



Emergency Department Visits with a Chief Complaint of Asthma, Ages 0-17

Description: Number and proportion of Emergency Department (ED) visits with chief complaints attributed to the asthma sub-syndrome¹ in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). Chief complaints were reported to ESSENCE from all 45 acute care hospitals in Maryland and two freestanding emergency medical facilities. The asthma sub-syndrome includes chief complaints that: contain any word that begins with “asthm*”² OR contain the word “bronchasthma” OR contain any two of the following three words – “reactive”, “airway”, or “disease”.

Ages: Includes 0 to 17 year olds.

Year(s) of Data Included in Proportion:

Numerator (Number of ED Visits with a Chief Complaint of Asthma in Zip Code): 07/01/2009 – 12/31/2011
Denominator (Total Number of ESSENCE ED Visits in Zip Code): 07/01/2009 – 12/31/2011

Resident Allocation: Includes asthma sub-syndrome chief complaints occurring in patients with a Maryland zip code at the 47 EDs in Maryland.

Data Suppression: Zip codes with a population less than 5,000 are suppressed.

Limitations: ESSENCE chief complaints are recorded by an individual who speaks with the patient upon registration at the ED. It may differ from the chief complaint that appears in the provider’s medical record note. Chief complaints are not diagnoses. Chief complaints represent the way the patient expresses their medical problem when they arrive at the ED. The diagnosis that is causing the patient’s complaints may differ from the diagnosis that might be inferred from the chief complaint. Asthmatic patients may be missed that have chief complaints of dyspnea (trouble breathing), wheezing, respiratory failure, or other descriptions of breathing difficulty not included in the ESSENCE asthma sub-syndrome. The procedure for recording chief complaints may vary across EDs.

Data Interpretation: Numbers and proportions are not suitable for comparing the relative health of zip codes to each other or to the county or State from the perspective of asthma. For example, a low proportion could be due to a low degree of asthma or to a high degree of asthma with a high degree of ED visits in general (which would make a low asthma proportion despite a high degree of asthma). Therefore, no valid conclusions can be made about the health of a zip code with respect to asthma from this data. However, these proportions are suitable for comparing ED Visits with a Chief Complaint of Asthma to the Congestive Heart Failure and Diabetes metrics to determine which of these three metrics accounts for the greatest proportion of those ED visits WITHIN the zip code being reported.

Data Sources: Data is from all 45 acute care hospitals in Maryland and two freestanding emergency medical facilities.

Data Reference: ESSENCE, Office of Preparedness & Response, Maryland Department of Health and Mental Hygiene.

- ¹ See the Early Notification of Community-based Epidemics (ESSENCE) data dictionary for more information on syndrome and sub-syndrome query information.
- ² The query symbol * is a wild card search – for example, the search “asthm*” will bring up any word that starts with “asthm”, such as “asthma” and “asthmatic”.