

When Law and Duty Collide

by Cathy Owens, RN, Lead Nurse, Murietta Valley High School

As the lead nurse at Murietta Valley High School in Murrieta, California, I'm pretty accustomed to the pace of life in a bustling high school and to taking quick action to help injured or seriously ill students. May 5, 1997 was shaping up to be a normal Monday, until Corey came to the health office in serious distress. Because Corey is asthmatic, he often visited my office to drop off medications or receive a treatment. But I could tell immediately that what Corey was experiencing was not an asthma attack. He was barely breathing; he couldn't speak and was grasping his neck. I quickly realized that, even though he was not known to have severe allergies, Corey was suffering from anaphylaxis.

I called 911 and informed them that a student was having an anaphylactic attack. Our school is only about eight minutes from the hospital, so when the ambulance didn't arrive immediately, I called 911 again. I was shocked to learn that the ambulance had been delayed in reaching the school. One look at Corey told me that he could not wait any longer for paramedics to arrive. Without hesitating, I reached into the medicine cabinet to retrieve another student's EpiPen auto-injector, which I immediately administered to Corey. Within seconds he began to relax and breathe more easily. When the ambulance did finally arrive, Corey was rushed to the hospital for follow-up care.

Only later at the hospital did the weight of what I had done settle in. By administering another student's prescription medication to Corey, I had violated federal law — both by dispensing a prescription medication without physician's orders, and by administering that medication to a person other than the one for whom it was prescribed. Because I acted against the law, the California Board of Nursing investigated the incident. I was relieved when the Board

commended me for my actions, rather than punishing me. Their decision affirmed what I already knew: that Corey would have died if I had not intervened to save him.

I do not at all regret the decision I made. Because of this experience, many of my school nurse colleagues and I began to realize that, without legislative changes, other school nurses could find themselves in the same position. In fact, I recently spoke with another school nurse who watched a student die while waiting for emergency treatment.

In its position statement on the use of epinephrine in the treatment of anaphylaxis, the American Academy of Allergy, Asthma and Immunology advocates that "Qualified lay personnel in positions of responsibility for public safety should be educated in the appropriate use of epinephrine and should be authorized to administer epinephrine for suspected anaphylaxis in conjunction with arrangements for complete medical management of the reaction."

We can help to ensure, in a number of ways, that nurses and other school personnel will have the authority to administer epinephrine. For example, school nurses are working for these changes in California.

State or County Legislation

The California State Assembly is considering a bill that would authorize pharmacies to furnish school districts with epinephrine auto-injectors. The bill would allow school districts to provide those auto-injectors to trained school personnel who would have the authority to provide medical aid to a person experiencing anaphylaxis.

Local School Board Policy

The Los Angeles Unified School District recently altered its policies to allow nurses to train teachers and other school personnel to treat anaphylaxis with epinephrine.

Although this policy does not authorize standing orders for epinephrine in all schools, it does provide training for teachers and other staff to recognize anaphylaxis and administer EpiPen to a student in need — a great back-up plan for schools that do not have a full-time nurse on staff.

Local Medical Associations

I worked with the Riverside County Medical Association to develop and implement a plan for standing orders of epinephrine in schools. It is now recommended that schools stock epinephrine auto-injectors for use when a student who does not have his or her own EpiPen experiences an anaphylactic reaction.

Emergency Medical Services Regulations

After Corey's incident, I learned some horrifying information: Not all emergency medical technicians (EMTs) are allowed to administer epinephrine. There is a chance that if I hadn't given Corey an EpiPen, he would have died en route to the hospital because the attending EMTs may not have been equipped with, or allowed to administer, epinephrine. This is the case in California, and 39 other states where not all EMTs are allowed to give epinephrine. The 13 states that do allow EMTs of all levels to carry and administer epinephrine are:

Connecticut	Rhode Island
Florida	Tennessee
Louisiana	Texas
Massachusetts	Washington
New York	Wisconsin
North Dakota	Wyoming
Oregon	

Similar legislation is awaiting signature by the governor of Illinois, and provisions for administration of epinephrine by EMTs are scheduled to go into effect in Maryland in January 2002. The California State

Assembly bill that would authorize standing orders for epinephrine in schools would also require the Emergency Medical Services Authority to establish training and standards in the identification of anaphylaxis and use of epinephrine for emergency medical technicians at all levels.

Beyond Regulations

In addition to supporting policy initiatives surrounding use of epinephrine, one of the other ways school nurses can help ensure the safety of allergic students is to initiate emergency action plans for dealing with anaphylactic emergencies. An emergency action plan is, ideally, a one-page document that lists the substance(s) to which a child is allergic, the symptoms of anaphylaxis and instructions for calling 911 and administer-

ing epinephrine and other medications. Emergency action plans should be developed by the school nurse or family physician in conjunction with parents. All teachers, classroom aides and other staff who work with the student should be familiar with the plan and have a copy accessible at all times (we recommend that it be kept with the EpiPen or on the student if he or she carries the EpiPen).

Even the best-trained people sometimes forget what to do in an emergency — that's why emergency action plans are so valuable. In simple, easy-to-follow steps, the emergency action plan guides the diagnosis and treatment of anaphylaxis.

Although the legislative issues surrounding administration of epinephrine may seem daunting, by working at the local and state

level, school nurses do have the power to effect change. We can each do our part to prevent tragedy by raising awareness of the dangers of severe allergies within our own community. A logical first step is to see to it that every allergic student has an emergency action plan on file, and that an epinephrine auto-injector is within easy reach of the student, a nurse or a teacher. 🏆

ABOUT THE AUTHOR

Cathy Owens, RN is the lead nurse at Murietta Valley High School in Murietta, CA. For the last six years, she has also served as the state education chair for the California Nurses' Association. In addition to positions held in several school nurse organizations, she is currently a member of the Registered School Nursing School Nurse Advisory Board. In 1996, Cathy received the School Nurse of the Year Award from the Riverside/San Bernardino School Nurses' Organization.

continued on page 14

ANAPHYLAXIS TREATMENT PROCEDURE

For Use In Public Schools for Persons WITHOUT Individual Physician Written Orders

ANAPHYLACTIC SYMPTOMS

May include any or many of the following:

Hives	Wheezing	Change of color
Itching (any part of the body)	Difficulty swallowing	Shock (pale, clammy skin)
Swelling (any part of the body)	Difficulty breathing	Red, watery eyes
Vomiting	Throat tightness	Change of voice
Abdominal cramps/diarrhea	Sense of doom	Fainting/loss of consciousness
Coughing	Dizziness	

If any of the following symptoms occur, administer EpiPen and call 911 IMMEDIATELY:

- Difficulty breathing
- Difficulty swallowing
- Fainting and/or collapse
- Convulsions

ESSENTIAL STEPS

1. Determine if anaphylaxis is present.
When in doubt, treat as an anaphylactic reaction.
2. Stay with the victim.
3. Calm and reassure the victim.
4. Administer EpiPen – seconds count!
< 2nd grade – use white label, EpiPen Jr (0.15 mg)
> 3rd grade – use yellow label, EpiPen (0.3 mg)
5. **EpiPen Administration Procedure:**
 - a. Pull off **GRAY** safety cap
 - b. Place **BLACK TIP** on **OUTER THIGH**
 - c. Push hard until you feel unit activate
 - d. Hold in place for **10 seconds**, then remove
 - e. Dispose of EpiPen appropriately
6. Remove stinger ASAP if reaction is result of a bee, wasp or other sting, after administering EpiPen.
7. Observe for signs of shock. Monitor airway and breathing. Provide CPR if necessary.
8. Follow-up medical care at Emergency Room should be obtained immediately.
9. Document incident, date and time EpiPen was administered, victim's response, additional pertinent information. Send copy to the school nurse.

KEY POINTS AND PRECAUTIONS

1. Usually occurs right after a sting, injection of a drug or medication, or ingestion of foods such as nuts, fish, or milk.
2. Have others notify the parents, school administrator and school nurse immediately.
3. Avoid moving the victim: calming reduces the distribution of the allergen in the body.
4. EpiPen acts immediately and lasts only 15-20 minutes.
Make sure 911 has been called.
5. EpiPen can be injected through clothing.
Victim may feel heart pounding; this is normal.
OSHA compliance procedure: dispose of EpiPen in red Sharps container or give to paramedics.
6. Do NOT push, pinch, squeeze or further imbed the stinger into the skin. This may cause more venom to be injected into the victim.
7. Maintain body temperature and help prevent shock. Cover victim with blanket if required to maintain body temperature.
8. A second, delayed reaction may occur.

Developed by the Los Angeles County Unified School District in conjunction with the California School Nurses Organization. May be reproduced for individual use.

Drug Updates and Legal Issues

Obese Girls Have Increased Risk for Asthma

According to a study conducted by researchers at the University of Arizona in Tuscon, and published in the May 2001 issue of the *American Journal of Respiratory and Critical Care Medicine*, girls who either are or become obese between the ages of 6 and 11 have a sevenfold increased risk of developing asthma.

Dr. Fernando Martinez and colleagues collected data on children who participated in the Tuscon Children's Respiratory Study. At the beginning of the study, the children had a mean age of 6.3 years; at the end of the study the mean age was 10.9 years. From body mass index (BMI) readings and the incidence of asthma, the researchers concluded that BMI at age 6 was not associated with the prevalence of wheezing at any age. But girls who were obese or overweight at age 11 were more likely to have wheezing at ages 11 and 13, and not at 6 or 8 years of age. This was not found to be the case in boys.

FDA-Approved Foradil for Maintenance Therapy

Novartis Pharmaceuticals has received FDA approval for formoterol fumarate inhalation powder (Foradil) for use as long-term maintenance therapy and bronchospasm prevention in adults and in children aged 5 years and older. Foradil is also indicated for the prevention of exercise-induced bronchospasm in adults and in children 12 years and older.

Foradil is administered twice a day, once in the morning and once in the evening, in asthmatics who require regular treatment with short-acting beta-2 agonists. It is not indicated for patients who require only occasional use of inhaled, short-acting beta-2 agonists.

Are School Nurses Equipped to Handle Asthmatic Students?

An article published in the December 2000 issue of the *Journal of Asthma* raised some concerns over the lack of equipment and information available to school nurses to help manage asthmatic students.

Dr. Robert Sapien of the University of New Mexico Health Sciences Center in Albuquerque, NM and Andrew Allen at Emory University in Atlanta, GA conducted a survey among 230 New Mexico-based school nurses to evaluate their preparedness to handle acute asthma emergencies.

Only one nurse in 5 reported that at least 75% of the students in the elementary, middle and high schools they served had a written asthma emergency action plan. Even more disconcertingly, 24% of the nurses did not know whether students had a plan and only about half of the school nurses "were involved in the development of the plan." 🐼