DATE: 04/27/2015
TO: Health Alert Network
FROM: Karen M. Murphy, PhD, RN, Acting Secretary of Health
SUBJECT: Adverse Effects from Synthetic Drugs, Pennsylvania

This transmission is a “Health Advisory” that provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE

FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE

LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Adverse Effects from Synthetic Drugs, Pennsylvania

Poison centers, public health agencies, and law enforcement agencies are collaborating with hospitals to respond to increased numbers of patients presenting with adverse reactions to the use of substances that are reported as synthetic marijuana, while other cases are suspected to involve cathinones (“bath salts”), or a mixture of these and other substances. However, there is NO confirmed chemical testing available yet, neither from the drugs that were used nor from clinical specimens from the patients. The adverse reactions have ranged from agitation and delirium to obtundation and lethargy. Some patients have required intubation and management in the ICU, and others have displayed aggressive behavior towards police and emergency medical services personnel.

These increased numbers of patients presenting with adverse reactions have been reported from hospitals mostly in eastern Pennsylvania, with clusters of such patients in Lehigh, Northampton, Luzerne, and Dauphin counties. The Lehigh County District Attorney’s Office
stated on April 22, 2015 that there are “eight suspected overdose deaths in Lehigh County,” but that “toxicology results are pending so it is unknown at this time what substance or substances were ingested.”

Because of reports of extreme agitation, paranoia and similar patterns of behavior, emergency medical services (EMS) and other health care workers should exercise heightened awareness and caution when dealing with patients who are suspected of or have a history of use of these products.

As a matter of security and safety for all involved, it is recommended that police be requested to respond to all such incidents if available.

While we are experiencing such problems in Pennsylvania, reports have emerged in recent weeks from across the country. On April 23, 205, The American Association of Poison Control Centers (AAPCC) and the experts at America’s 55 poison centers put out a press release warning the public about a group of dangerous new synthetic cannabinoids which have recently led to a dramatic spike in poison center exposure calls in the United States, according to Stephen T. Kaminski, JD, AAPCC executive director.

According to this release, poison centers across the country have been receiving increased levels of calls related to these substances. From Jan. 1, 2015, through April 22, 2015, poison centers have received 1,900 exposure calls from people seeking help for adverse reactions to these drugs.

According to the National Institutes of Health, the term, “synthetic marijuana,” initially referred to a wide variety of herbal mixtures that produced experiences similar to marijuana (cannabis) and that were marketed as "safe," legal alternatives to that drug. Sold under many names, including Spice, K2, fake weed, Yucatan Fire, Skunk, Moon Rocks, and others — and labeled "not for human consumption" — these products contain dried, shredded plant material and chemical additives that are responsible for their psychoactive (mind-altering) effects. Synthetic marijuana users report experiences similar to those produced by marijuana—elevated mood, relaxation, and altered perception—and in some cases the effects are even stronger than those of marijuana. Some users report psychotic effects like extreme anxiety, paranoia, and hallucinations. The chemicals currently being sold as synthetic marijuana seem to be much more dangerous and toxic than their predecessors.

The term “bath salts” refers to an emerging family of drugs containing one or more synthetic chemicals related to cathinone, an amphetamine-like stimulant found naturally in the khat plant. Reports of severe intoxication and dangerous health effects associated with use of bath salts have made these drugs a serious and growing public health and safety issue. The synthetic cathinones in bath salts can produce euphoria and increased sociability and sex drive, but some users experience paranoia, agitation, and hallucinatory delirium; some even display psychotic and violent behavior, and deaths have been reported in several instances.
What is most important for healthcare providers and law enforcement and the general public to know is:

1) Drugs identified as "K2", "Spice", or other synthetic cannabinoids are causing more significant toxicity than has previously been seen

2) The public needs to be aware that use of these drugs, while felt to be analogous to marijuana and relatively safe, can have severe side effects including death

3) The actual chemical composition is not known, but could represent a new more potent cannabinoid versus other stimulants not unlike bath salts

4) **Healthcare providers should be aware of and ready for this apparent sharp increase in use with the goals of therapy being aggressive sedation, airway management, and identification of secondary effects including arrhythmia, myocardial ischemia/infarction, intracranial hemorrhages, muscle breakdown with kidney injury, liver injury, and lung injury requiring mechanical ventilation**

Healthcare providers can call and consult with their poison center about the management of their patients. Reporting of cases is very important to maintain surveillance of this epidemic. The public can also call 1-800-222-1222 to speak with the experts at their local poison center.

Categories of Health Alert messages:
**Health Alert**: conveys the highest level of importance; warrants immediate action or attention.
**Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.
**Health Update**: provides updated information regarding an incident or situation; no immediate action necessary.

This information is current as of April 27, 2015, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.