Emerging Illnesses Associated with Drugs of Abuse

May 6, 2015

Dear Colleague:

New information is emerging about another drug of abuse in Virginia potentially relevant to your practice. This correspondence is intended to share information regarding illness presentations potentially associated with the drug of abuse “synthetic marijuana.” In addition, we want to provide an update on the investigation into a cluster of atypical presentations and severe health effects after heroin use that was reported in a letter sent to Central region clinicians on March 26, 2015.

Key focus areas include:
- Information regarding emerging cases of illness associated with “synthetic marijuana”
- An update on the investigation of atypical presentations after heroin use
- Recommended Actions

Emerging Drug of Abuse Known as “Synthetic Marijuana”

Calls to the nation’s regional poison centers about exposures to “synthetic marijuana” (known as Spice, K-2, and hundreds of other names) increased dramatically in April 2015. While Virginia’s poison centers have not observed a marked increase in calls, Virginia’s enhanced public health surveillance system has recorded an increase in the number of emergency department/urgent care center visits with a complaint related to “marijuana” in April. Most of the reports were in the Eastern region and the Northwest region of the state.

While the chemical(s) found in this drug(s) of abuse has yet to be identified, it is thought the substances contain chemicals called cannabimimetics. These chemicals can cause dangerous health effects, including severe agitation and anxiety, tachycardia, blood pressure elevations, and other effects such as intense hallucinations or suicidal thoughts or actions. Poison centers also received reports of hypotension and bradycardia leading to coma, respiratory arrest and the need for respiratory support. These recent cases appear to be significantly different from the cases associated with the initial wave of illnesses associated with Spice and K-2 several years ago.
If you care for a patient that you believe has become ill as a result of using a drug of abuse known as “synthetic marijuana,” please report the case to your poison center at 1-800-222-1222 (Blue Ridge Poison Center, National Capital Poison Center, or Virginia Poison Center). Your efforts will help us to track this emerging epidemic.

**Update on Investigation of Atypical Presentations after Heroin Use in the Central Region**

In March 2015, the Virginia Department of Health and the Virginia Poison Center initiated an investigation of a cluster of severe illness in Richmond after individuals had reported using heroin. Clenbuterol, the presumed adulterant in the heroin linked with this outbreak, was laboratory-confirmed in several clinical samples. Clenbuterol, a beta-2-agonist and veterinary medication, is not approved by the Food and Drug Administration for human use. It can cause sympathomimetic effects in humans and can lead to dangerous cardiac complications. Clenbuterol has been identified as a heroin adulterant in clusters reported previously in other states.

To date, clinicians in the Richmond area have reported 13 patients who meet a confirmed or suspect case definition. The following signs, symptoms, and clinical findings were present in the majority of the patients: hypokalemia (100%), tachycardia (92%), palpitations (92%), chest pain (77%), EKG with QT prolongation (69%), shortness of breath (69%), elevated anion gap (69%), nausea/vomiting (61%), leukocytosis (61%), EKG with ST or T wave abnormalities (61%), elevated lactate (54%), and elevated CK (54%). Of note, no deaths have been reported, but several case-patients have been critically ill and required treatment in intensive care units.

- If you are called by a sick patient and you are concerned that they have been exposed to clenbuterol-tainted heroin, advise them to call 911 immediately as it should be treated as a medical emergency.
- If you have a patient presenting with a history of heroin use and symptoms similar to those listed above and have questions about clinical management, please call your poison center at 1-800-222-1222.

The investigation is ongoing to determine if the risk of exposure to clenbuterol-tainted heroin is still present. If you treated a patient since March 1, 2015 who had similar signs and symptoms (chest pain, tachycardia, palpitations, and hypokalemia) following heroin use, please contact Dr. Brigette Gleason at the Virginia Department of Health at (804) 864-7264 or brigette.gleason@vdh.virginia.gov.
Recommendations

- Please consider the possibility of exposure to a chemical adulterant if your patient presents with atypical symptoms after use of any drug of abuse.
- Please report any suspected case to your poison center at 1-800-222-1222 (Blue Ridge Poison Center, National Capital Poison Center, or Virginia Poison Center).

Thank you for your care of the people of Virginia, for reporting any potential poisoning to our poison centers, and for assisting in gathering critical information in order to identify and track these emerging conditions associated with drugs of abuse.

Sincerely,

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Virginia Department of Behavioral Health and Developmental Services

A pdf version of this letter is available on the VDH Resources for Health Care Professionals web page.