Cincinnati Drug and Poison Information Center

**Website:**
http://www.cincinnatichildrens.org/service/d/dpic/default/

**Blog:**
http://cincinnatichildrensblog.org/category/safety-and-prevention/
On Wednesday, March 18, 2015 Safe Kids teamed up with McNeil Consumer Healthcare and the American Association of Poison Control Centers (AAPCC) to launch a new medication safety study, “Medication Safety: An In-Depth Look at Calls to the Poison Centers.” With the generous donation of AAPCC’s data, we analyzed more than 547,000 medicine-related calls to poison centers for children, and found that while younger kids generate far more calls to poison centers for medication exposure, teens are at greater risk for serious outcomes related to medicine poisonings.
In July 1940, biochemists secretly synthesized an antidote to Lewisite, a potent arsenic-based chemical warfare agent. The compound was named British anti-Lewisite (BAL), or dimercaprol. During World War II, BAL decreased the risk of injury and death from Lewisite.

Today, BAL continues to be used in the treatment of heavy metal poisonings. It forms complexes with select heavy metals, minimizing the toxicity of metals such as arsenic, mercury, and lead. BAL has been on backorder, but according to the manufacturer it should be back in hospital supply mid-May.

Reference:
Emergent BioSolutions Inc. announced in March 2015 that the U.S. Food and Drug Administration (FDA) has approved Anthrasil™ [Anthrax Immune Globulin Intravenous (Human)], also known as AIGIV, for treatment of inhalational anthrax in combination with appropriate antibacterial drugs.

Anthrasil is a sterile solution of purified human immune globulin G (IgG) containing polyclonal antibodies that targets the anthrax toxins of Bacillus anthracis, the bacteria that causes anthrax disease. It is prepared using plasma collected from healthy, screened donors who have been immunized with Emergent's BioThrax® (Anthrax Vaccine Adsorbed) vaccine, the only FDA-licensed vaccine for the prevention of anthrax disease.

Anthrasil was developed as part of a $160 million contract which was awarded in 2005. **Anthrasil has been delivered to and is stored in the U.S. Strategic National Stockpile.**

Bacillus anthracis makes a toxin that can lead to inhalational anthrax – the most deadly form of anthrax. Early symptoms of anthrax infection include fever, cough, muscle aches. Later symptoms include shortness of breath and chest discomfort. Without treatment, only 15% of patients with inhalation anthrax survive.

References:


http://www.cdc.gov/anthrax/types/inhalation.html

Indication:
Anavip [Crotalidae immune F(\text{ab}')\textsubscript{2}] is an equine-derived antivenin approved for use in North American rattlesnake envenomation. It was approved for use in both children and adults.

Dose:

**Intravenous use only.**

<table>
<thead>
<tr>
<th>Dose</th>
<th>No. of Vials</th>
<th>Infusion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Dose</td>
<td>10 vials</td>
<td>Infuse intravenously over 60 minutes (2)</td>
</tr>
<tr>
<td>Additional dose(s) to achieve initial control</td>
<td>10 vial (as needed)</td>
<td>Infuse intravenously over 60 minutes (2)</td>
</tr>
<tr>
<td>Observation and late dosing</td>
<td>4 vials</td>
<td>Infuse intravenously over 60 minutes (2)</td>
</tr>
</tbody>
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- **Initiate administration** as soon as possible after rattlesnake bite in patients who develop signs of envenomation (e.g., local injury, coagulation abnormality, or systemic signs of envenomation).
- Monitor patients in a health care setting at least 18 hours following initial control of signs and symptoms. Re-emerging symptoms including coagulopathies may be suppressed with additional 4 vial doses of Anavip as needed (2).
- Reconstitute each vial with 10 milliliters (mL) of sterile normal saline (2).
- Combine and further dilute to a total of 250 mL with sterile normal saline (2).

Mechanism of action:
Anavip contains venom-specific F(\text{ab}')\textsubscript{2} fragments of immunoglobulin G that bind and neutralize venom toxins, facilitating redistribution away from target tissues and elimination from the body.

How supplied and storage:
Anavip is supplied as a sterile lyophilized preparation in a single-use vial. When reconstituted with 10mL of 0.9\% NaCl solution, each vial contains not more than 12mg per mL of protein, and will neutralize not less 780 times the LD50 of Bothrops asper venom and 790 times the LD50 of Crotalus durissus venom in a mouse neutralization assay.
Store at room temperature.

Reference: Anavip package insert.
The DPIC Education and Outreach team has been working on strategies to encourage access to the poison control hotline.

The American Association of Poison Control Centers (AAPCC) Public Education Committee developed a QR scan code. This code enables anyone to easily scan the hotline number into their cell phone or mobile device.

The DPIC Education and Outreach team has launched a campaign to promote use of this tech savvy feature. The national number automatically connects callers to the closest local poison center. No matter where a person calls from, he or she will be connected to the closest poison center based on the phone’s area code. Specially trained nurses, pharmacists, doctors and other health care professionals answer calls 24 hours a day, 7 days a week.

Scan the QR code below and the number will be programmed automatically into your cell phone or mobile device.

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Ohio House Bill 314: Prescribing Opioids to Minors
Effective September 17, 2014

Updated 12-30-2014

Effective September 17, 2014, HB 314 requires all prescribers (physicians, PAs, APRNs, optometrists, dentists and podiatrists) to obtain explicit informed consent, in the absence of a medical emergency or other specified circumstances (see below), prior to issuing a minor an initial prescription for any drug classified as an opioid.

The informed consent requirement has three components: assessing the minor’s mental health and substance abuse history; discussing with the minor and the minor’s parent, guardian, or another authorized adult certain risks and dangers associated with taking controlled substances containing opioids; and obtaining the signature of the parent, guardian, or authorized adult on a consent form. Additionally, the new law limits to not more than a 72-hour supply the quantity of a controlled substance containing an opioid that a prescriber may prescribe to a minor when another adult authorized by the minor’s parent or guardian gives the required consent.
In 1985 there were 745 ingestions of button batteries, approximately 73% of these were in children <6 years old.

In 2014 there were 3,272 ingestions with approximately 65% in children <6 years old. 53% of these exposures were treated in a health care facility. There were 2 fatalities.

- As use & availability of button batteries increase, the number of ingestions continue to rise.
- Batteries lodged in the esophagus can cause severe burns in as little as 2 hrs, and can continue to injure even after removal.
- Batteries ≥ 20mm (a penny is 19mm, and a nickel 21mm) in diameter are more likely to get lodged.
- Children <6 years old are most at risk.
- Unwitnessed, misdiagnosed ingestions have the worst outcomes.
- Prevention is key. Keep button batteries out of reach of young children and secure battery compartments with tape.

Reference: http://www.poison.org/battery/stats.asp
Affiliation: Center for HIV Educational Studies & Training, New York, New York; The Graduate Center, City University of New York, New York, New York; Department of Psychology, Hunter College, City University of New York, New York, New York.

PURPOSE: Alternative consumption practices of prescription drug misuse have been less well monitored than general prevalence. We describe prescription drug smoking among socially active youth and highlight correlates of this practice. We also examine its association with drug problems, drug dependence, and mental health.

METHODS: We surveyed 404 young adults recruited from nightlife venues in New York via time-space sampling. We used linear and logistic regression models to examine the probability of smoking prescription drugs and its association with drug problems, dependence, and mental health. Qualitative findings supplement the survey data.

RESULTS: Males have higher odds than females (odds ratio [OR] = 3.4), and heterosexuals have higher odds than sexual minority youth (OR = 2.3) of smoking prescription drugs. Those involved in electronic dance music nightlife have higher odds (OR = 2.1) than those who do not participate in that scene, whereas those in college bar scenes have lower odds (OR = .4) of having smoked prescription drugs. Prescription drug smokers report more drug problems ($\beta = .322$) and greater symptoms of dependence net ($\beta = .298$) of the frequency of misuse and other characteristics. Prescription drug smokers do not report greater mental health problems. Qualitative interview data support these survey findings.

CONCLUSIONS: **Prescription drug smoking is a significant drug trend among socially active youth.** It is associated with drug problems and symptoms of dependence net of frequency of misuse. **Prevention and intervention efforts for youth who misuse prescription drugs should address the issue of prescription drug smoking,** and this may be an area for clinicians to address with their adolescent patients.

You can read the full article and why it is called the “bean” at the following link:
file:///C:/Users/goer8x/AppData/Local/Microsoft/Windows/Temporary%20Internet%20Files/Content.Outlook/L5YO05BP/1-s2.0-S1054139X1500066X-main.pdf
ISSUE: The FDA is alerting pet owners, veterinarians, health care providers and pharmacists that pets are at risk of illness and death when exposed to topical pain medications containing the nonsteroidal anti-inflammatory drug (NSAID) flurbiprofen. People using these medications should use care when applying them in a household with pets, as even very small amounts could be dangerous to these animals.

The FDA received reports of cats in two households that became ill or died after their owners used topical medications containing flurbiprofen on themselves to treat muscle, joint, or other pain. The pet owners had applied the cream or lotion to their own neck or feet, and not directly to the pet, and it is not known exactly how the cats became exposed to the medication. The products contained the NSAID flurbiprofen and the muscle relaxer cyclobenzaprine, as well as other varying active ingredients, including baclofen, gabapentin, lidocaine, or prilocaine.

BACKGROUND: Two cats in one household developed kidney failure and recovered with veterinary care. Two cats in a second household developed signs that included reluctance to eat, lethargy, vomiting, melena (black, tarry, bloody stools), anemia, and dilute urine. These two cats died despite veterinary care. A third cat in the second household also died after the owner had stopped using the medication. Veterinarians performed necropsies on the three cats that died and found evidence in the kidneys and intestines that were consistent with NSAID toxicity.

RECOMMENDATION: FDA recommends that people who use topical medications containing flurbiprofen take care to prevent their pets from being exposed to them, even in ways that may seem unlikely to cause problems. Health care providers who prescribe topical pain medications containing flurbiprofen, and pharmacists who fill these prescriptions, should advise patients with pets to take care to prevent exposure of the pet to the medication.

Reference: