

Anaphylaxis and Epinephrine Utilization in North Carolina Schools

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STANSBURY ELEMENTARY SCHOOL

3050

GRANITE SCHOOL DISTRICT



Common Signs of Anaphylaxis

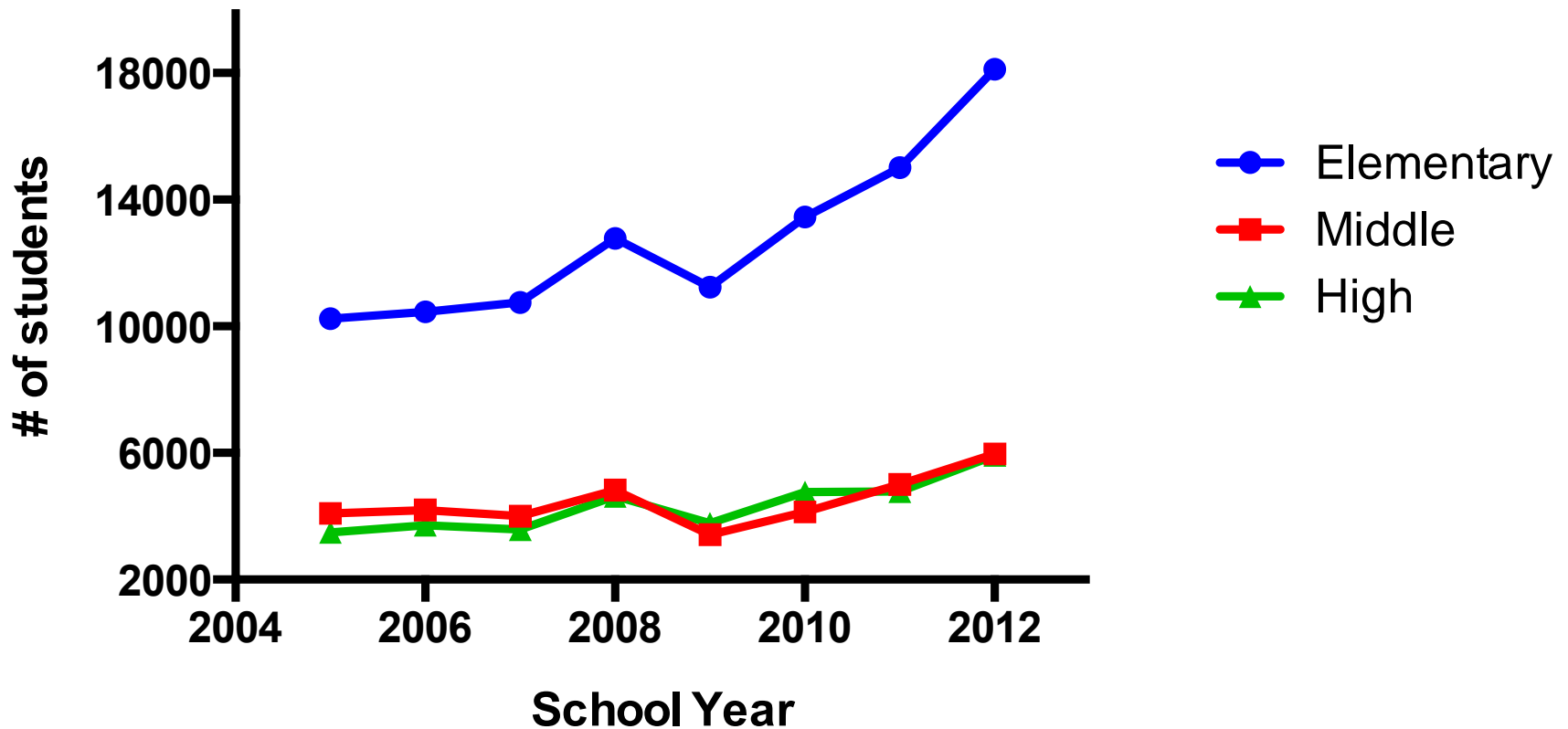
- Hives/itchy skin
- Swelling of the throat, lips, tongue, or around the eyes
- Difficulty breathing or swallowing



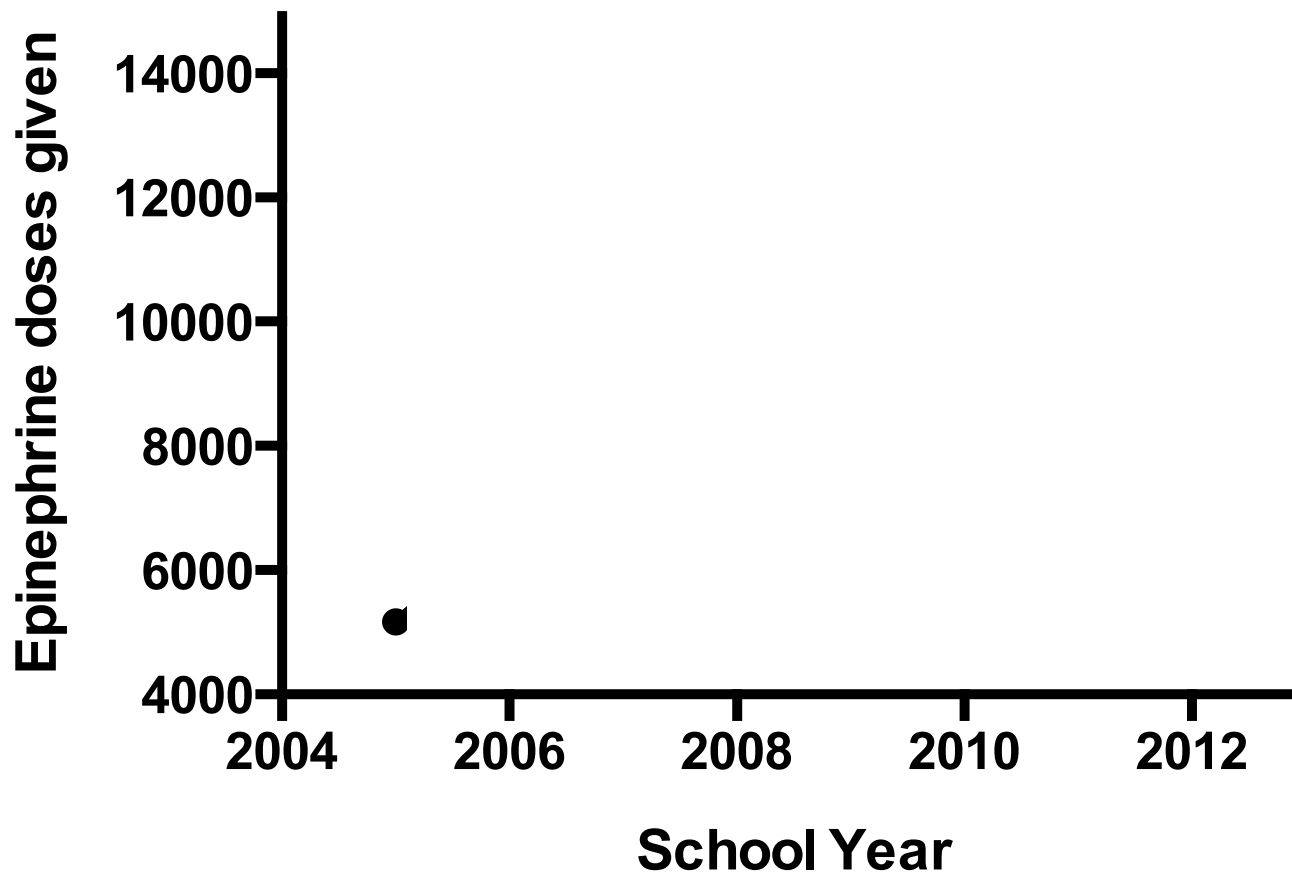
Key Facts

- Food allergies affect an estimated 4-6% of U.S. children.^{1,2}
- Among these, 16-18% experience a reaction at school.^{3,4}
- Approximately 25% of individuals treated with epinephrine at school have no prior diagnosis.⁵
- Delayed administration of epinephrine is associated with increased mortality.⁶
- On average there are 210 cases of severe anaphylaxis per year in North Carolina Schools.⁷

Prevalence of Severe Allergies in North Carolina Schools

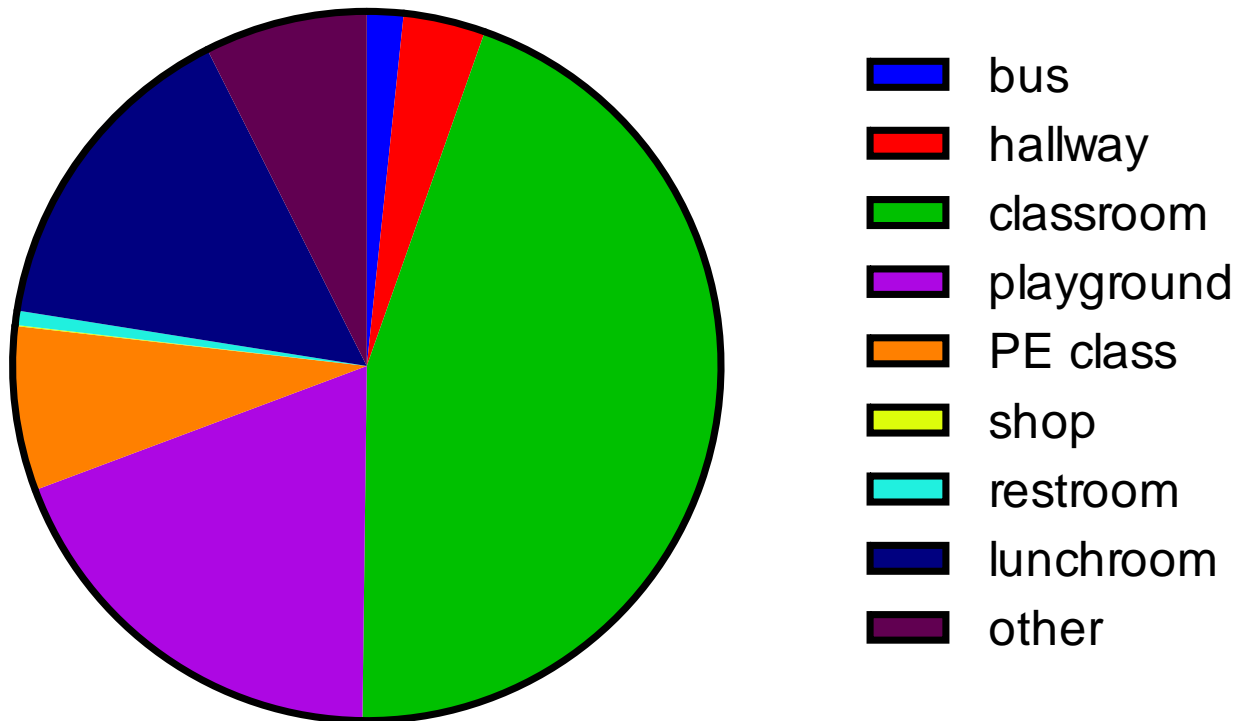


Epinephrine Administration in North Carolina Schools



Source: Annual Report of School Health Services in NC Public Schools, 2004-2012
<http://www.ncdhhs.gov/dph/wch/stats>

Location of Anaphylaxis Occurring in North Carolina Schools*



Total=1681

***events reported from 2004-2012**

Amarria Johnson



School Access to Emergency Epinephrine Act

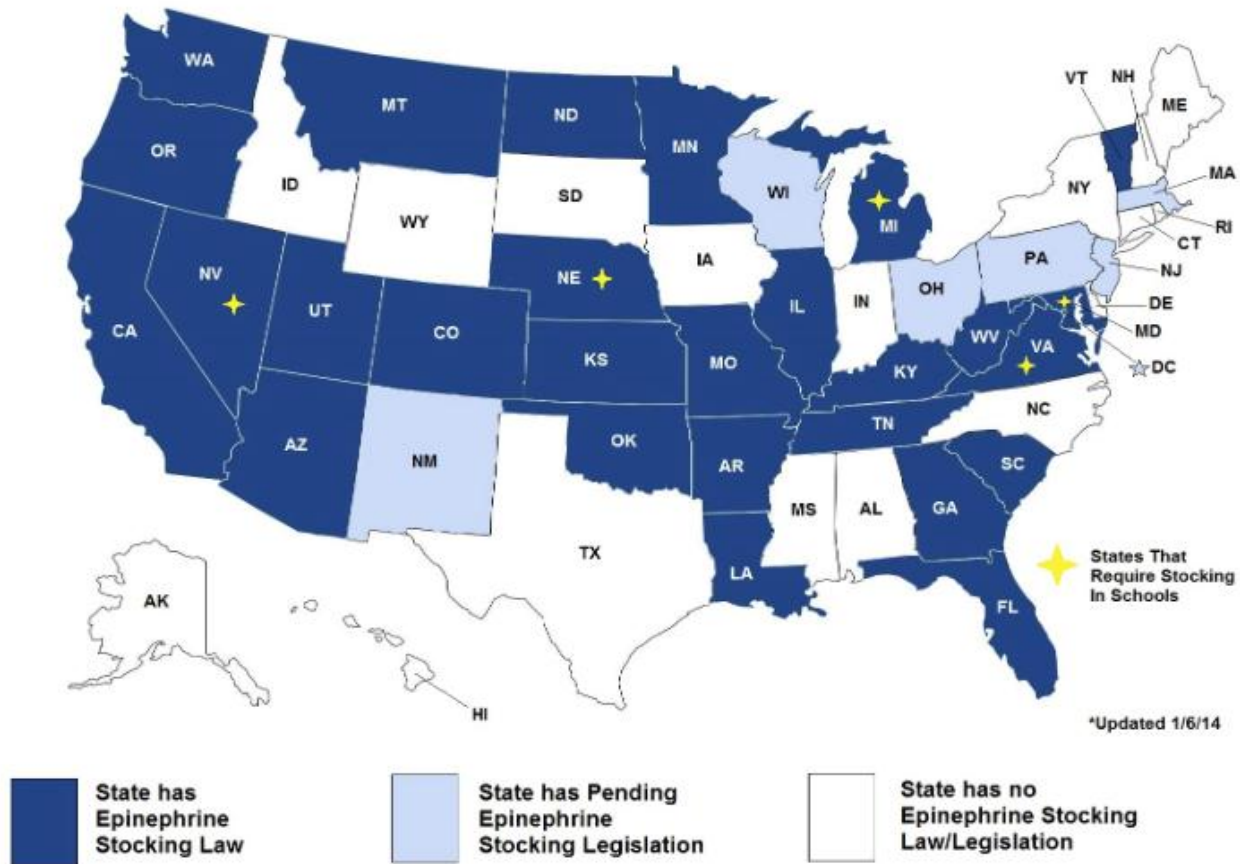


- November 2013
- Gives funding preference to states for federal asthma treatment grants if they:
 - allow self-administration of asthma and anaphylaxis medication.
 - make a certification concerning Good Samaritan protections.

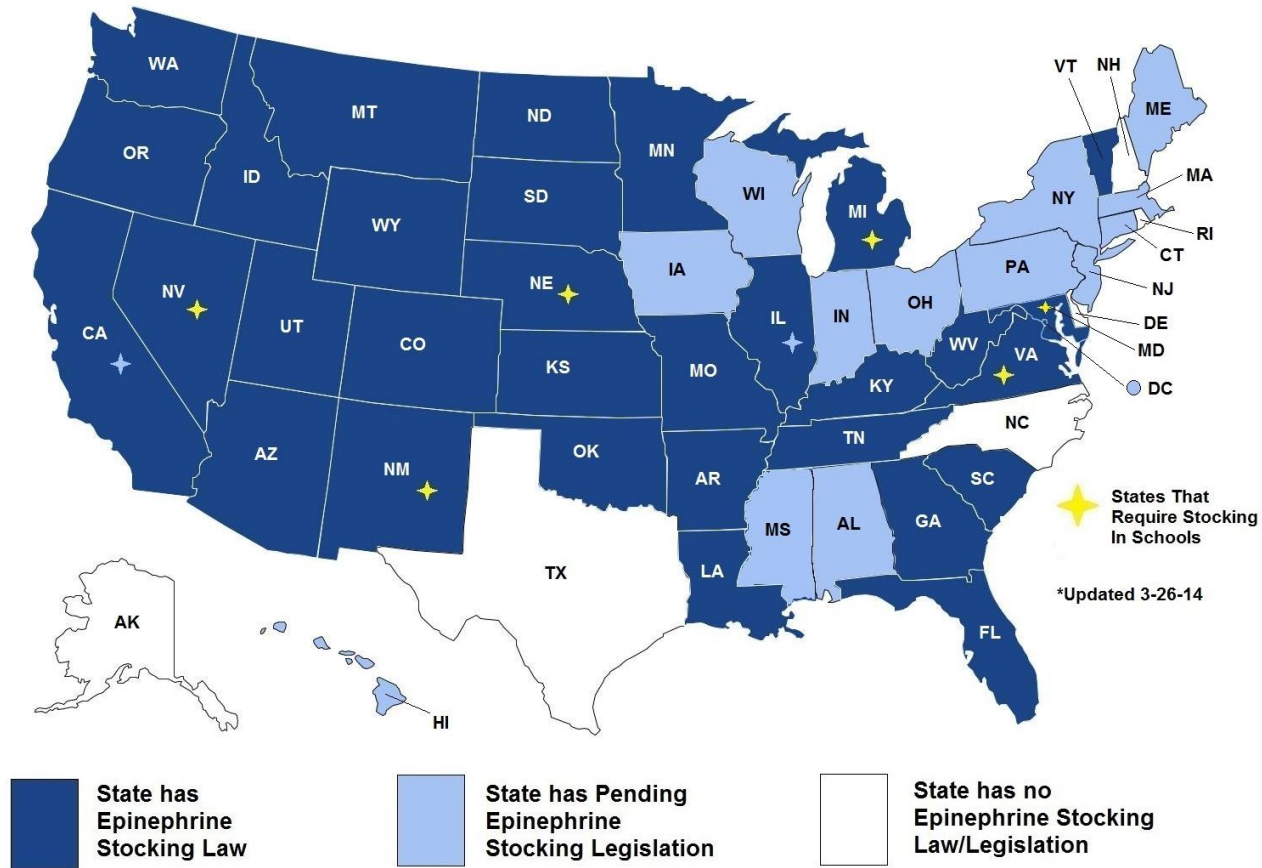
School Access to Emergency Epinephrine Act

- Requires elementary and secondary schools in these states to:
 1. maintain an emergency supply of epinephrine (EpiPens).
 2. permit trained personnel of the school to administer epinephrine.
 3. develop a plan for ensuring trained personnel are available to administer epinephrine during all hours of the school day.

Which States Stock Epinephrine in Schools?



Which States Stock Epinephrine in Schools?



References

1. Branum, A.M. and S.L. Lukacs, *Food allergy among U.S. children: trends in prevalence and hospitalizations*. NCHS Data Brief, 2008(10): p. 1-8.
2. Liu, A.H., et al., *National prevalence and risk factors for food allergy and relationship to asthma: results from the National Health and Nutrition Examination Survey 2005-2006*. J Allergy Clin Immunol, 2010. **126**(4): p. 798-806 e13.
3. Nowak-Wegrzyn, A., M.K. Conover-Walker, and R.A. Wood, *Food-allergic reactions in schools and preschools*. Arch Pediatr Adolesc Med, 2001. **155**(7): p. 790-5.
4. Sicherer, S.H., et al., *The US Peanut and Tree Nut Allergy Registry: characteristics of reactions in schools and day care*. J Pediatr, 2001. **138**(4): p. 560-5.
5. McIntyre, C.L., et al., *Administration of epinephrine for life-threatening allergic reactions in school settings*. Pediatrics, 2005. **116**(5): p. 1134-40.
6. Sampson, H.A., *Fatal food-induced anaphylaxis*. Allergy, 1998. **53**(46 Suppl): p. 125-30.
7. Annual Report of School Health Services in North Carolina Public Schools, 2004-2012, <http://www.ncdhhs.gov/dph/wch/stats>
8. Asthma and Allergy Foundation of America, <http://cqrcengage.com/aafa/epinephrine>