

Clandestine Methamphetamine Labs Frequently Asked Questions

FAQ #1 – General Clandestine Lab Information

What is a clandestine lab?

A clandestine laboratory is simply defined as a place where preparation of illegal substances takes place. These 'labs' are used to manufacture drugs, explosives and even biological or chemical weapons. Most often, the labs are used to manufacture methamphetamine, a potent illegal stimulant drug.

What hazards exist in a clandestine lab?

Since the activity in these labs is illegal, they are usually designed for ease of concealment of the activity and not for safety. Often, the persons running the lab have little or no formal education in chemistry. Numerous hazards exist in this environment including potential toxicities from the chemicals and gases produced, fires, explosions and chemical and thermal burns. Children living in a lab are at heightened risk for physical, psychological and sexual abuse as well as possible exposure to methamphetamine or dangerous chemicals, booby traps, violence, weapons and pornography.

What chemicals are likely to be present in a clandestine lab?

This question must be answered with some caution. The chemicals commonly used to manufacture methamphetamine are well known. However, this does not mean that only these chemicals are present in a clandestine lab. Since the activity of making methamphetamine is illegal, the chemicals and equipment may be obtained through theft from legitimate scientific laboratories or suppliers. In these circumstances, the manufacturer may steal many things not required in the actual manufacture of methamphetamine. Furthermore, a great deal of misinformation is available, particularly on the internet, which may mislead a cook into thinking a given chemical compound may be useful. Additionally, the cook may lack the scientific sophistication to distinguish between similar sounding chemical names. Finally, there may be more than one clandestine activity taking place in the lab in addition to the preparation of methamphetamine. That said, a wide variety of caustics / corrosives (e.g. NaOH and HCl), solvents (e.g. naphtha and ether), and respiratory irritants (e.g. ammonia) are commonly present in illicit methamphetamine labs.

What are the potential acute toxicities of these chemicals?

The answer to this question depends on the specific agent to which the individual was exposed, the route of exposure, the concentration of toxin and the duration of the exposure. Most reported acute effects are either caustic / corrosive (affecting the skin, eyes and other mucous membranes) or respiratory in nature (e.g. wheezing, coughing). Exposure to some solvents (e.g. n-hexane) can potentially cause peripheral neuropathy. Other hydrocarbon solvents can cause CNS depression if inhaled in high concentrations. The more concentrated and longer duration exposures are generally more serious, though brief exposures to some highly toxic agents (e.g. phosphine) may also be life-threatening.

What data are available regarding the long-term health effects of these chemicals?

Though long-term effects of some chemicals are known primarily from industrial settings, many other chemicals are not as well studied. Within the specific context of clandestine methamphetamine labs, chemicals may be mixed or stored inappropriately. A limited number of reports have been published examining acute health effects of chemical exposure

in methamphetamine laboratories in emergency response personnel. No studies involving long-term effects of continuous clandestine laboratory exposure exist. Currently, no prospectively collected data exist describing the effects of acute or chronic exposure of children to illicit methamphetamine labs.

What is meant by the term "decontamination" in reference to persons removed from a clandestine laboratory, why is it necessary and when should decontamination be performed?

"Decontamination" simply means thoroughly washing in order to remove any potentially harmful residue from persons removed from a hazardous site. Decontamination is necessary to protect the individual from continued exposure as well as to prevent possible secondary contamination of other persons, equipment and facilities with which a contaminated individual might come in contact. All persons removed from a clandestine lab should be properly decontaminated and dressed in clean clothing prior to any additional questioning or evaluation. Decontamination is necessary regardless of the age of the person removed from the lab and whether or not the lab was in use at the time of removal.

How should a person removed from a clandestine laboratory be decontaminated?

The answer to this question depends entirely upon the exposure history of the involved persons. For example, a police officer involved in warrant service in a lab may only need decontamination of his/her boots with a soap and water solution. An adult suspect removed from a lab must have all clothing removed and be thoroughly washed with soap and water, typically using portable warm water and then dried and dressed in clean clothing such as a jail jumpsuit. The best recommendation for a child is to have a facility such as a tent or camper available at the scene in which the child can be given a warm shower and then dressed in age and gender appropriate clothing to minimize the psychological impact of the decontamination process. Decisions regarding specifics of decontamination are most appropriately made by trained HAZMAT personnel.

When should someone removed from a clandestine laboratory be medically evaluated?

All symptomatic persons should be evaluated by medical personnel immediately upon decontamination. Asymptomatic adults may not require medical intervention. It is recommended that all children removed from clandestine labs be evaluated by a qualified practitioner that can do a complete pediatric evaluation within 24 hours of removal from the lab. Medical evaluation of children removed from illicit labs is described in greater detail in FAQ #2.

Who should I contact if I have any questions about this FAQ sheet?

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