



# School Based Pediatric Asthma Surveillance in Massachusetts

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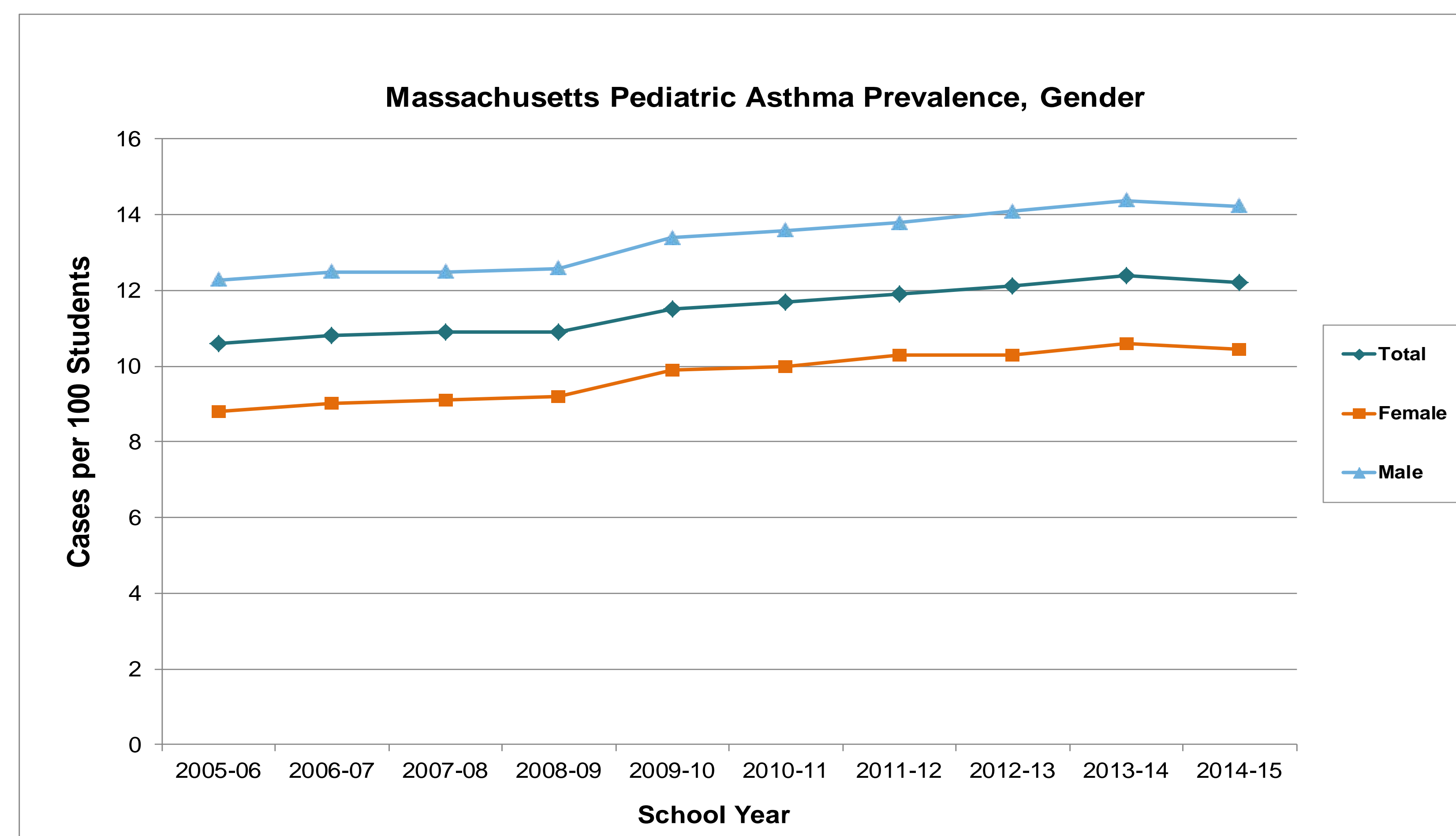


## Abstract

Asthma remains one of the most common chronic diseases among children in the United States today. Surveillance is limited to national and state estimates which can vary over time and by population (CDC/NCHS, National Health Interview Survey, 2012). It is estimated that anywhere from 14% to 50% of children with asthma remain undiagnosed.

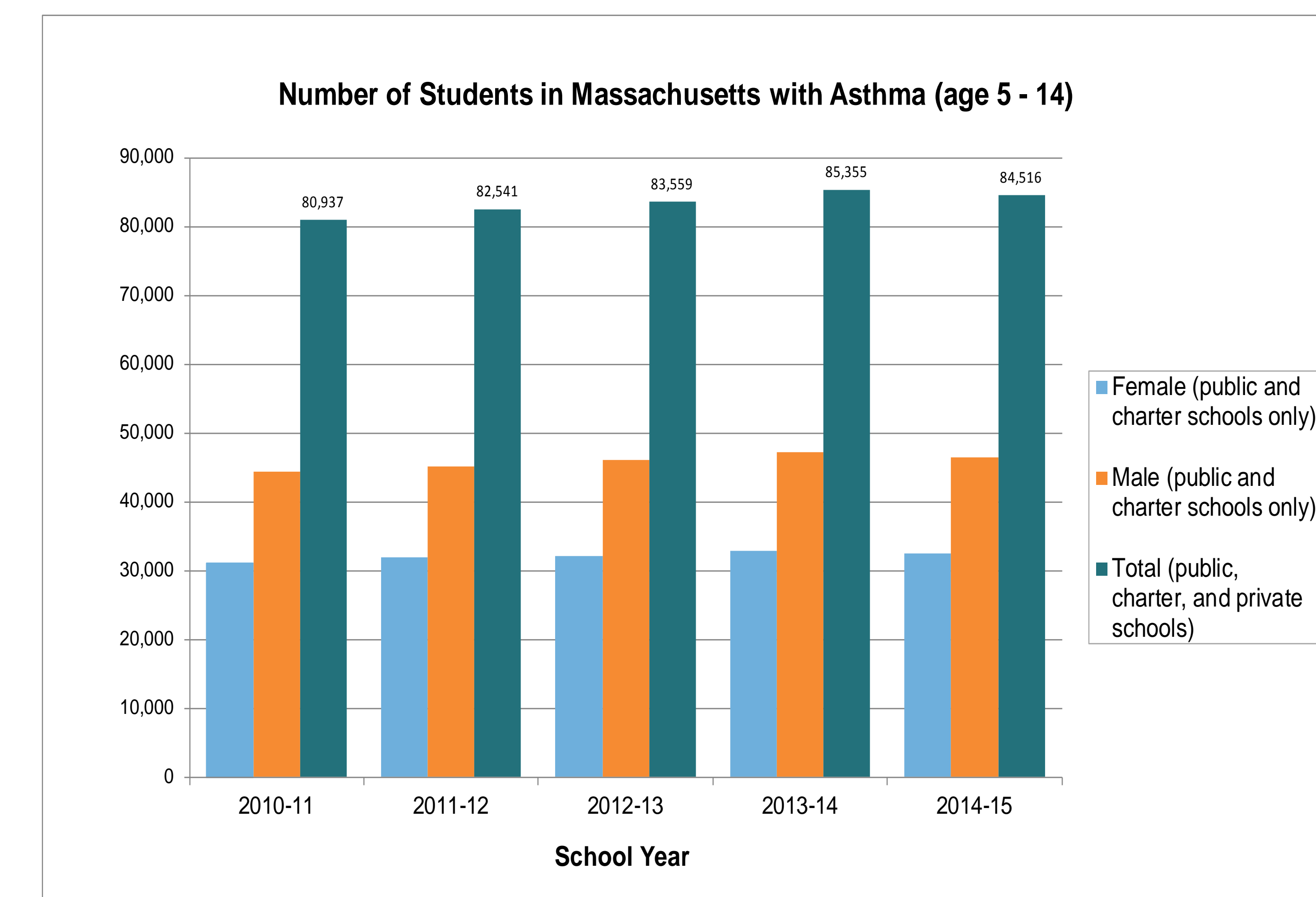
The Massachusetts Department of Public Health's Bureau of Environmental Health (MDPH/BEH) has been conducting a successful and comprehensive statewide school-based asthma surveillance program since 2002. Partnering with school nurses throughout the state, we request aggregate information annually via a one-page survey. The survey is distributed to all public, private, charter and virtual schools in Massachusetts (n=1800). Variables collected include number of students with asthma by gender, grade (K-8), race/ethnicity and community of residence. Therefore, we can estimate prevalence by school and community.

## Pediatric Asthma Trends 2005-2015

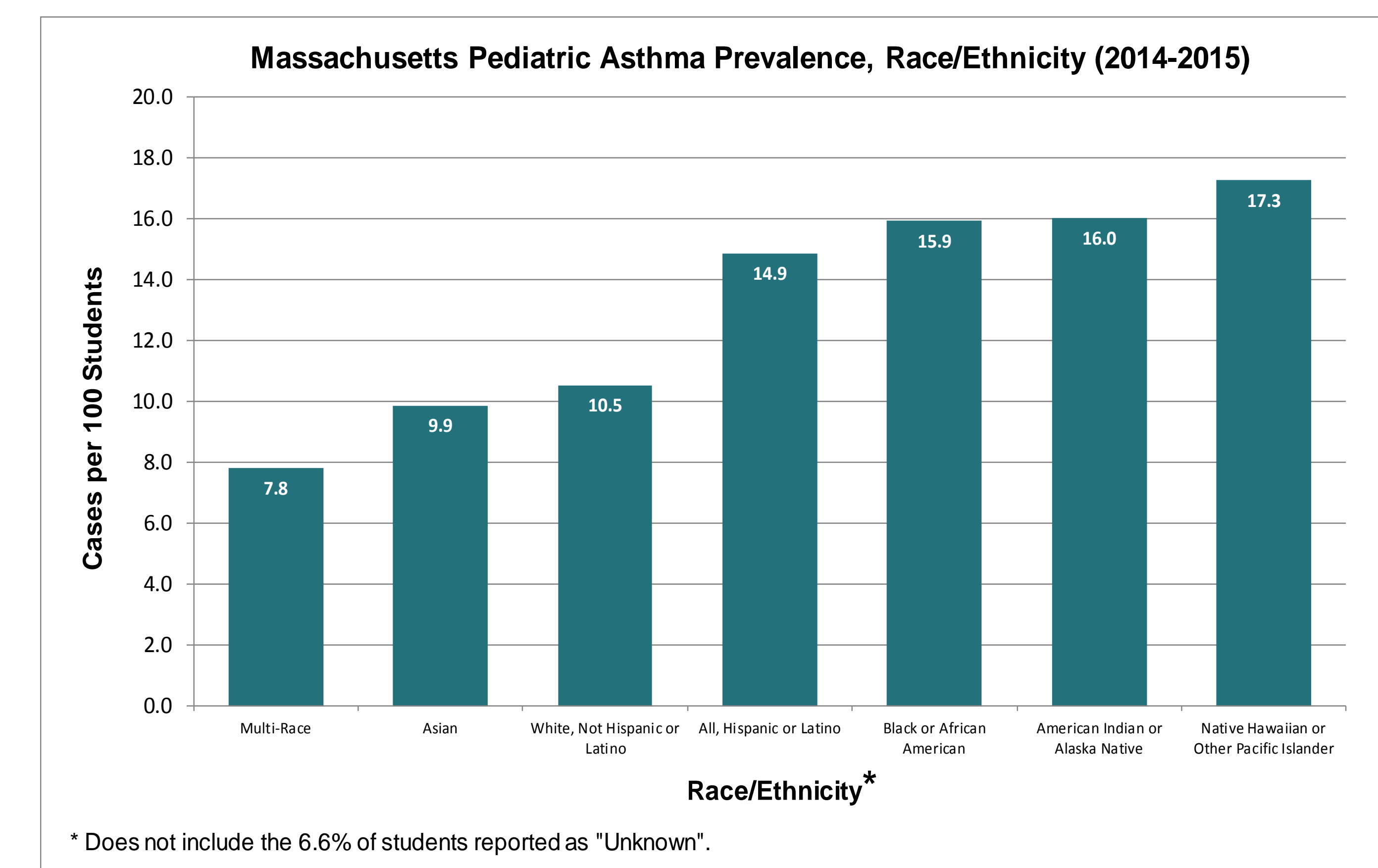
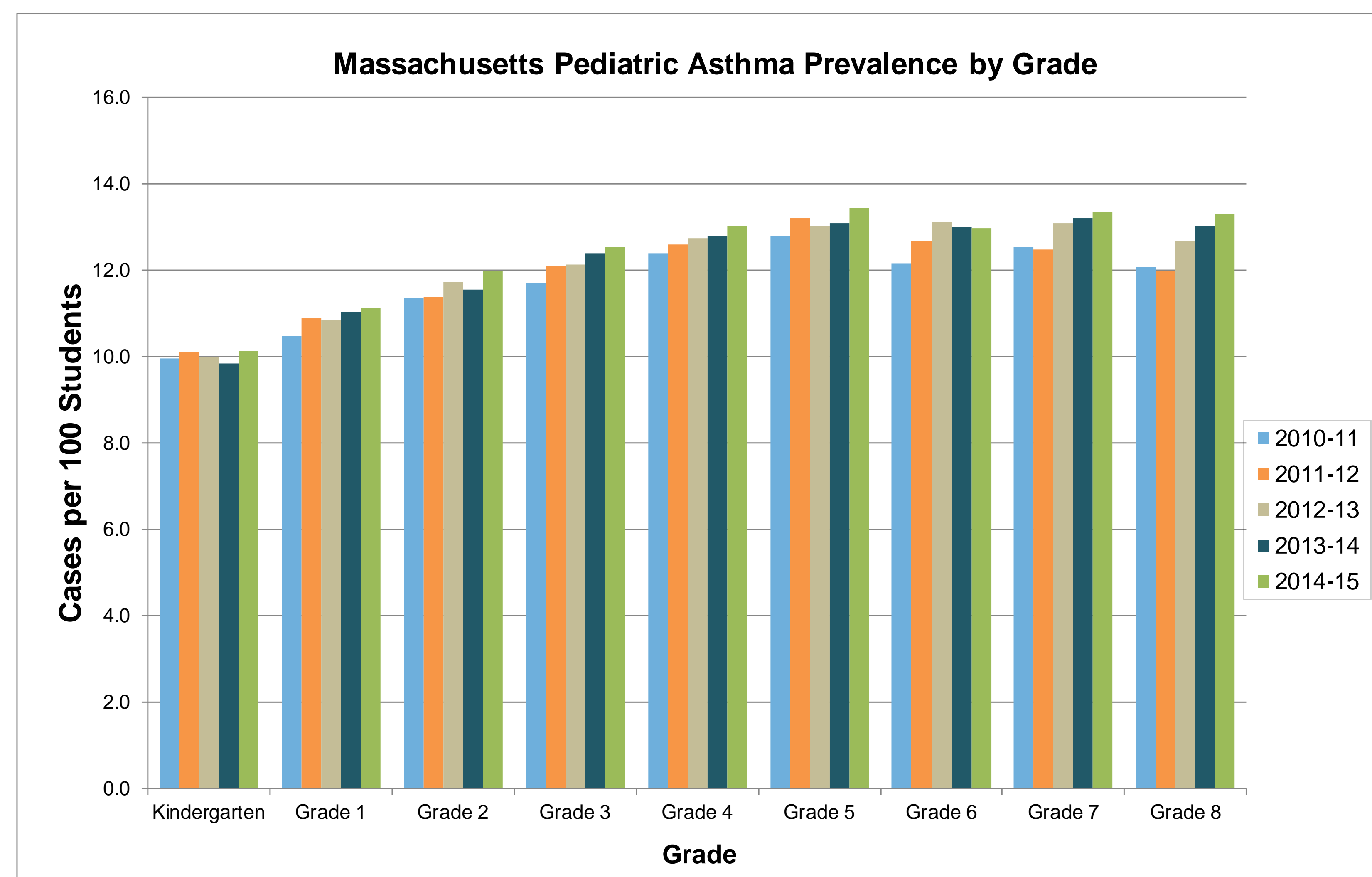
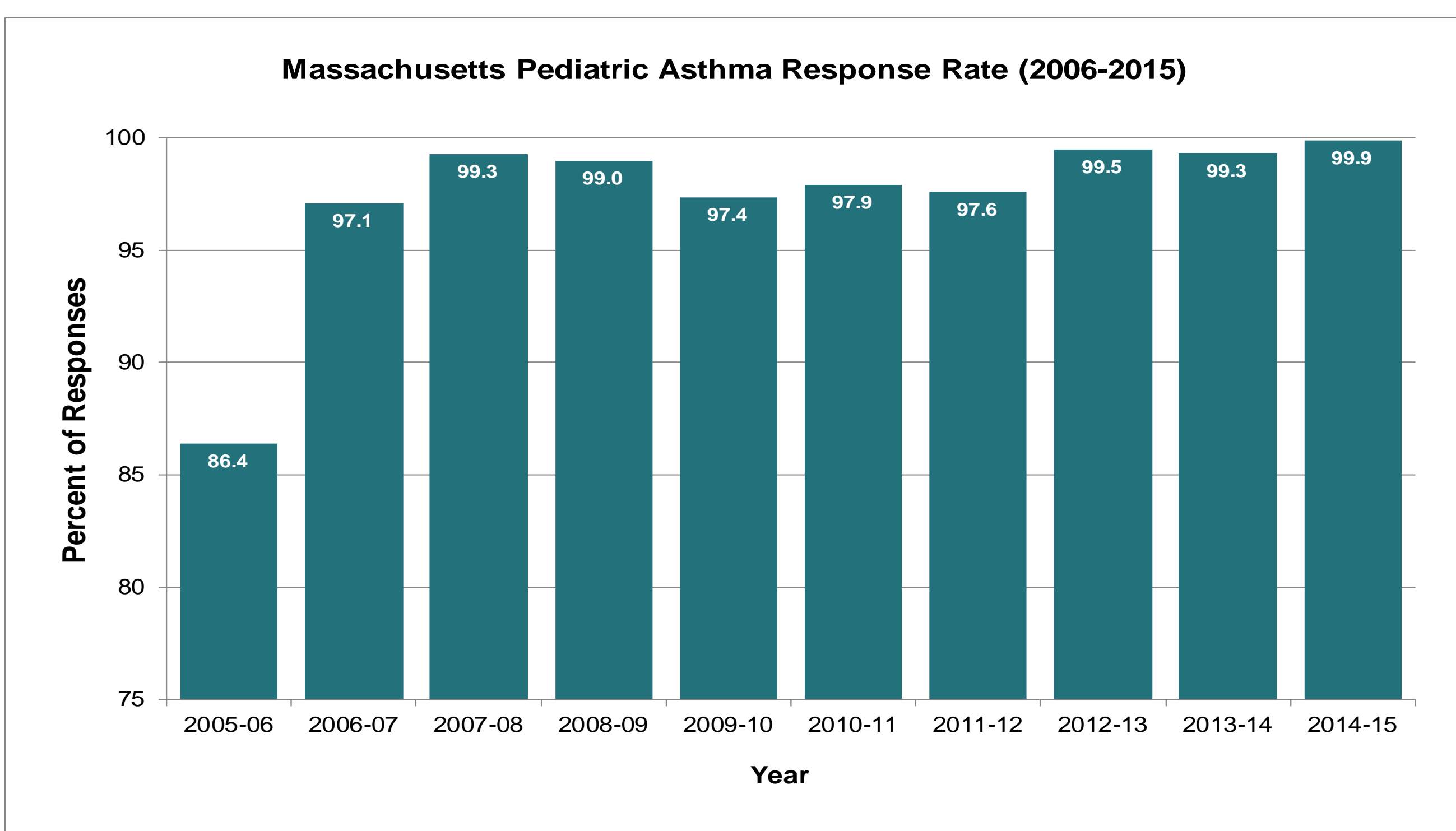


Now entering the 15<sup>th</sup> year, the program has a near 100% survey response rate and reveals a statewide asthma prevalence of 12.4%. Approximately 85,000 students in Massachusetts carry the diagnosis. Trends over the last 10 years of data collection indicate asthma to be > among males than females for this age group (~5-14).

## Discussion



School-based pediatric asthma surveillance demonstrates the important role school nurses play in surveillance. The feasibility of using school health records as a secondary data source is highlighted as a reliable, aggregate, community-based data source.



\* Does not include the 6.6% of students reported as "Unknown".