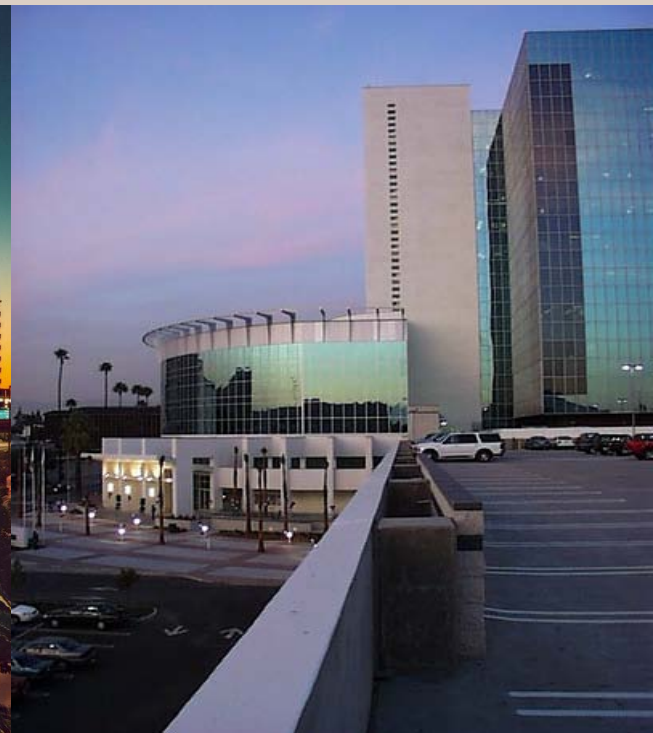




# Joint Regional Intelligence Center **FORCE MULTIPLIER**

**JULY 2011**



# Cocaine Contaminated with Levamisole

In April 2011, the US Drug Enforcement Administration (DEA) reported up to 82 percent of all cocaine seized in the United States contained levamisole, a veterinary drug used to de-worm livestock. Law enforcement and public health officials in the United States are warning of serious public health consequences for drug users related to contaminated cocaine use.

## Background

- Levamisole is an inexpensive anti-parasitic (de-worming) agent used in veterinary medicine currently approved for cattle, sheep, and swine
- It has been increasingly used as a cutting agent in cocaine instead of traditional fillers such as baking soda; DEA agents have detected it in cocaine seized in the United States since 2003
- Recently, serious skin infection cases related to cocaine use have been seen in Los Angeles, New York, Denver, and San Francisco
- Studies report that levamisole is known to increase dopamine, a neurotransmitter that helps control the brain's reward and pleasure centers, leading experts to believe that it is added to cocaine to further enhance or prolong the user's "high"
- It can be added at anytime during the production, transport, or shipment of cocaine



Levamisole tablets

# Cocaine, cont'd

## Health Effects:

- It appears that some people, especially women, are more susceptible to the effects of levamisole. Users of cocaine contaminated with levamisole may experience the following health effects:
  - Decrease of white blood cells (*"agranulocytosis"*), which causes a greater risk of infection
  - Crusty, purplish areas of dead skin—particularly around the ears—that are extremely painful (*"purpura"*)
  - Worsening or persistent sore throat and fever
  - Swollen glands (*"lymphadenopathy"*)
  - Painful sores (especially in the areas of the mouth and anus)
  - White fungal coating of the mouth, tongue, or throat (*"thrush"*)
  - Constriction of the blood vessels (*"vasoconstriction"*)
  - Pneumonia



Skin infections caused by levamisole

## Implications:

- The increasing presence of levamisole in cocaine is a development that is important to both law enforcement and public health professionals:
  - Detection of levamisole in a patient is challenging because specific testing is necessary, but not routinely available
  - Levamisole's half-life—the amount of time it takes for drug concentration to reach half of its original concentration—is only 5.6 hours
  - Large amounts of levamisole being diverted away from standard veterinary medicine could potentially lead to the identification of major cocaine trafficking organizations

# JRIC Goals and Objectives

- Provide relevant and actionable intelligence in a timely manner to prevent, mitigate, and respond to emerging threats
- Conduct, coordinate, and promote multi-tiered awareness and educational programs to facilitate intelligence-led policing and information sharing among participating agencies
- Develop and cultivate working relationships and intelligence sharing among law enforcement, public safety, and the private sector



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