

by Kelly St. John Regier



## Prepare for the worst

When it comes to allergies and asthma, is your child's school doing enough to keep kids safe?

**C**athy Owens knows just how frightening it can be when a child has a life-threatening allergic reaction at school.

A school nurse in Murrieta, Owens was at work in 1997 when a student named Corey came into her office in distress. While she knew he had asthma, it wasn't an asthma attack. Barely breathing, he couldn't speak and was grasping at his neck — signs of anaphylaxis, a serious allergic reaction that can be fatal.

Owens called 911, but as school officials waited for the paramedics to arrive, Owens could tell Corey's situation was dire.

"I made a decision to use someone else's EpiPen," Owens says.

An EpiPen is a prescription epinephrine auto-injector used to treat anaphylaxis. The item was kept in the school office for another student with known allergies. Within seconds, Corey began to breathe easier, and when the ambulance arrived, he was rushed to the hospital for treatment.

Because Owens used another student's prescription medication on Corey, she violated federal law at that time. However, doctors said afterward that

Owens' actions had clearly saved his life.

"As an RN, I don't want anyone to be in that position," says Owens, who has since become a crusader for policies making epinephrine more widely available in schools.

Today, thanks in part to the efforts of Owens and others like her, California law has been changed to allow school districts to stock epinephrine auto-injectors for students who don't have their own prescribed EpiPens. In addition, a federal law signed last November by President Obama provides states with financial incentives to pass laws that allow schools to stock epinephrine. About 30 states currently do so.

However, advocates say that even though schools are allowed to stock EpiPens for students, many schools do not. And that, they say, puts students needlessly at risk.

"We believe that in order to best protect students, it's imperative to have epinephrine on hand in schools," says Tonya Winters, president of the nonprofit advocacy group Allergy & Asthma Network Mothers of Asthmatics (AANMA). "Twenty-five percent of life-threatening reactions occur in children

who haven't been diagnosed before."

About 8 percent of American children under age 18 have at least one food allergy, according to a 2010 study published in the journal *Pediatrics*. Of those with food allergies, 39 percent had a history of severe reaction and 30 percent were allergic to multiple foods.

The study showed that peanut allergy is the most common food allergy, followed by milk and shellfish.

Besides food allergies, another common reason a child might go into anaphylactic shock at school is a reaction to a bee sting.

In 2011, there were about 700 deaths from anaphylaxis across the United States in both adults and children, says AANMA's Winters, adding that the true incidence is likely higher since those kinds of deaths are sometimes categorized as respiratory failure or other associated causes. Insect stings were the most common cause of anaphylaxis, followed by food allergies and latex allergy, she says.

While anaphylaxis more often than not occurs in a child with a known allergy, in one out of four times, a potentially deadly reaction occurs when no allergy



has been previously diagnosed.

"Studies have shown that, if there's a clear exposure to an allergen, the sooner the epinephrine is given, the better the outcome," says Dr. William Berger, of Allergy & Asthma Associates in Mission Viejo. "It's a real critical issue."

In Orange County, school districts have taken a varied approach to the question of whether or not to stock epinephrine. The Saddleback Valley Unified School District stocks all its health offices with emergency EpiPens and has trained responders at each site, says Dianne Beckman, its health service specialist.

In neighboring Capistrano Valley Unified, the district does not stock additional EpiPens in its health offices beyond those specifically prescribed for children at the school site, says Julie Malone, a lead district nurse.

Owens says that, for some school districts, it has been a question of cost, training and liability that keeps them from choosing to stock EpiPens in their health offices.

The auto-injectors retail for about \$120 to \$140 apiece, and with a shelf

life of about 15 months, they need to be replaced annually, Owens says. But the manufacturers are currently providing up to four free epinephrine auto-injectors annually to schools, Winters notes.

As the parent of a third-grade girl with asthma, Stephanie Ireys can't help but worry about her daughter, Pixie, when she's at school.

Ireys knows the health aides at Pixie's elementary school, who keep her prescription rescue inhaler in the office to use if she has trouble breathing. She meets every year with Pixie's teachers, and the school has a plan to make sure her inhaler is brought on field trips.

"The nurses at her school have been wonderful," Ireys says. "Her teachers are aware that it's not something to mess with. Not being able to breathe is scary."

But, like many parents of children who suffer from severe asthma or allergies, Ireys has to live with the nagging fear that something unexpected could prevent her daughter from getting the medicine she needs in a crisis. That's why Ireys sometimes sends a back-up inhaler to school in Pixie's backpack, even though doing

so violates school policy.

"I admit, I've done it myself. I've hidden an inhaler in her backpack, just in case," Ireys says, noting that she gets especially worried she might need to use it on the way to or home from school.

Under California law, children are allowed to possess and self-administer asthma inhalers and other lifesaving medication such as epinephrine at school. But to do so, they must have a physician's and a parent's written consent. That news comes as a surprise even to some parents of children who keep inhalers or epinephrine auto-injectors in the school nurse's office for use in emergencies.

Making the decision about whether their child is mature enough to carry their own medication – and whether circumstances might even warrant that – is just one of many dilemmas faced by families whose children suffer from asthma and allergies.

A number of studies indicate that millions of American children have some sort of food allergy, and sometimes the consequences can be deadly.

In March of 2013, for instance, a

7-year-old Virginia girl with a peanut allergy died after eating a peanut given to her by a classmate. School officials called 911, but she did not have a prescribed epinephrine injector kept at the school.

It's just that kind of frightening scenario that causes Wendy Doeding to be so vigilant about protecting her 6½-year-old daughter, Emma, when she goes to her first-grade class at Morse Elementary, in the Placentia-Yorba Linda Unified School District.

Emma has an anaphylactic allergy to eggs, peanuts and tree nuts, as well as an allergy to mustard. Doeding worked with Emma's school to develop a 504 plan, a legal document that defines her severe food allergies as a disability and outlines just how school officials will ensure her safety.

At lunchtime, Emma sits at a table where no students can have nuts, a table that has been cleaned by a custodian beforehand to make sure it is safe for her. Emma's prescription EpiPen is kept in the school office, and staff have been trained to recognize and respond to any symptoms of distress.

For her part, Doeding double-checks the ingredients of even seemingly innocuous products that her daughter could come into contact with, everything from the custodian's cleaning products to her teacher's classroom supplies.

"Did you know that tempera paints have eggs as an ingredient?" Doeding says. "You can't just assume anything. You have to check things every time."

Overall, Doeding says she has been happy with how the school accommodates Emma's needs. She advises other parents of children with allergies to view working with their school as a collaborative – not adversarial – process.

"We are a team," Doeding says. "It's not me versus them."

School officials agree that students are best protected when families work with them to develop the plans to protect children with allergies.

"We take food allergies very seriously," says Julie Malone, a lead district nurse at the Capistrano Valley Unified School District. "We know it's an issue that's definitely not going to go away any time soon."

Malone splits her time between six district schools, where about 160 students keep a prescribed EpiPen in the schools' offices. She says one of the most important things for parents of allergic children to remember is to communicate with the school nurse about their children's medical needs.

"The number one thing is, make sure you tell the school," Malone says. "Some parents will just drop off an EpiPen without explanation. We need to have a doctor's orders and have an action plan so everything is in place."

Berger, the Mission Viejo allergist, emphasizes that whenever possible, parents and schools should always take a preventive approach when managing food allergies.

"The key thing is to teach kids not to share lunches, not to take food from other kids," Berger says. "It's like teaching them not to touch a knife or a gun. The problem is that some parents who don't have children with allergies don't understand or believe it's a real issue. It can be life threatening. It's real." 