

# **The Safety Guys: Introduction to Clandestine Drug Laboratories**

## **A Serious Health and Safety Concern**

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Clandestine laboratories, commonly referred to as “Clan Labs,” manufacture stimulants, depressants, hallucinogens, and narcotics in violation of the Controlled Substance Act (PL 91-513). According to the Drug Enforcement Administration’s registry there were 17,170 clandestine laboratory incidents during calendar year 2004. Since the DEA’s Clandestine Drug Laboratory Cleanup Program began in 1991, the number of cleanups has grown from 446 to over 10,100 per year.<sup>1</sup> Due to the chemicals used to make the drugs and the wastes generated during the “cooking,” clan labs present significant safety and health risks to law enforcement, including forensic scientists, and to the public. In addition, serious environmental concerns such as soil and ground water contamination usually result from clan lab operations as well.

In order to combat the growing clan lab epidemic, Congress passed the Anti-Drug Abuse Act (PL 100-690) in 1988 establishing the Joint Federal Task Force on illegal drug laboratories. The Task Force consisted of the DEA, the Environmental Protection Agency, and the United States Coast Guard and was charged with developing a program to clean up clandestine drug laboratories and dispose of the hazardous wastes generated. In assembling the Clandestine Drug Laboratory Cleanup Program, the DEA and EPA acknowledged that residual cleanup of contaminated sites was beyond the expertise of law enforcement, therefore they committed to working with health and safety experts in addition to state and local agencies to ensure contamination and waste found at illegal drug laboratories was properly handled.

First published in 1990, the Guidelines for the Cleanup of Clandestine Drug Laboratories, known as the “redbook” to those in the field, provides a flexible program that meets the needs of law enforcement while ensuring safe cleanup and disposal. The primary objective is to protect first responders, property owners, the public, and communities where these labs are found. While there will always be new twists and more we can learn, with each new edition, the progress builds on the goals of ensuring public safety, health, and the environment.

### **CHARACTERIZING THE PROBLEM**

Clandestine drug labs are most prevalent in rural areas compared to urban areas. About 70% of incidents occur in these locations. According to recent data from the DEA’s clandestine laboratory database the heaviest concentration is now in the Midwest with four states – Missouri, Iowa, Tennessee, and Illinois, accounting for nearly 40% of the total number of incidents.<sup>2</sup> Often hidden in remote locations, clan labs can be almost anywhere: private homes, motel/hotel rooms, garages, apartments, mobile homes, campgrounds, commercial businesses, even motor homes, panel trucks, and vans. Talk about going mobile! The most creative clan lab we have seen was a full size school bus that had been completely buried with only the emergency rear exit door exposed for access. Clan labs like this, set up in confined spaces, greatly increase the potential hazards involved.

When a clandestine drug lab is discovered there is a basic three stage approach to move from seizure to a fully restored site. Law enforcement personnel are the first responders and have to secure the operation and note what materials are on-site. In addition to the well established chemical hazards, many clan lab operators or “cooks” are also drug users and this can lead to extreme behavior. Frequently, secluded clan labs are booby-trapped to hinder entrance and injure possible intruders and law enforcement personnel. These traps are also set to destroy evidence should the lab be discovered. Operators of clandestine drug labs come up with innovative and lethal booby-trap designs. Law enforcement first responders have encountered very nasty surprises such as light bulbs loaded with explosives or flammables that detonate or ignite when the switch is flipped; or acid showers triggered by opening a door. Obviously, this phase is the most dangerous and presents numerous safety and health concerns. Once the site is secured it is then processed for evidence, as all crime scene investigators know very well. When the CSIs are done the site is ready for the next stage.

Phase two consists of removal of the gross contamination. This includes inventorying the chemicals present, separating them into compatible disposal groups, and then packing them into containers for proper disposal. In addition to handling the chemicals, all contaminated apparatus and equipment used to manufacture illegal drugs are also removed. These operations are usually performed by hazardous waste contractors with specialized training and equipment for the DEA, state, and local law enforcement. When the removal of hazardous materials is complete notification of potential residual contamination is provided to the property owner as well as the local health department and environmental agency. The property is posted with a warning notice and entrances sealed or marked with appropriate barrier tape. Now we are ready for the third stage of cleanup.

The final cleanup phase deals with assessment and remediation of residual contamination. Interiors may be coated with residues from cooking operations. Sinks, bathtubs, and toilets may have received wastes and/or chemicals. Since operators or cooks can range from novices with little or no chemistry background to advanced degreed chemists, spills have usually occurred. The chemicals used and the residues and spills left behind present serious health and safety concerns due to toxicity, corrosivity, and flammability. Since each pound of drug made can produce upwards of six pounds of wastes, and clan lab cooks are not known for their neatness, environmental contamination may be present in addition to interior walls, floors, and fixtures. Many rural locations use septic systems for waste disposal and these are often the receptors of clan lab wastes. The bad news is that this phase can be very expensive and the responsibility for remediation falls on the property owner.

*Next issue we will take an in-depth look at the types of drugs found in clandestine labs, their methods of manufacture, and specific hazards associated with the materials used.*

## References

<http://www.usdoj.gov/dea/resources/redbook.pdf> - US Department of Justice Drug Enforcement Administration, Guidelines for Law Enforcement for the Clean up of Clandestine Drug Laboratories. 2005

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