Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

Paul R. LePage, Governor Mary C. Mayhew, Commissioner

Model Plan:
Administration of Epinephrine and Benadryl

NOTE:

The signs and symptoms of anaphylactic shock are: hypotension, respiratory distress such as laryngeal edema, dyspnea, wheezing, a sense of retrosternal pressure or tightness, rapid and/or irregular pulse, urticaria, loss of consciousness, agitation, faintness, burning and/or itching eyes, tearing, congestion and itching nose, rhinitis, nausea, vomiting, abdominal pain, diarrhea, flushed skin, general itching, non-pruretic swelling of extremities as well as the face and perioral or periorbital regions, and/or a sense of uneasiness.

- After an injection of medication and/or vaccine it is determined that the individual has symptoms categorized as mild, the client may only require close monitoring on site with notice to their health care provider.

- Using clinical judgment, when the individual's symptoms progress to those of anaphylactic shock, School Vaccine Providers shall initiate the emergency procedure for the administration of Epinephrine and Benadryl.

Special Instructions:

1. Equipment needed includes:

   2 ampules Epinephrine (adrenaline) 1:1000
   1 vial of Benadryl (diphenhydramine) 50mg/ml
   4 TB syringes
   (2) 3cc syringes (w/needle-22-25 ga, 1-1.5" length)
   Alcohol swabs
   B/P cuff and stethoscope
   CPR mask

2. All School Vaccine Providers are required to be trained in Health Care Provider cardiopulmonary resuscitation (CPR).

3. In the event of a medical emergency during a clinic session, School Vaccine Providers shall activate emergency medical services and notify the responsible health care provider and/or call an ambulance or other local emergency medical services.

4. School Vaccine Provider staff shall apply CPR if the situation warrants it, unless there is a "Do Not Resuscitate" order in place. The school disclaims any liability for misapplication of this knowledge by the School Vaccine Provider.

In an emergency:

1. **Call for assistance**
2. **Notify local emergency medical services**
3. **Establish and maintain an airway**

To administer Epinephrine and Benadryl, follow the steps below:

1. **Administer Epinephrine (per dosage chart/guidelines)**
2. **Administer Benadryl (per dosage chart/guidelines)**

A. Using a tuberculin (1cc)-syringe draw up only the amount of Epinephrine needed, based on the weight of the child or the dosage amount for an adult.

B. Administer the Epinephrine subcutaneously. NOTE: DO NOT GIVE if symptoms of angina are present.

Epinephrine Dosage Guidelines:*

Epinephrine (Adrenaline Chloride) 1:1000

0.1cc for children < 20 lbs. (0-12 months of age)

0.2cc for children 20 - 45 lbs. (1-4 years old)

0.3cc for children > 45 lbs. (> 4 years of age)

0.3cc for adults

C. Administer the Benadryl deep I.M. in a large muscle.

Benadryl Dosage Guidelines

****Adult:** Benadryl 50mg. Deep I.M. in large muscle

*****Pediatric Patients other than premature infants or neonates:** Benadryl 1mg/kg Deep IM in large muscle

D. Observe the clinical condition of the individual including the apical pulse rate and rhythm, respiratory rate, blood pressure, and level of consciousness. Monitor the blood pressure and pulse every 2-5 minutes until stable. Also note a change in any of the symptoms or the development of new symptoms.

E. If symptoms persist, give a second dose of Epinephrine in 15 minutes, using a second ampule of Epinephrine. **Do not repeat more than one time.**

F. If the individual exhibits signs of shock treat him/her by having him/her lie in a supine position with legs elevated, and keeping the person(s) warm with blankets, if necessary.

G. Reassure the individual and the family (if present).

H. If CPR becomes necessary, institute as per current CPR protocols The responder must be certified to conduct CPR.

*American Academy of Pediatrics, Abbott Laboratories, American Hospital Formulary Service, Mosby's Nursing Drug Reference
** Nursing 2006 Handbook, 26rd edition . New York: Lippincott Williams & Wilkins.
*** Nelson's Textbook of Pediatrics, 15th edition. Philadelphia: Saunders.

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