








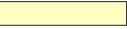


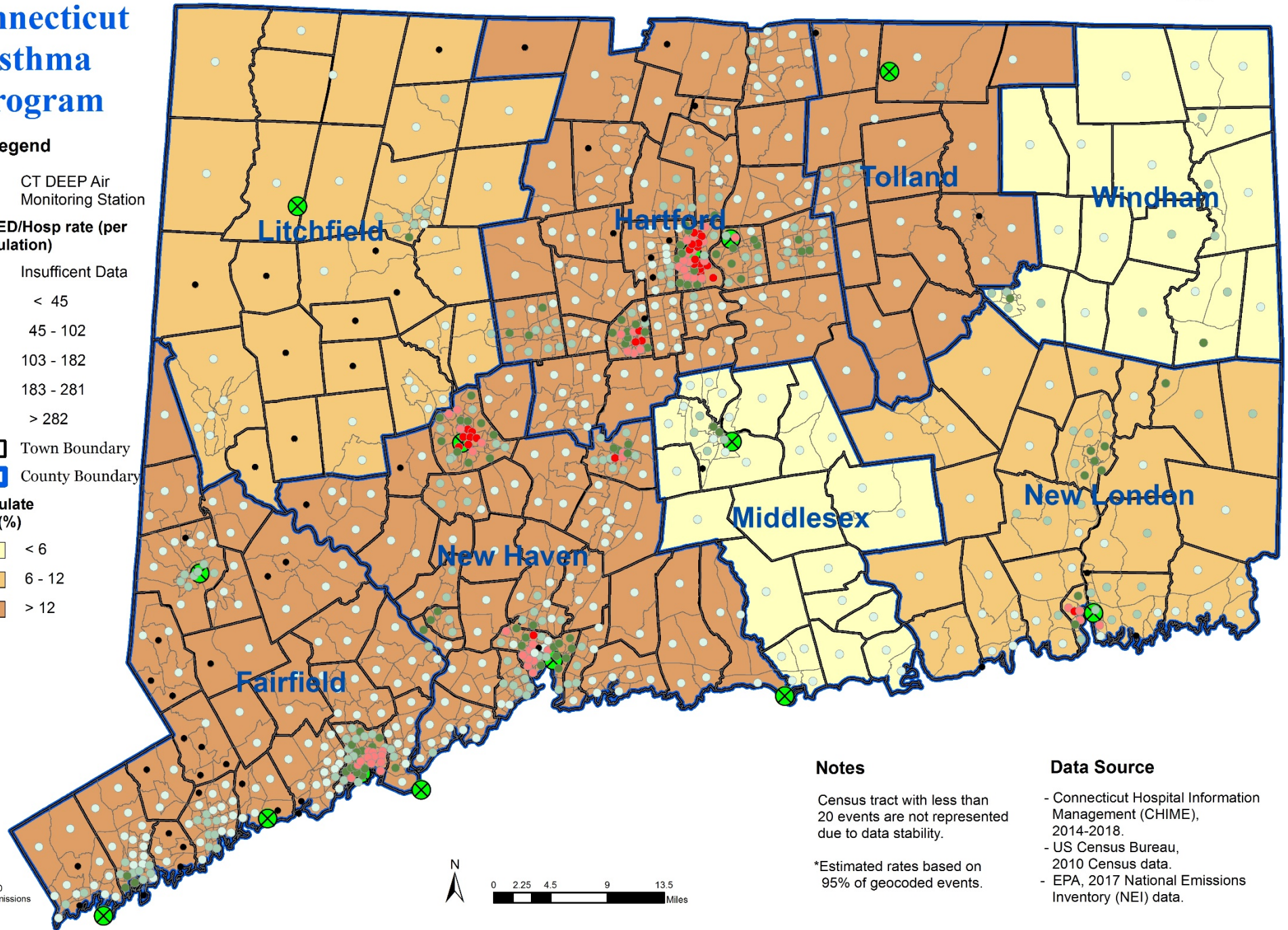


Combined Emergency Department and Hospitalization Rates* of Asthma as Primary Diagnosis, per Census Tract and County Particulate Matter 10 μ , Connecticut 2014-2018

Connecticut Asthma Program

Legend

-  CT DEEP Air Monitoring Station
- Combined ED/Hosp rate (per 10,000 population)**
-  Insufficient Data
-  < 45
-  45 - 102
-  103 - 182
-  183 - 281
-  > 282
-  Town Boundary
-  County Boundary
- 2017 Particulate Matter 10 μ (%)**
-  < 6
-  6 - 12
-  > 12



Notes

Census tract with less than 20 events are not represented due to data stability.

*Estimated rates based on 95% of geocoded events.

Data Source

- Connecticut Hospital Information Management (CHIME), 2014-2018.
- US Census Bureau, 2010 Census data.
- EPA, 2017 National Emissions Inventory (NEI) data.

Map Description

This map presents the state of Connecticut's five-year combined emergency department and hospitalization rates of asthma as primary diagnosis at the census tract layer, overlaid with the county layer featuring a one-year pollution level as a percentage from the total for the specific pollutant, in this case, with coarse particulate matter size 10 micrometers (PM₁₀). Sources PM₁₀ include both industrial and man-made sources such as rock crushing, airborne dust from construction sites and roads, wood smoke and natural sources such as pollen. Census tracts with less than 15 events do not have a rate calculation due to data stability.

Major Findings

Background: The towns of Bridgeport, New Haven, Stamford, Hartford and Waterbury are the top five towns with high density population during 2014-2018. The overall statewide age-adjusted emergency department visit/hospitalization rate during 2014-2018 was 69.8 per 10,000 population.

Coarse particulate matter can also contain microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems and are known to trigger asthma episodes. According to the Environmental Protection Agency (EPA), some particles less than 10 micrometers in diameter can get deep into the lungs and some may even enter the bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM_{2.5}, pose the greatest risk to health. More information on PM can be found on the [EPA website](#).

Residents from Hartford, New Haven and Fairfield counties have used hospital emergency department services or have been hospitalized at a greater rate than other counties. Within Hartford County the towns of Harford, East Hartford and New Britain, in New Haven County the towns of Waterbury, Meriden and New Haven, in Fairfield County the city of Bridgeport and in New London County the city of New London have several census tracts showing three -fold or more of that of the state combined asthma rate.

The 2017 EPA's National Emissions inventory shows Fairfield, New Haven, Hartford and Tolland as the areas emitting 12% or more of the total pollution of PM₁₀, followed by Litchfield and New London counties emitting between 6-12% and Middlesex and Windham counties as areas emitting less than 6%

Three the four counties with the greatest PM₁₀ emission rate include census tracts with the highest combined asthma rate.

Produced by the Connecticut Department of Public in collaboration with the Connecticut Department of Energy and Environmental Protection.