California Asthma Dashboard – Notes About the Data

This document contains information about the data displayed on the California Asthma Dashboard.

Charts

Bars are missing on charts and values are marked as "Not available" when not enough data are available to calculate prevalence or rates.

All rates are calculated using the California Department of Finance's (CA DOF) annual population estimate in the denominator. Rates are age-adjusted based on the 2000 U.S. population age distribution according to the U.S. Census Bureau.

Abbreviations for race/ethnicity include AI (American Indian), AN (Alaskan Native), Native Hawaiian (NH), and PI (Pacific Islander). Prior to 2019, data for Asians and Pacific Islanders were combined into a single group (Asian/PI). Beginning in 2019, data were reported separately for Asians and Native Hawaiian Pacific Islanders (NHPI). Data were also reported for Multi-race individuals starting in 2019.

Asthma Prevalence

Lifetime asthma prevalence is the proportion of people in the population who have ever been diagnosed with asthma by a healthcare provider. Current asthma prevalence is the proportion of people who have ever been diagnosed with asthma by a healthcare provider *and* report that they still have asthma and/or had an episode or attack within the past 12 months.

These data are obtained from the California Health Interview Survey (CHIS). CHIS is a statewide telephone and web survey administered to 20,000 to 50,000 households each year by the UCLA Center for Health Policy Research. Adults and teens (ages 12–17 years) are asked: 1) "Has a doctor ever told you that you have asthma?", 2) "Do you still have asthma?", and 3) "During the past 12 months, have you had an episode of asthma or an asthma attack?" Asthma prevalence for children (ages 0–11 years) is obtained from their parent/guardian using the questions: 1) "Has a doctor ever told you that your child has asthma?", 2) "Does {he/she} still have asthma?", and 3) "During the past 12 months, has {he/she} had an episode of asthma or an asthma attack?" Information about CHIS data and survey methods can be found on the CHIS website.

The dashboard displays asthma prevalence as the percentage of the population with asthma. Because estimated prevalence is impacted by selection of survey respondents, a 95%

confidence interval (likely range of the true prevalence) is included for each prevalence estimate in the ADA accessible data file and asthma prevalence data analysis files.

Because of small numbers of survey responses at the county-level, asthma prevalence data are combined for two-year periods (as recommended by CHIS). In addition, some counties with small populations are grouped together for analysis of prevalence data:

- Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne counties are grouped
- Colusa, Glenn, and Tehama counties are grouped
- Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, and Trinity counties are grouped

Asthma ED visits, hospitalizations, and insurers

The dashboard displays asthma emergency department (ED) visit and hospitalization rates (number per 10,000 residents) and insurers (expected sources of payment). Counts of ED visits and hospitalizations are included in the ADA accessible data file, as well as data analysis files for ED visits and hospitalizations. ED visits include those that result in a hospital admission.

Data are from Emergency Department and Patient Hospital Discharge Databases provided by the California Department of Health Care Access and Information (HCAI). These databases contain information for each patient admitted to an ED or discharged from a licensed acute care hospital. Numbers represent ED visits and hospitalizations, rather than persons. For example, one person hospitalized for asthma three times will count as three hospitalizations. If a person visits the ED for an asthma episode or attack and is admitted to the hospital, they will count as both an ED visit and a hospitalization.

Asthma ED visits and hospitalizations are identified by principal diagnosis codes (before October 1, 2015: ICD9-CM code 493; October 1, 2015 and after: ICD10-CM code J45). Due to the transition from ICD9-CM to ICD10-CM coding on October 1, 2015, rates of asthma ED visits and hospitalizations should not be compared between 2015 (or earlier) and 2016 (or later).

Rates are calculated using yearly population estimates from CA DOF. All rates are age-adjusted to the 2000 U.S. standard population (U.S. Census Bureau).

Insurers correspond to sources from which hospitals expect to receive payment for charges incurred from asthma ED visits hospitalizations or. This measure is presented for all ages. Sources of payment are grouped into the following four categories: 1) Medicare = Medicare (including HMO/PPO), 2) Medi-Cal = Medi-Cal (including HMO/PPO), 3) Private Insurance = private insurance company (e.g., HMO, PPO, Blue Cross/Blue Shield), and 4) Other = workers' compensation, county indigent program, charity care, self-pay, other governmental sources, etc.

Asthma deaths

Asthma deaths are presented as rates (number of deaths per million residents). Counts of asthma deaths are included in the ADA accessible data file, as well as the asthma deaths data analysis file. Because asthma deaths are relatively rare events, data are combined for three-year periods. Asthma death data are from the California Death Statistical Master Files, which contain information collected from death certificates. These data are provided by the California Department of Public Health, Center for Health Statistics. For analysis, we selected all deaths for which asthma was coded as the underlying cause of death (ICD10-CM code J45 or J46). Rates are calculated using yearly population estimates from CA DOF and are age-adjusted to the 2000 U.S. standard population (U.S. Census Bureau).

Suppressed Data

CHIS prevalence estimates are suppressed, or withheld, when the relative standard error (standard error divided by estimate) is 0.5 or greater. On the dashboard, bars are missing from charts and values are marked as "Not available" when data are suppressed. In the ADA accessible data file, suppressed estimates and their associated 95% confidence intervals are marked as “Not available.” In the asthma prevalence data analysis files, suppressed estimates and their associated 95% confidence intervals are shown as blank.

For asthma ED visits, hospitalizations, and deaths, counts of 1–5, or counts of 1-10 for subpopulation analyses, are suppressed for privacy in accordance with the California Department of Health Care Services Data De-identification Guidelines. Rates based on fewer than 12 events are considered statistically unreliable and are also suppressed. On the dashboard, bars are missing from charts and values are marked as "Not available" when data are suppressed. Suppressed counts are marked as “≤ 5” or “< 11” and suppressed rates are marked as “Not available” in the ADA accessible data file. In the ED visit, hospitalization, and death data analysis files, suppressed counts and rates are shown as blank.

Race/Ethnicity Categories

Race/ethnicity groups for which asthma data are presented include Non-Hispanic American Indian/Alaskan Native (AI/AN), Non-Hispanic Asian/Pacific Islander (Asian/PI), Non-Hispanic Black, Hispanic, and Non-Hispanic White. Data are only presented by race/ethnicity for ED visits and hospitalizations because numbers are too small for other measures. In 2019, HCAI began reporting data separately for Asians and Native Hawaiian Pacific Islanders (NHPI), as well as reporting data for individuals identifying as Multi-race.

For more information

Please contact california.breathing@cdph.ca.gov.