

Asthma Heat Map | Location Results

ST. LOUIS CITY, MO

Air Quality*	NA
Patients with ASTHMA	8,334
Patients with SEVERE ASTHMA	18.3%
SEVERE ASTHMA patients who had EXACERBATIONS in the 12-month follow-up period	34.6%
SEVERE ASTHMA patients who were UNCONTROLLED based on EXACERBATIONS	14.9%
Patients with EXACERBATIONS who required HOSPITALIZATIONS or ER VISITS	16.3%
Additional BIOLOGIC USE among patients with SEVERE ASTHMA	6.4%
Additional SYSTEMIC CORTICOSTEROID USE among patients with SEVERE ASTHMA	61.8%

A retrospective database analysis of patients aged 12 years or older with an asthma diagnosis (1 inpatient or ≥ 2 outpatient claims) between June 1, 2021 and July 31, 2023 in the IQVIA open-source medical/pharmacy claims (LRx/Dx) database was conducted. Patients with asthma were further categorized as severe persistent asthma patients, after they met the Healthcare Effectiveness Data and Information Set (HEDIS) and Global Initiative for Asthma (GINA) step 4/5 criteria in the 12 months following their initial asthma diagnosis on or before July 31, 2023 if the asthma diagnosis was after July 31, 2022. The earliest qualifying claim date for severe asthma was considered as the patient's index date. These patients with severe asthma were followed for a period of 12 months post index to assess the proportion of patients with ≥ 1 exacerbation, the proportion of patients with exacerbations requiring hospitalization or emergency room visits, the proportion of patients with uncontrolled asthma, the proportion of patients with any asthma biologic use and the proportion of patients with any systemic corticosteroid use. All patient counts and outcomes described above were projected to generate census-level estimates at each geographic level using a previously established age and gender standardized IQVIA projection methodology. Air quality data were obtained from the US EPA's AirData Air Quality Index (AQI) Summary Report and reported for metropolitan area level as percentage of days with moderate to hazardous air quality (AQI ≥ 51). The results are subject to limitations typical of retrospective claim analyses.

*Air Quality: Percentage of days with moderate to hazardous air quality (defined as having an Air Quality Index ≥ 51), only available at the metropolitan area level.

NA: Data are not available or cannot be reported due to small patient counts (1-10 patients), in accordance with privacy standards and data use agreements.

Asthma Heat Map | Social Determinant Breakdown

ST. LOUIS CITY, MO

	Male	Female	Age 12 - 17	18 - 64	65+	White	Black	Hispanic	Other*
Patients with ASTHMA	34.5%	65.5%	14.3%	63.8%	21.9%	NA	NA	NA	NA
Patients with SEVERE ASTHMA	16.4%	19.4%	11.4%	18.0%	23.9%	NA	NA	NA	NA
SEVERE ASTHMA patients who had EXACERBATIONS in the 12-month follow-up period	27.4%	38.1%	31.9%	35.3%	32.6%	NA	NA	NA	NA
SEVERE ASTHMA patients who were UNCONTROLLED based on EXACERBATIONS	11.5%	16.5%	16.5%	12.9%	16.7%	NA	NA	NA	NA
Patients with EXACERBATIONS who required HOSPITALIZATIONS or ER VISITS	13.9%	17.2%	26.6%	15.4%	15.1%	NA	NA	NA	NA
Additional BIOLOGIC USE among patients with SEVERE ASTHMA	7.5%	5.8%	NA	6.9%	5.7%	NA	NA	NA	NA
Additional SYSTEMIC CORTICOSTEROID USE among patients with SEVERE ASTHMA	54.9%	65.3%	49.6%	61.4%	63.8%	NA	NA	NA	NA

*Other: Includes any other race or unspecified.

ASTHMA DEFINITION:

Patients with asthma were identified using 1 inpatient or ≥ 2 non-ancillary outpatient claims (at least 30 days apart) with a diagnosis code of asthma during the index period. The earliest date of asthma diagnosis was considered the patient's "asthma date."

SEVERE ASTHMA DEFINITION:

Among patients with asthma, those with severe asthma were identified by qualifying for the following criteria:

Step 1: Meeting the Healthcare Effectiveness Data and Information Set (HEDIS) definition for PERSISTENT ASTHMA in the year following the asthma date through:

- ≥ 1 inpatient admission or emergency room (ER) visit with a principal diagnosis of asthma

OR

- ≥ 4 asthma medication dispensing events, with an event defined as an asthma medication prescription with days of supply lasting 30 days or less, where:
 - i. Prescriptions for different asthma medications dispensed on the same day are counted separately;
 - ii. Inhalers of the same medication dispensed on the same day is equal to one dispensing event; and
 - iii. Each asthma medication injection is counted separately.
 - iv. For prescriptions >30 days, divide days of supply by 30 and round down (e.g., a prescription with 45 days' supply will be counted as 1 dispensing event; a prescription with 60 days' supply will be counted as 2 dispensing events; etc.); for prescriptions with days' supply >90 , cap at 3 distinct medication dispensing events

OR

- ≥ 4 non-rule-out outpatient office visits, inpatient admission, or ER visits on different days with an asthma diagnosis in any position and ≥ 2 asthma medication dispensing events

Step 2: Patients who meet the Global Initiative for Asthma (GINA) 4/5 criteria for severe asthma, defined as including ≥ 1 of the following in the 12 months on or after the asthma date::

- ≥ 2 claims for medium-to-high-dose inhaled corticosteroids (ICS) and long-acting beta-agonist (ICS/LABA) combination
- ≥ 2 claims for medium-to-high-dose ICS with additional controllers (e.g., long-acting muscarinic antagonist [LAMA] or leukotriene receptor antagonists [LTRA])

A patient's index date will be the date they first meet the definition for severe asthma.

SEVERE UNCONTROLLED ASTHMA DEFINITION:

Among patients with severe asthma, those with severe uncontrolled asthma were identified by qualifying for either of the following criteria in the 12-month period following the severe asthma date or index date:

- ≥ 1 hospitalization claim with a diagnosis of asthma as the primary discharge diagnosis with or without a corresponding claim for mechanical ventilation during the stay
- ≥ 2 ER, urgent care, or other outpatient visit claims carrying an asthma diagnosis code in any position and a claim for systemic corticosteroids within 7 days of each visit (one dose of injectable steroids or OCS with days' supply of ≥ 3 and < 28 days)

EXACERBATIONS DEFINITION:

Among patients with severe asthma, those with exacerbations were identified by qualifying for either of the following criteria in the 12-month period following the severe asthma date or index date:

- Any inpatient claim, with or without mechanical ventilation, with a diagnosis of asthma as the primary discharge diagnosis
- ≥ 1 ER visit with an asthma diagnosis in any position and a claim for systemic corticosteroids within 7 days of the visit (one dose of injectable steroids or OCS with days' supply of ≥ 3 and < 28 days)
- ≥ 1 outpatient medical claim with an asthma diagnosis in any position and a claim for systemic corticosteroids within 7 days of the visit (one dose of injectable steroids or OCS with days' supply of ≥ 3 and < 28 days)