This alert from the Kentucky Regional Poison Control Center is to provide awareness of the recent increase in exposures to synthetic cannabinoids.


These chemicals are often sprayed on plant material and sold in packaging labeled "not for human consumption." There are several known Tetrahydrocannabinol (THC)-homologs and often a user does not know the actual chemical they have been exposed to. Although referred to as synthetic marijuana, they act on numerous receptors and pose significant risk to the user.

In Kentucky, there is no rapid confirmatory test for these substances. Decisions to treat should be guided by history and clinical picture.

Patients often present with the some or all of the following symptoms, and exposure can be life threatening:

- Agitation, Anxiety
- Tachycardia, Hypertension
- Seizures, Dysrhythmias
- Nausea, Vomiting
- Muscle spasms, Tremors
- Hallucinations, Psychosis
- Suicidal Ideation
- Other Harmful Thoughts, Actions

**Treatment is supportive.** Benzodiazepines should be used liberally for agitation, psychosis, increased autonomic activity and seizures. Consider 5HT3 antagonist antiemetics (ondansetron, granisetron) for nausea and vomiting. In cases of severe psychosis, antipsychotics should be considered with caution as their efficacy in this setting may be limited and may increase the risk for dysrhythmias.

Recently, there have been reports of patients presenting with inconsistent symptoms including CNS depression, respiratory depression, and hypotension who, when successfully reversed by naloxone, became immediately agitated. It is not yet known if this is a new substance or a known substance combined with an opioid.

The Kentucky Regional Poison Control Center is working with poison control centers nationally to monitor this trend. Please call us to discuss any patients you feel may have been exposed to synthetic cannabinoids. Our medical staff is here to assist you 24 hours/day, 365 days per year.