

Allergies & Child Care Facilities

Do mandatory allergy policies in childcare facilities reduce allergic reactions?

Allergic reactions can be life-threatening.

Allergic reactions to foods, insect stings, medications, or other substances (e.g., latex) can range from acute (e.g., eye/skin irritation) to life-threatening (e.g., anaphylaxis; [Dribin 2022](#)).

- Anaphylaxis can damage or impair multiple critical organs (e.g. lungs, heart, brain, etc.; [DHSS 2014](#); [CDC 2021](#)).
- 1-in-12 children have a food allergy, and 25% of students that have anaphylactic reactions in school have no prior allergy diagnosis ([Allergy & Asthma Network n.d.](#)).

Muscular injection of epinephrine is nearly 100% effective at lessening an allergic reaction and can be self-administered or given by a non-medical professional. Immediate medical follow-up is recommended to ensure allergic reactions are cleared, and may require additional short-term treatments or supplemental oxygen as prescribed ([Campbell 2022](#)).

Roughly 1-in-50 adults have reported an anaphylactic reaction at some point in their lives. Between 3-6% of children have had



Research Highlights

Approximately 1-in-20 children have life-threatening allergic reactions that can lead to hospitalization.

Schools and hospitals are not required to report most allergic reactions to state or federal sources.

Most states regulate allergy planning in school districts, not childcare facilities.

significant reactions that led to hospitalizations, often worsened by delayed administration of epinephrine ([Yu 2018](#)).

- Long-term effects from delayed anaphylactic treatment can include brain damage, organ failure, trauma-induced mental health disorders, and death ([Prince 2018](#); [Mangold 2018](#); [Mt. Sinai Hospital 2021](#)).

Allergic reactions are not tracked in school-age children.

There is no publicly available reporting mechanism in MO for anaphylactic reactions (e.g. frequency, where they occur).

- In 2009, out of 860,000 students' medical records in MO, roughly 1-in-97 students had a food allergy, 1-in-260 students had an insect allergy, and 1-in-1,300 students had a latex allergy ([DHSS n.d.](#)). The severity of these allergies and treatment protocols were not recorded.

No federal agency appears to collect anaphylaxis data apart from reactions to some drugs or vaccines that lead to medical interventions.

Table 1. School or childcare facility allergy policies in MO (RSMo 167.208, RSMo 167.627, RSMo 167.621; RSMo 167.630).

Policy	MO law for schools	MO law for childcare facilities
maintaining up to date health records for children (e.g. NE DHHS 2013)		
creating food allergy plans specific to children (e.g. IA HHS 2023)	X	
developing food service plans that are safe for all children (e.g. KS DHE 2020)		
posting food allergies for students (e.g. OK HS 2022)		
carrying allergy rescue epinephrine injectors without prescription specific to child (e.g. AR DH 2016)	X	X
training staff to recognize allergic reactions and/or give medication (e.g. TN Public Chapter 805)		
establishing emergency services protocols (IL 102-0413 2021).	X	
getting parental permission for epinephrine & contact protocol (e.g. KY Child Care Standards 2022).	X	
allowing students to carry and self-administer epinephrine injectors (all states)	X	N/A

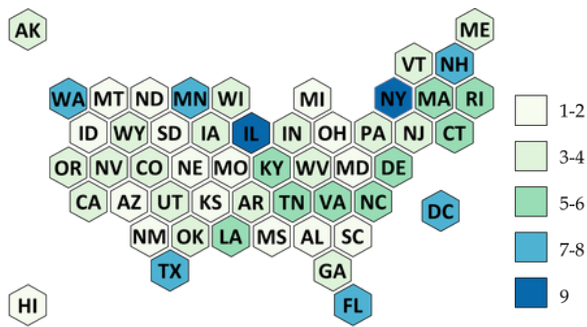


Figure 1. States with childcare facility allergy policies. States with more preventative allergy policies (Table 1) are filled with darker blue shades. Data from [Asthma & Allergy Foundation of America](#).

- 36% of confirmed anaphylactic reactions in a study of 1,000 U.S. adults resulted in patients going to the hospital ([Wood 2014](#)).
- Of allergic reactions resulting in hospitalization, roughly 30-50% meeting the criteria of anaphylaxis are incorrectly recorded as “acute allergic reactions,” and are difficult to account for in databases ([Sclar 2014](#)).

Most state-mandated allergy protocols are specific to schools.

In school or childcare settings, certain strategies can reduce the risk of allergic reactions, including cleaning and sanitizing of high-touch surfaces routinely, mandatory hand washing for students and/or staff, allergen free or safe zones, or planning ahead for events and

emergencies surrounding food such as staff emergency training ([DHSS 2014](#)).

School and Childcare Allergy Policies

1-in-3 schools in the U.S. provide some training for school nurses or staff to recognize anaphylactic reactions.

- In a study of U.S. schools, federal and state school allergy policies resulted in 15-55% of nurses or staff being authorized to administer epinephrine ([White 2016](#)).
- 1 MO law is directed toward childcare facilities (Figure 1 and Table 1).

Elijah’s Law

NY and IL have passed ‘Elijah’s Law,’ a comprehensive law which requires state health departments to work with **schools** and **childcare facilities** to create plans for epinephrine administration, emergency protocols, exposure reduction, training of at least one staff member, and distribution of these plans to the public ([NY OCFS 2023](#); [IL 102-0413 2021](#)).

- Information on the effectiveness of these laws on reducing anaphylactic reactions or hospitalizations is not readily available.
- Studies in public settings show that when stock epinephrine injectors are available, they are used in 20-77% of anaphylactic reactions ([Waserman 2021](#)).

MOST Policy Initiative is a 501(c)3 nonprofit organization that provides nonpartisan research information to members of the Missouri General Assembly upon request. This Science Note is intended for informational purposes and does not indicate support or opposition to a particular bill or policy approach. A full list of references used in this Science Note may be found at <https://mostpolicyinitiative.org/science-note/allergies-child-care-facilities/>. Please contact info@mostpolicyinitiative.org with any questions.