

Nebraska: Case Study and Data on the Use of Epinephrine in the School Setting

- As a result of the death of two students in 1998 in the Omaha Public Schools (OPS) from acute asthma attacks while at school, OPS developed and implemented an *Emergency Response to Life-Threatening Asthma or Systemic Allergic Reactions (Anaphylaxis) Protocol*.
- From 1998-2003, 99 students were treated in the Omaha Public School System with the school-based Protocol.
 - 24% of the cases in which an individual was treated with epinephrine in the school setting, the individuals were not known to have an allergic condition at the time of the anaphylactic event.
 - All but one student responded favorably to treatment without serious adverse events.
 - Of the 98 students who responded favorably, no adverse effects were reported during or following treatment.
- As of October 1, 2003 all accredited schools, approved schools, and approved Early Childhood Education Programs in the state of Nebraska must procure and maintain the equipment and medication necessary to implement the protocol in each school building while school is in session in the case of any student and/or school staff emergency.

The program initially rolled out in the Omaha Public Schools and was later implemented statewide.

- The protocol requires the use of IM epinephrine in conjunction with nebulized albuterol.
- School staff and teachers now have significantly more knowledge about asthma and severe allergies and are more aware and educated about signs and symptoms of an asthma attack and anaphylactic shock. In addition, there are designated emergency responders in each school trained to the protocol. These persons have in-depth training in the protocol including CPR certification.
- As a result of the program, there has been an increased awareness from teachers, parents, teachers, and physicians about the necessity of an emergency response program. Communities have responded favorably to the implementation of the program.
- By June 2004, selected staff members from all Nebraska schools had been fully trained to recognize the onset of symptoms and respond quickly to employ the Protocol.
- As a result of interest and awareness in the Protocol, other initiatives were implemented. The State of Nebraska Department of Health and Human Services later updated their EMS regulations to allow all emergency medical personnel (First Responders, EMTs and Paramedics) to administer epinephrine upon completion of approved training.

