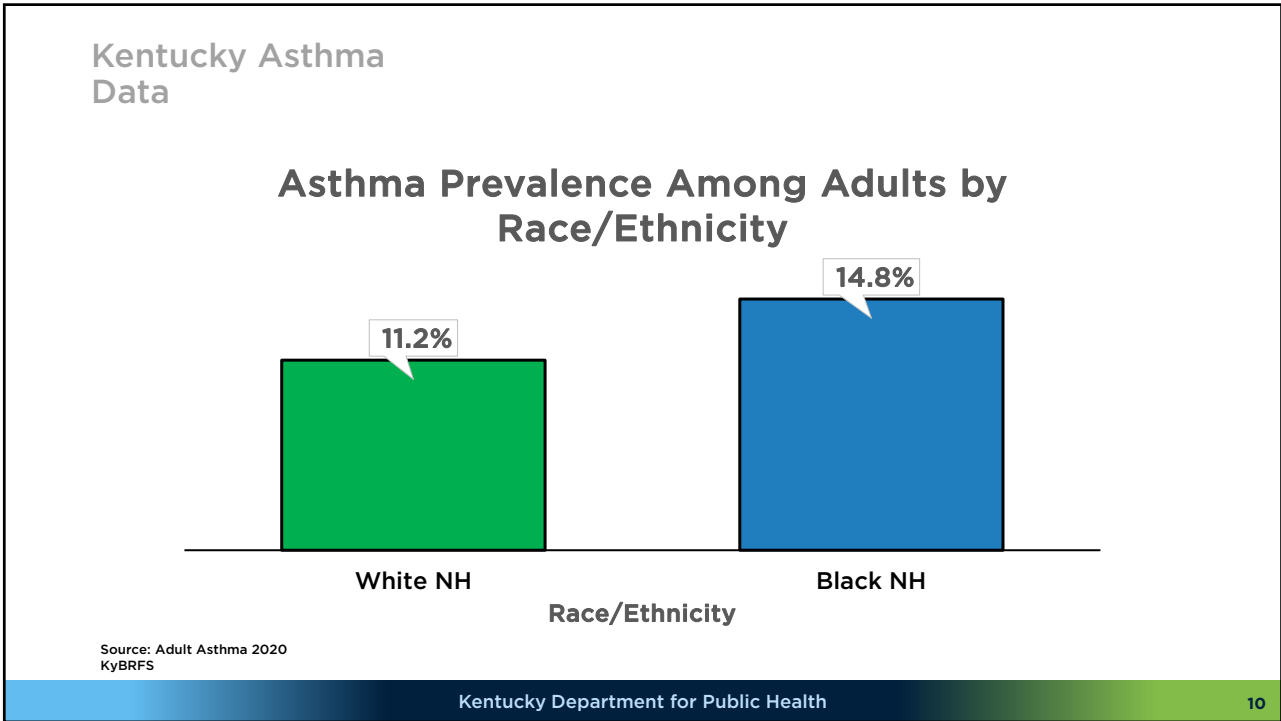
Regions	%	95% CI
Western (Purchase, Pennyrite, Green River)	9.5	(6.5 - 12.5)
Central (Barren River, Lincoln Trail, Lake Cumberland)	15.1	(11.7 - 18.5)
KIPDA (Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble)	10.9	(7.7 - 14.1)
Northern	11.2	(8.2 - 14.1)
Eastern (Buffalo Trace, Gateway, FIVCO, Big Sandy, Kentucky River, Cumberland Valley)	12.7	(9.5 - 15.9)
Bluegrass	9.4	(6.9 - 11.8)

Source: 2020
KyBRFS

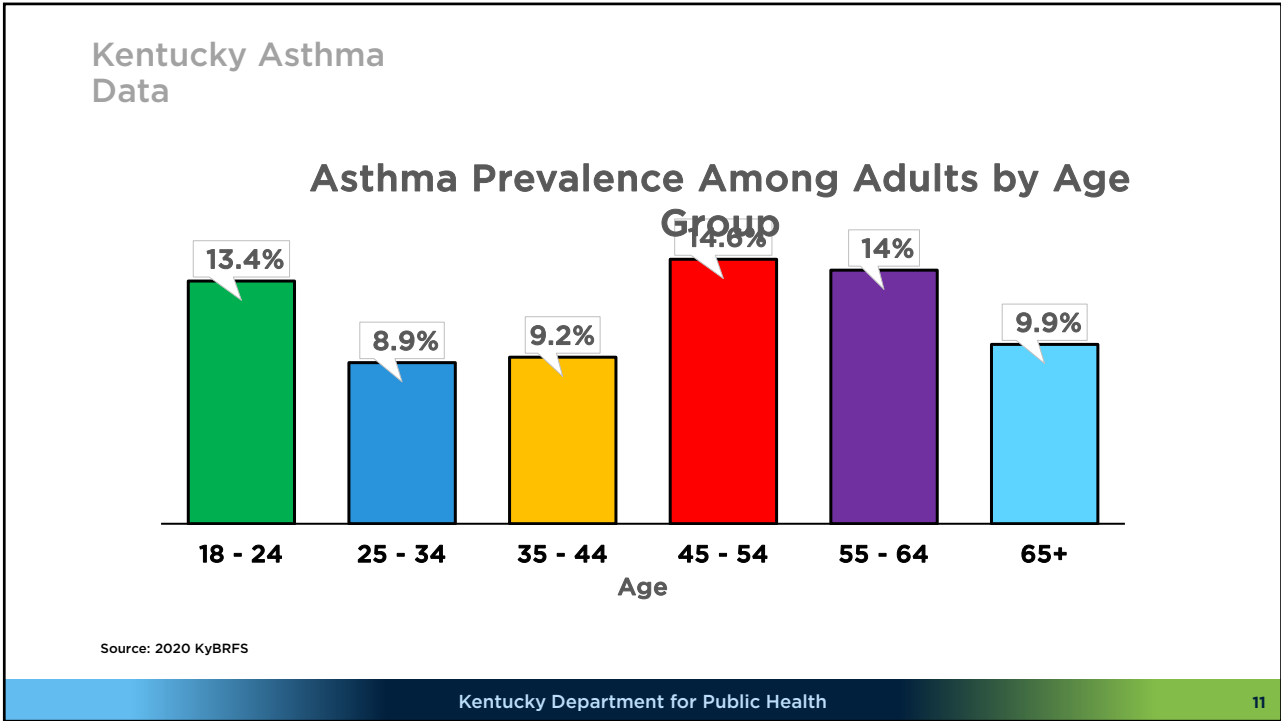
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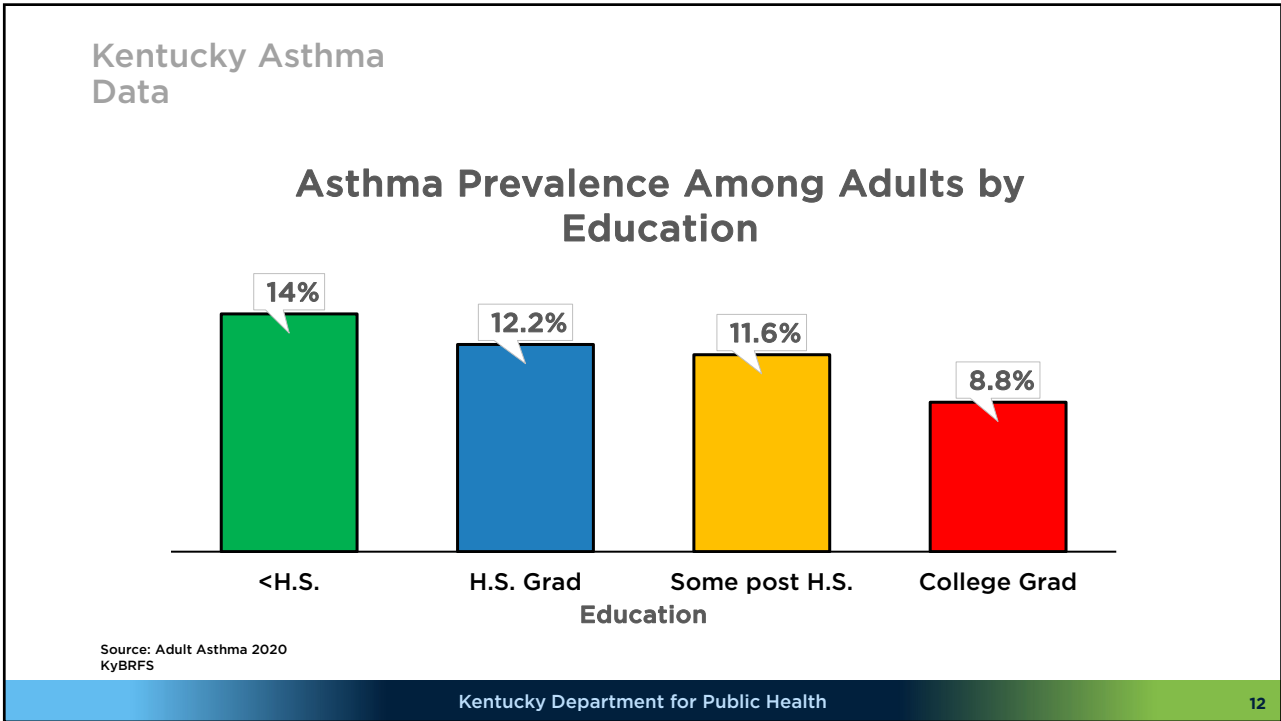
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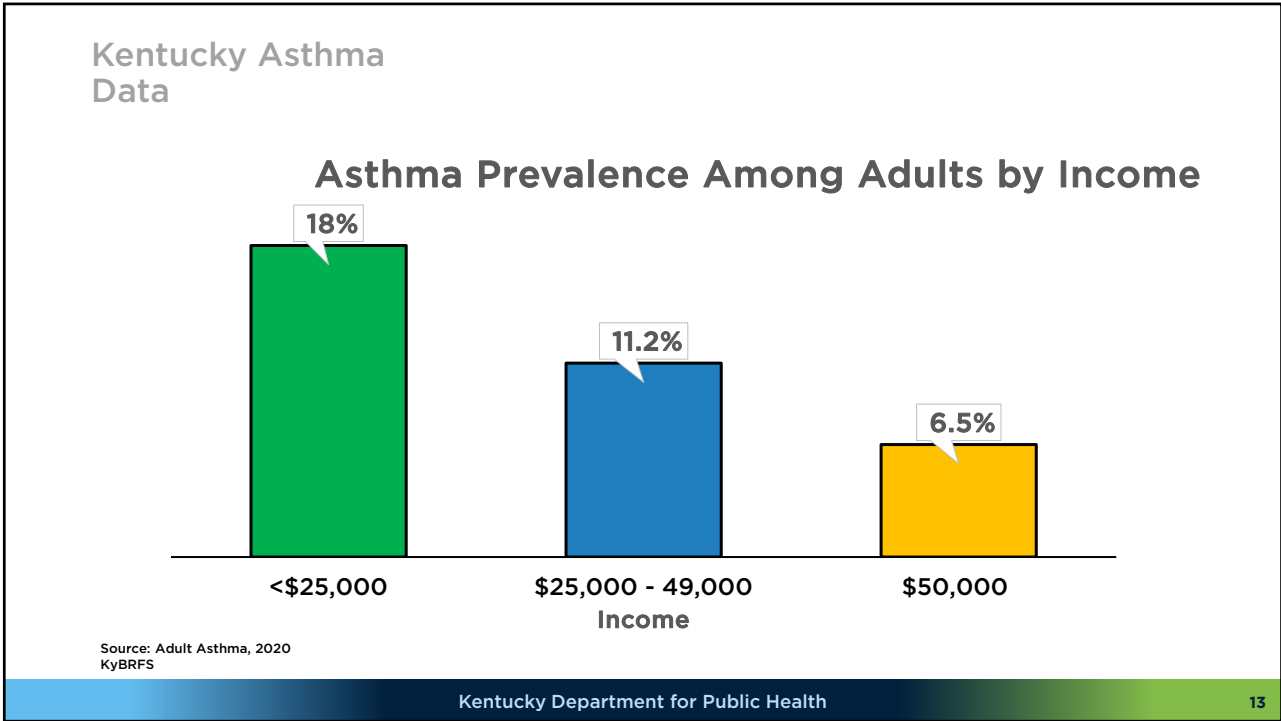
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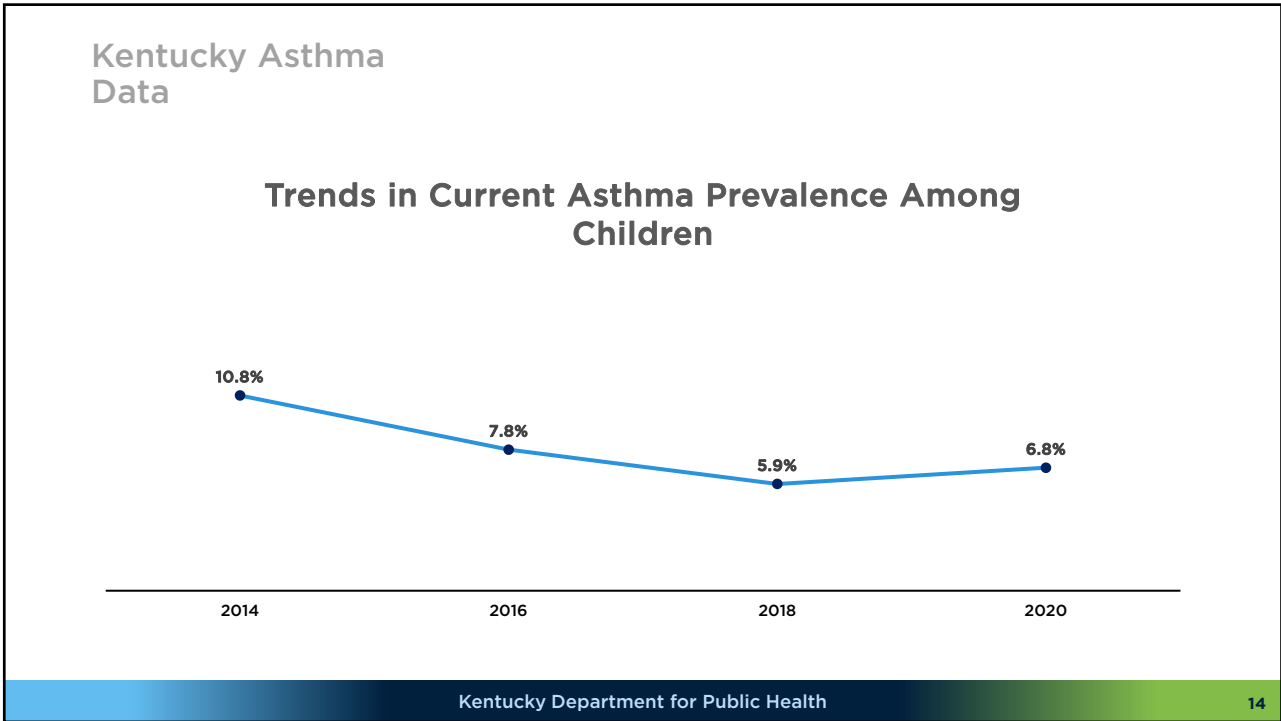
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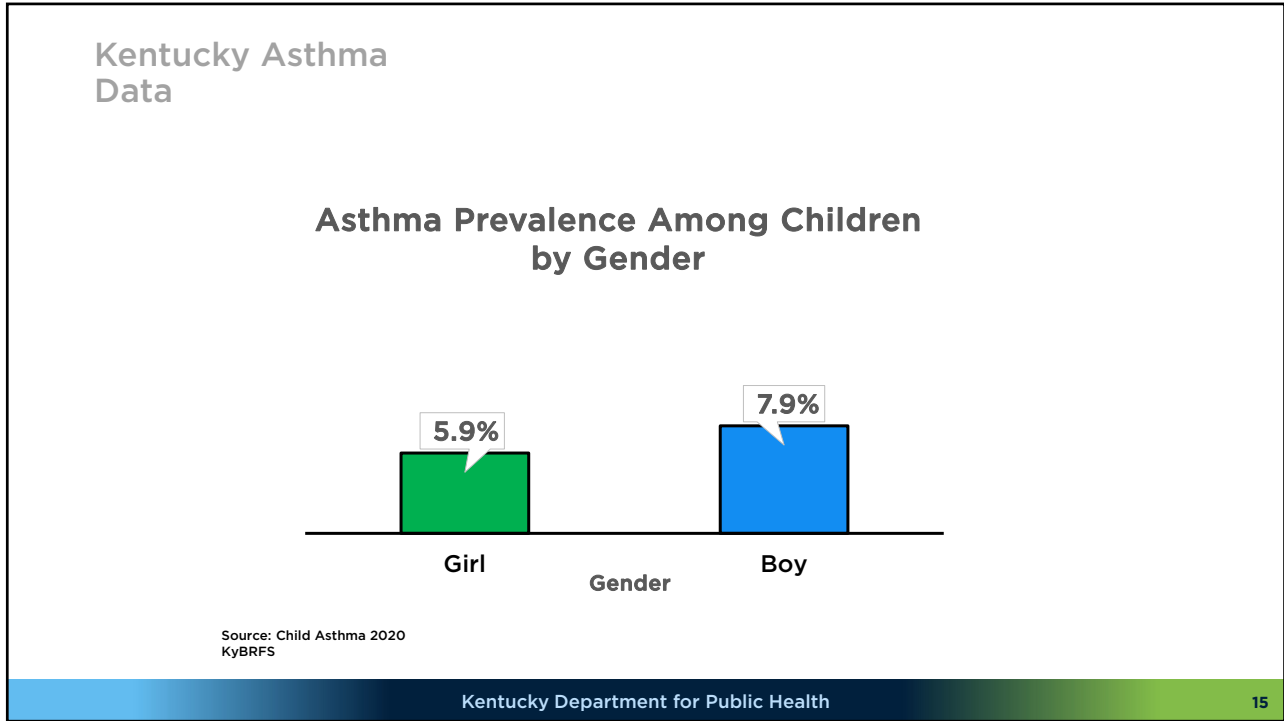
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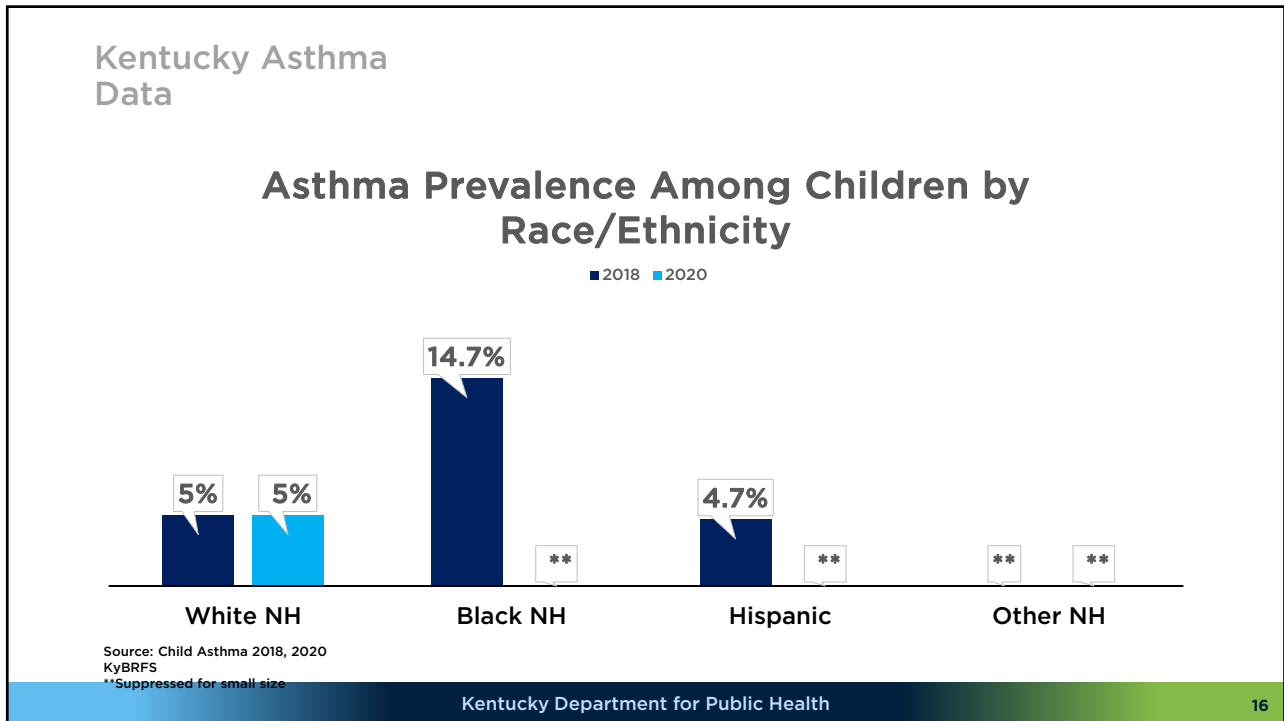
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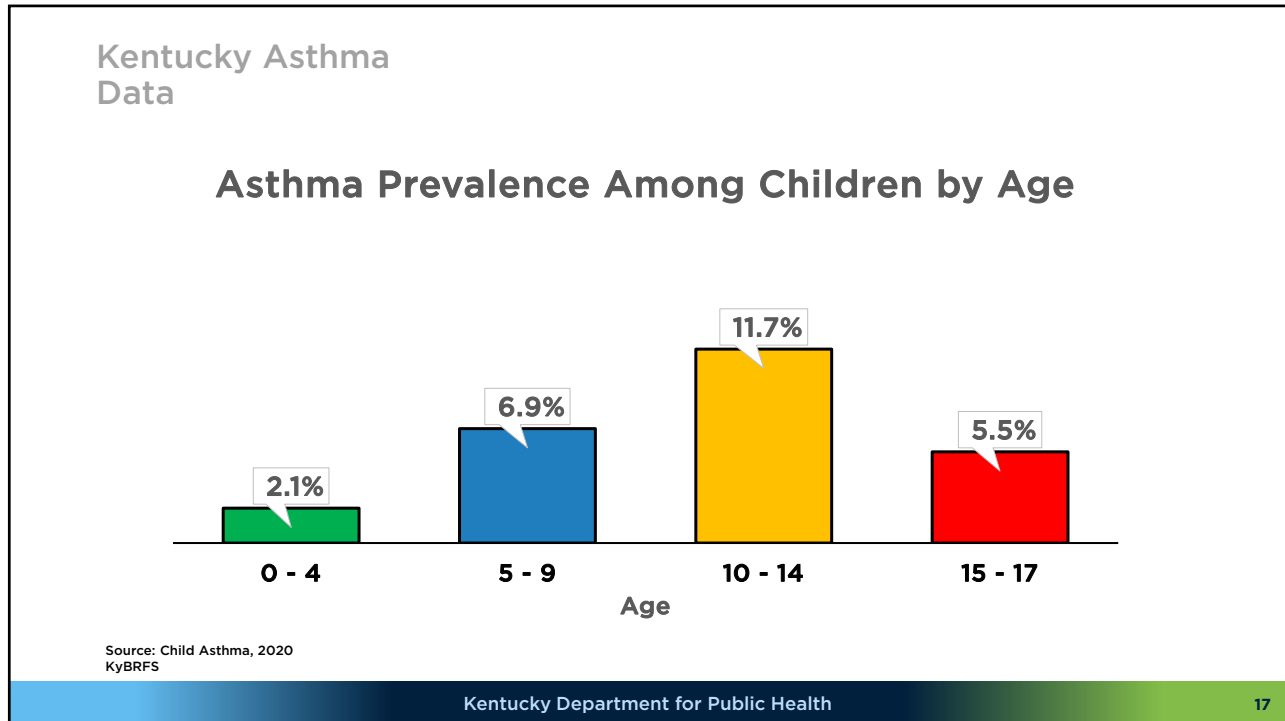
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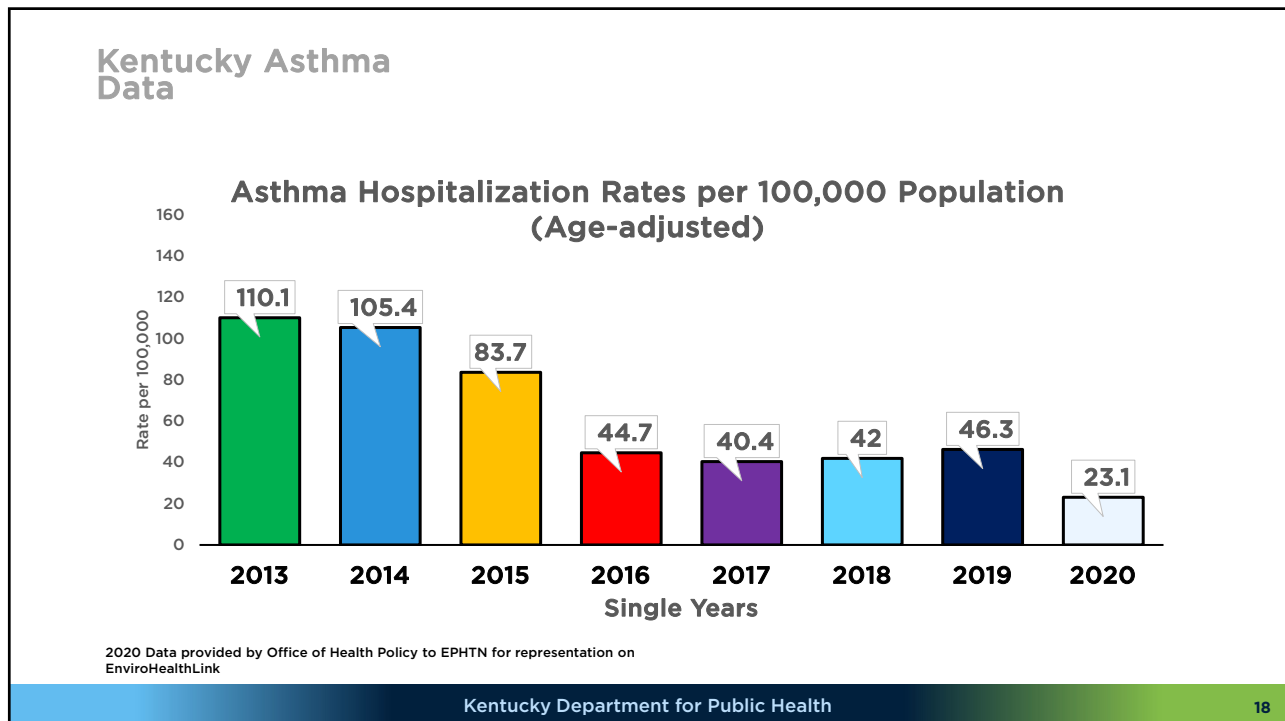
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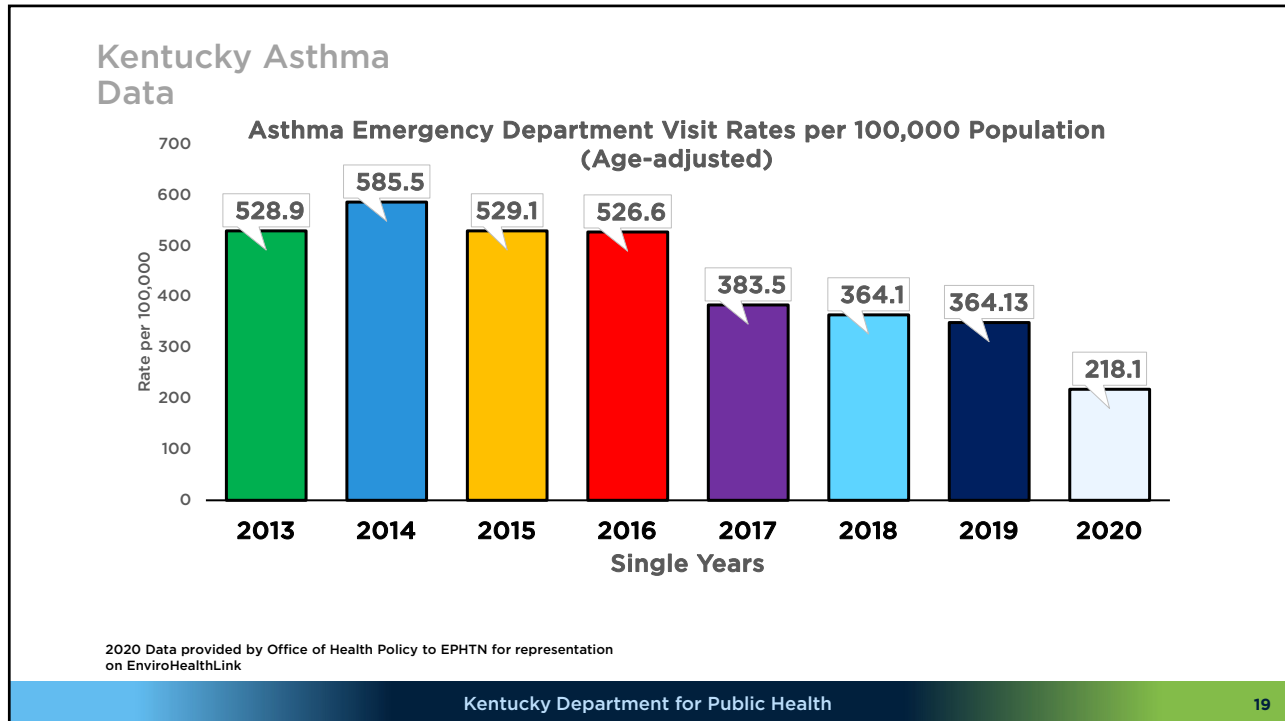
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Kentucky Asthma Data

2020 Asthma Hospitalizations by Age Groups

Age Groups	Number of HD Visits	Number of ED Visits
Under 5	124	618
5 - 9	103	662
10 - 14	57	610
15 - 17	27	357
18 - 24	53	1344
25 - 34	101	1858
35 - 44	140	1457
45 - 54	143	1091
55 - 64	97	611
65+	142	427
Total	987	9035

2020 Data provided by Office of Health Policy to EPHTN for representation on EnviroHealthLink

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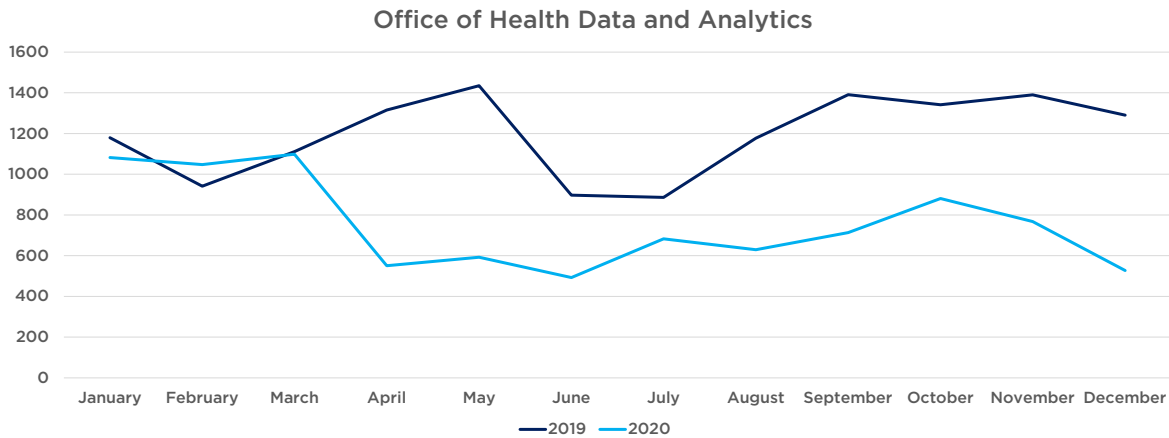
Kentucky Asthma Data

Resident Asthma Deaths by Age, Office of Vital Statistics						
Age Group						
Year	0 - 20	21 - 40	41 - 60	61 - 80	>80	TOTAL
2013	0	6	11	6	13	36
2014	0	<5	12	9	9	*
2015	<5	6	10	9	10	*
2016	<5	8	9	14	14	*
2017	<5	<5	9	9	7	31
2018	<5	<5	8	7	<5	26
2019	<5	7	12	<5	5	31
2020	5	<5	12	11	8	*
		42	83	*	*	281

Death Data from 2013-2020 are preliminary and subject to change.
 *Asthma deaths include the ICD 10 coding: J45-J46
 *Resident mortality data includes deaths which occurred to the residents of the specified geographic area, regardless of place of occurrence
 *S counts are suppressed due to confidentiality constraint
 *The total counts per row that may lead to reveal any suppressed number are not included.

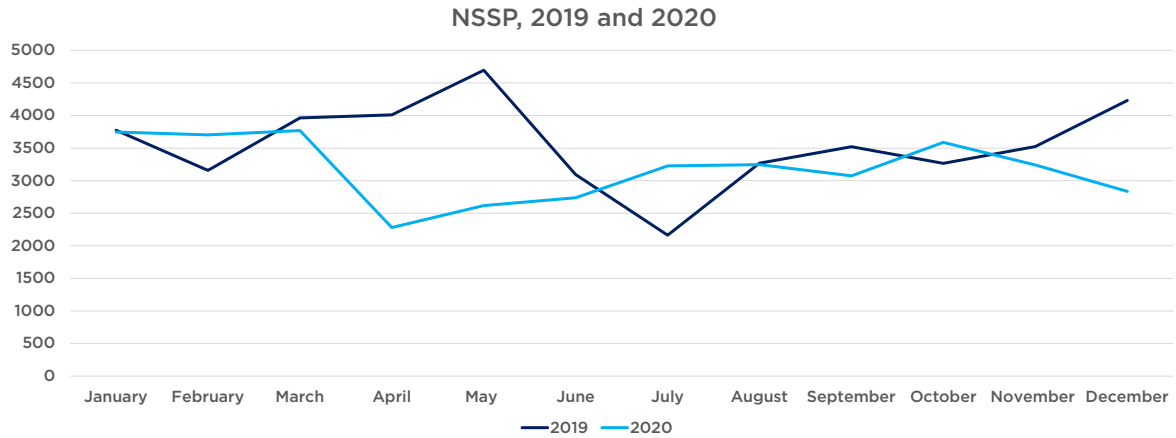
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2019 and 2020 Asthma Discharge Diagnosis by Month



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Asthma Complaint Subsyndrome by Month

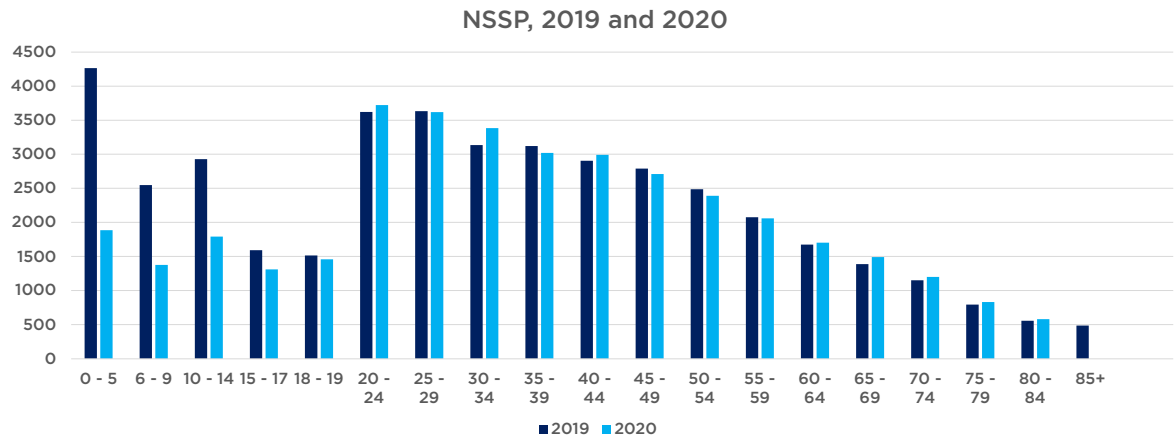


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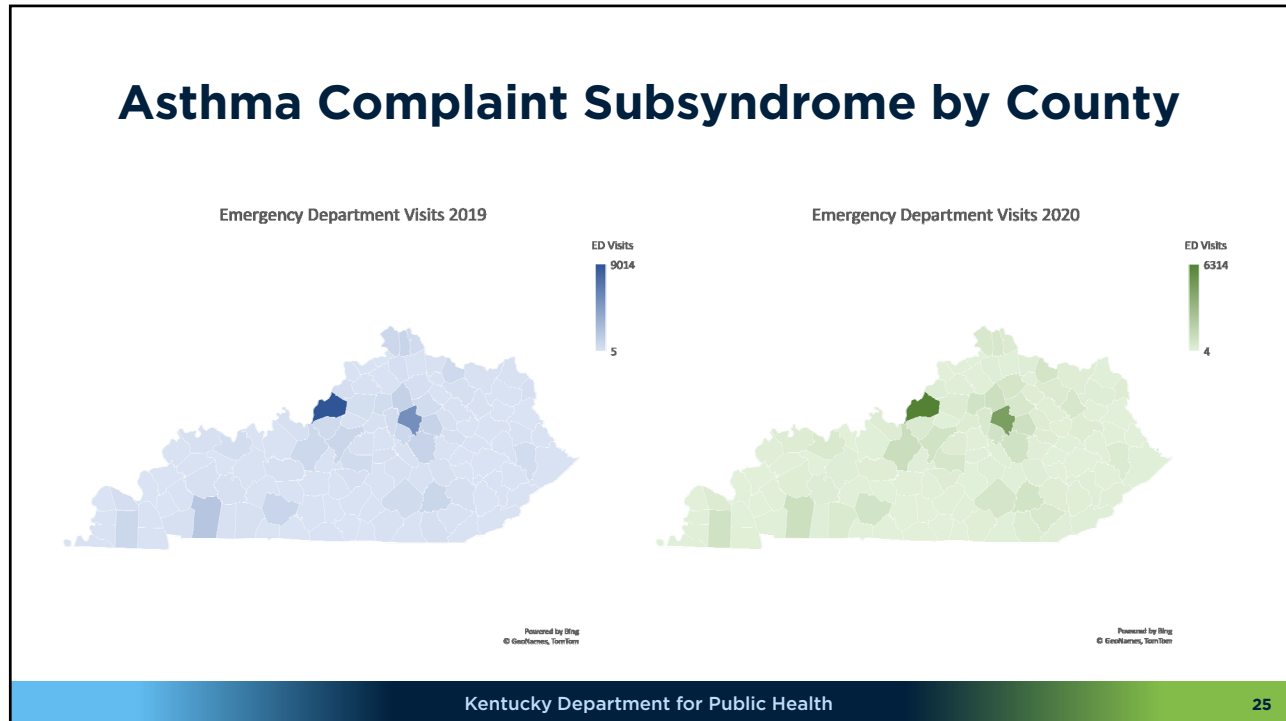
Asthma Complaint Subsyndrome by Age (years)



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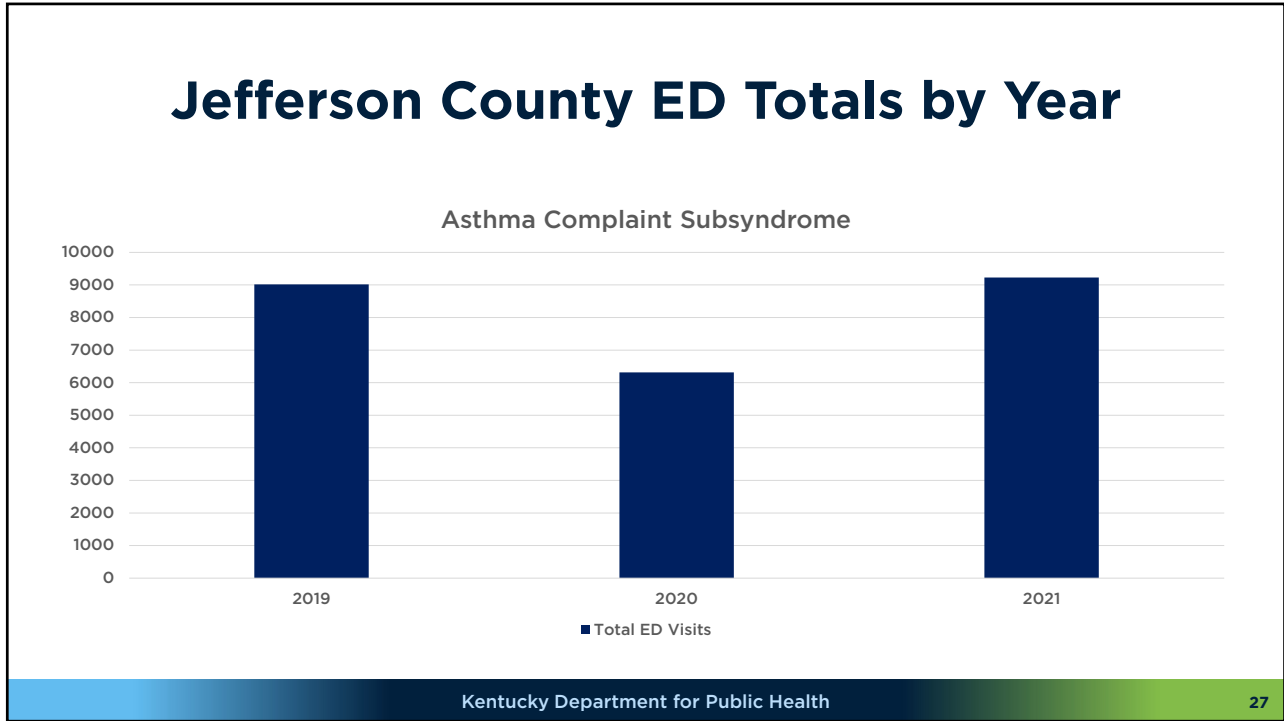
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Profile: Jefferson County, KY (Louisville Metro)

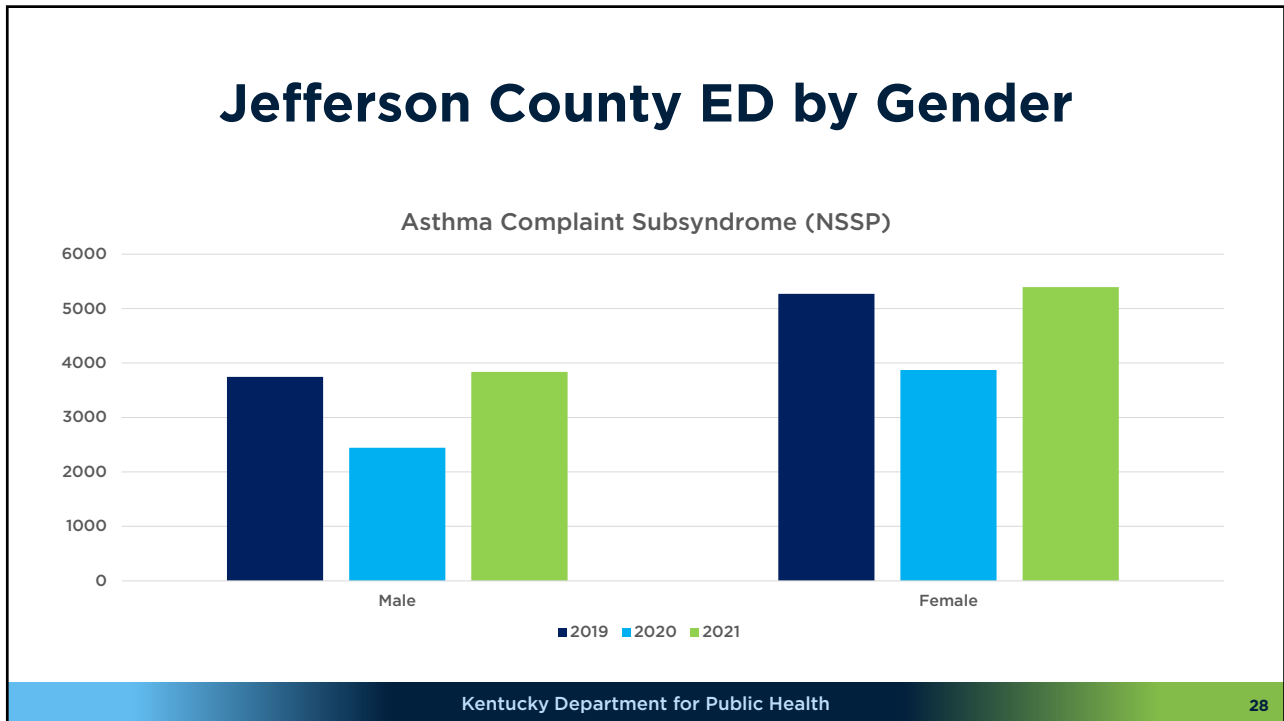
- 🏡 Contacts in school system and in health department (Louisville Metro Public Health & Wellness)
 - Implemented stock albuterol policy
 - Healthy Homes/K-ACT
- 🏡 Large health systems
 - Exploring partnerships
- 🏡 KAP leadership
 - Physicians
- 🏡 University of Louisville Envirome Project
- 🏡 Significant data will direct projects

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Jefferson County ED Asthma Complaint Subsyndrome

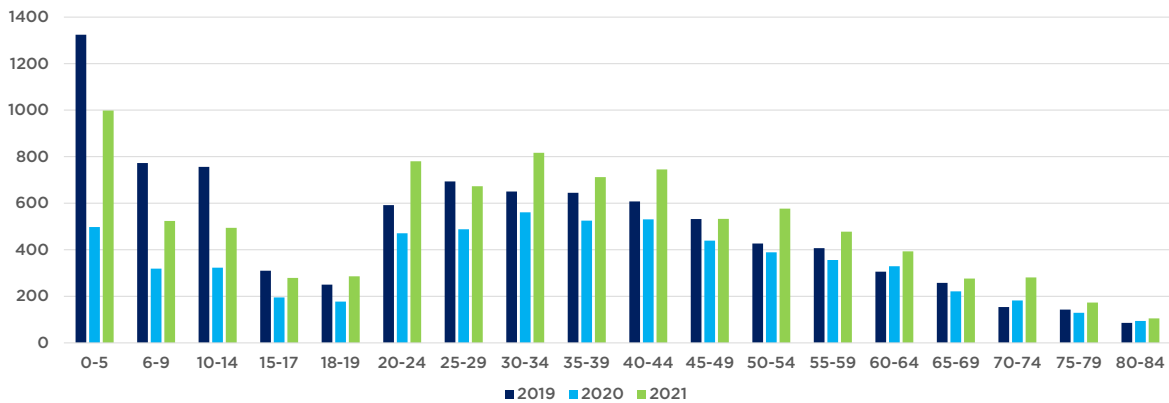
ED Visits			
Race	2019	2020	2021
White	3702	2767	2975
Black/AA	4567	3139	4059

Inpatient			
Race	2019	2020	2021
White	1132	2767	2975
Black/AA	4567	3139	4059

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Jefferson County ED Visits by Age Group

Asthma complaint subsyndrome (NSSP)



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Thank You!

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