

# Hazards of Clandestine Drug Laboratories

By Battalion Chief Joseph McHugh and Investigator Shawne Maile

**D**uring the past two decades, there has been an increase in the domestic manufacture of illicit narcotics throughout the United States and, more specifically, here in New York. The discovery of clandestine drug labs is part of this dramatic increase. Most clandestine drug labs are found outside of New York City, in upstate New York.

The New York State Police (NYSP) discovered 31 clandestine methamphetamine labs from 2000 to 2009 and more than 500 illicit drug manufacturing labs that the NYSP Contaminated Crime Scene Emergency Response Team (CCSERT) responded to and dismantled in 2017.

Why should the FDNY be concerned with clandestine drug labs? Fire departments, emergency medical services and law enforcement frequently are first on the scene at clandestine drug labs when a fire, chemical release or medical emergency occurs. During the past three years, the FDNY and NYSP have responded to numerous clandestine labs here in New York City.

## What is a Clandestine Drug Lab?

A clandestine drug lab is an illicit operation consisting of a sufficient combination of apparatus and chemicals that either has been or could be used in the manufacture or synthesis of controlled substances. These labs include but are not limited to the manufacture of MDMA (ecstasy), phencyclidine (PCP), methamphetamine, psilocybin mushrooms, P2P amphetamine, fentanyl, butane honey/hash oil extraction and indoor marijuana grow operations (IMGOs) and WMDs.

Historically, in the U.S., illicit manufacture of narcotics is nothing new. A first use of clandestinely made drugs by West Coast biker gangs occurred in the 1960s. In the 1980s to the present day, the most significant amount of clandestine drug labs or



*Early meth lab in New York State.*

“super labs” where illicit drugs are manufactured and trafficked into the U.S. come from Mexican Drug Trafficking Organizations (DTOs) and large laboratories in China.

Here in New York, the most illicit narcotic being produced is methamphetamine. The manufacturing technique is called the “one pot” or “shake and bake.” This production calls for a plastic or glass vessel, pseudoephedrine--which is the precursor--reagents and catalysts. The pseudoephedrine, mixed with reagents and catalysts, will produce methamphetamine.

When responding to a call for a possible clandestine drug lab, there are numerous

hazards. These hazards include fires, explosions, chemical off-gassing, hazardous waste/material and the human threat.

## Fires are Caused by Two Items

Lithium and solvents cause fires. Lithium stripes, pulled from lithium batteries, are used as a chemical catalyst to start a reaction inside the manufacturing vessel. When peeled from the battery and if not properly handled, they can come into contact with water or the moisture in the air, become flammable and ignite household items.

When contacted by the ignited lithium, solvents--which are used in the produc-



## About the Authors

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Investigator Shawne Maile is assigned to the New York State Police Contaminated Crime Scene Emergency Response Team and has been involved in narcotic investigations for more than 15 years, specializing in clandestine drug laboratories, indoor marijuana grows and fentanyl operations. He is a subject matter expert and instructs for both the New York State Police and the U.S. Drug Enforcement Administration and has instructed more than 100 federal, state and local and Canadian law enforcement and first responder agencies. He has co-authored articles on the dangers of fentanyl and his work has been featured on *DiamondPlate*. He is a New York State Hazardous Materials Technician. This is his second contribution to *WNYF*.





Current meth lab in New York State.



Meth lab traffic stop.

tion process to extract the narcotics--also may cause an explosion, if the lower explosive levels (LELs) are high. Prior to making entry into the location and while conducting an initial entry and survey, monitor your multi-gas instruments. Pay particular attention to the LELs, O<sub>2</sub> and VOCs (volatile organic compounds). (Those units that carry the appropriate meters to monitor VOCs include Haz-Mat Technician Units, Haz-Mat Company 1, SOC Support Trucks, Rescues and Squads.) You may need to back out and ventilate.



MDMA (ecstasy) lab.



Psilocybin mushroom lab.

### Explosions

Explosions can occur when the vessel begins to BLEVE, which is caused by the buildup of gases inside the "vessel." The vessel is the one-pot meth lab. Usually, it is a plastic Gatorade bottle, but there has been a rise in the use of glass mason jars. "Cooks," as the manufacturers are called, have to release the pressure from the vessel or "burp" the one pot. If this is not done correctly, the one pot basically becomes a bomb/flamethrower.

### Off-Gassing of Chemicals

The cook needs to build a hydrogen-chloride (HCl) gas generator to produce the final manufactured narcotic. The danger of an HCl generator is the off-gassing of phosphine gases.

### The Person Manufacturing the Drug

Referred to as cooks or "tweakers," they pose the most dangerous element for units responding to a clandestine drug lab. A tweaker is a reference to an individual who is under the influence or even addicted to the drug being manufactured. He/she may have been up for days, producing and using the drug. When responding, the individual will not know if you are there to rob him/her for his/her drugs and/or money; law enforcement is executing a search warrant; or Fire or EMS personnel are responding to

smells of chemicals coming from the residence. Without warning, the tweaker can engage in a violent act against you and your unit.

### Personal Protective Equipment (PPE)

Full PPE is mandatory when entering one of these clandestine drug labs. This includes the use of self-contained breathing apparatus (SCBA). Haz-Mat units should wear suits that provide protection from both liquid splashes and fire.

### Decontamination of Personnel and Gear

At the conclusion of the operation, all members and gear must go through a decontamination process. This can be either a wet or dry decon operation. You *do not* want to cross-contaminate vehicles, personnel or the firehouse/EMS station.

### EMS

EMS personnel must be called to the scene, not only for the obvious medical needs, but also for pre- and post-entry evaluation of members, as well as checking for the possibility of fentanyl exposure.

### Incident Commander (IC)

Clandestine drug labs present a great risk to our Department. When a clandestine drug lab is discovered, units shall be withdrawn to a safe area and NYPD and NYS Police shall be notified. Units shall--within reason--ensure that all life hazards near

this clandestine drug lab are accounted for and evacuated. If entry is to be made, only members properly trained and in proper PPE shall be allowed inside. The IC shall ensure a Haz-Mat response, including Haz-Tac ambulances. Proper decon must be provided for members who entered the lab. Members shall try to avoid touching anything inside the lab.

### Who to Call for Dismantling the Lab?

If your crew responds to and identifies the location as a clandestine drug lab, back out and contact both the NYPD and the NYSP CCSERT. The NYPD can secure the location until arrival of the NYSP CCSERT. If possible, unless human lifesaving steps are needed or a structure fire is occurring, attempt to preserve all evidence.

In 2018, the War on Drugs, specifically the clandestine drug manufacturing, will involve joint operations between law enforcement and Fire/EMS departments. With the current rise in clandestine drug manufacturing, the chance of units encountering one of these labs has increased greatly. ■

### WNYF References

1. "Dangers Found at Indoor Marijuana-Growing Operations," by Captain Carlos Vazquez, in the 3<sup>rd</sup>/2009 issue.
2. Safety First column, "Indoor Marijuana Grow House Hazards," by Battalion Chief Joseph McHugh and Investigator Shawne Maile, in the 2<sup>nd</sup>/2018 issue.