The School Year Begins – and So Do Asthma Attacks

*Illinois Poison Center experts warn of common mistakes when using asthma medications*

(Chicago) – A recent study published in the Journal of Allergy and Clinical Immunology found that asthma attacks peak shortly after the school year starts. As children begin suffering from asthma, parents and caregivers may try to combat attacks with asthma medications. However, treating asthma can be dangerous if the medicine is not taken correctly. In fact, Illinois Poison Center (IPC) call data shows that asthma medications account for a significant number of calls to the poison center.

During a three-year period (July 1, 2000 – June 30, 2003), the IPC handled 1,882 exposure calls regarding asthma medications; 82.7 percent of the calls involved pediatric and adolescent patients. Nearly two-thirds of the poisonings were accidental exposures (1,214 calls); and 25 percent of the calls involved therapeutic errors (473 calls). This compares to a therapeutic error rate of 6.3 percent reported for all medications during the same time period. This four-fold difference demonstrates a significant increase in the rate of therapeutic errors for these types of medications.

Examples of the types of asthma medication exposures the IPC handled include:

- **Accidental exposure:** a young child ingesting 10 tablets of an older sibling’s Singulair®, or a toddler breathing from a family member’s inhaler.
- **Therapeutic error:** both parents giving a child a dose of albuterol, or a parent failing to dilute the albuterol nebulizer solution.
- **Adverse reaction:** a child vomiting after a dose of theophylline.
- **Misuse:** categorized as intentional or unintentional.
  - Intentional: purposely taking three teaspoons of albuterol syrup, instead of the prescribed one teaspoon, to make it “work better.”
  - Unintentional: using an albuterol inhaler 10 times in an hour for a bad asthma attack.
Depending on the type of medication involved and the dosage taken, these errors can lead to serious consequences including increased heart rate, shakiness, tremors, increased blood pressure, anxiety, insomnia and seizures.

To avoid poisonings involving asthma medications, parents and other caregivers should be diligent with their children’s medications. Store them out of the sight and reach of young children. Teach children who suffer from asthma how to properly use inhalers, and make sure they understand how and when to take their medicine. Alert school nurses to a child’s asthma condition and allergies that may trigger an asthma attack.

If you suspect a poisoning, call the Illinois Poison Center at 1-800-222-1222 right away. Do not wait for symptoms to appear. To order the IPC’s medication safety brochure, please call 1-800-222-1222, or visit the IPC Web site at www.IllinoisPoisonCenter.org.

The Illinois Poison Center serves all of Illinois – 24 hours a day, 365 days a year – via a national, toll-free number, 1-800-222-1222. Staffed by pharmacists, physicians, nurses and poison information providers, the IPC provides poison prevention information and treatment advice on household products, medication issues, alcohol and drug misuse, bites and stings and other poisonings.

The IPC is a program of the Metropolitan Chicago Healthcare Council, an association comprising more than 140 hospitals and health care organizations working together to improve the delivery of health care services in the Chicago area.