Iowa Department of Public Health Hazardous Substances Emergency Events Surveillance System



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This fact sheet contains information on illegal methamphetamine (meth) labs that have been discovered and reported to the Iowa Department of Public Health. This information is collected as part of a combined study between the federal Agency For Toxic Substances and Disease Registry and the Iowa Department of Public Health. The Hazardous Substances Emergency Events Surveillance (HSEES) System collects data on emergency hazardous substance releases. The system's purpose is to describe the public health consequences associated with the release of hazardous substances and to reduce injury and death resulting from these releases.

Seizure of meth labs in the Midwest has increased dramatically over the past few years. According to reports received by the Iowa Division of Narcotics, meth lab seizures in Iowa increased from eight in 1995 to 1,195 in 2003. These seizures reflect reported occurrences throughout the state of Iowa, not just for the metropolitan areas.

The meth epidemic in the central region of the U.S. stems from two problems:

- 1) Steadily increasing importation of meth into the region by organized trafficking groups; and
- 2) Illegal manufacturing of meth by hundreds of users and/or dealers in small "mom and pop" labs.

Meth labs are increasingly becoming a public safety hazard. Police and firefighters must take special safety courses to handle meth situations because of the likelihood of explosions, invisible

poison gases and other dangers. People who come into contact with the highly toxic chemicals used for the production of the drug can become sick or even die.

Meth labs known as "mom and pop" labs can be found almost everywhere - in rural, city and suburban residences; barns; garages and other outbuildings; apartments; motel rooms; storage facilities; vacant buildings; vehicles; and outdoors in sparsely populated areas.

Meth production is different than for other drugs because it poses hazards through all levels of production and handling. Also, there are many different ways of producing meth. Each method has its own inherent dangers. Many of the chemicals used are caustic or corrosive, and are potentially hazardous to people and to the environment.

Some of the processes may result in chemical release, can create noxious and harmful fumes, and have the potential for fires and explosions. Irresponsible practices of meth producers may result in injuries and/or death not only to themselves or their family members, but also to law enforcement and/or firefighters that respond.

Any number of solvents, acids, ammonia and other hazardous chemicals may be found in unmarked containers at these labs. These toxic chemicals can affect the nervous system, liver and kidneys, and can burn and irritate the skin, eyes, nose, and lungs. In addition, damage to the environment can result from the production process, which creates large amounts of extremely toxic waste, much of which gets dumped into waterways or on the ground.

Many agencies and jurisdictions have response systems that automatically call for specialized teams to support meth lab response, management, and cleanup. However, a significant number of emergency response and law enforcement personnel do not routinely engage in response or management activities regarding meth labs. Although they do respond to a variety of emergencies, they sometimes lack adequate training to recognize active or abandoned meth labs and the hazards they present.

The variety of hazards associated with meth labs and the knowledge necessary for managing them requires extensive training.

The toxic properties associated with chemicals in and around meth labs introduce special health risks to emergency responders, law enforcement personnel and the neighboring public. The explosive and flammable nature of these chemicals adds to the public safety risks. An active or abandoned meth lab contains a variety of chemical hazards to personnel. Illegal lab sites and waste disposal locations are likely to possess certain hazardous conditions simply because they are not designed or intended for the kinds of activities for which they are being used for. Ventilation is almost always inadequate or non-existent. This increases the potential for the accumulation of flammable, toxic, or oxygen deficient atmospheres. Structures that are selected generally have small work places, considerable clutter and debris, and restricted access. Drug lab operators may employ security devices, such as cameras, fencing, alarm systems, booby traps, and vicious animals in order to avoid being discovered.

The following stories are examples of how meth lab injuries can occur:

- Two police officers were searching the home of a man wanted for delinquent child support payments. They found him hiding in his garage. While searching for weapons the man may have possessed, one of the officers opened a refrigerator door and was overcome by anhydrous ammonia fumes. This chemical is commonly used to make methamphetamine.
- A smoking vehicle on a highway sent its driver and two highway patrolmen to the hospital: An officer noticed smoke coming out of a vehicle sitting in the median. When the officer pulled over to investigate, the vehicle sped away. After a short chase the vehicle was apprehended. The smoke that was coming from the vehicle was anhydrous ammonia escaping from a fire extinguisher that had ruptured. The driver of the vehicle was taken to the hospital for ammonia inhalation, and the two patrol officers went to the hospital to be checked for the after-effects of ammonia exposure.
- A worker from a senior citizen center was hospitalized after inhaling fumes from discarded chemicals used to make methamphetamine: Several cans of ether were disposed of in a garbage container behind the center. When the worker opened the lid, the fumes overcame him.
- While cooking chemicals, a flash fire occurred in an apartment building. Two adults were sent to the hospital and treated for burns. One of their daughters suffered cuts and respiratory irritation, and a second daughter was treated for minor injuries that occurred while she was trying to escape the burning apartment. Approximately 100 people had to be evacuated.

Many people are unaware that they are living near a meth lab. Here are some things to look for:

- ♦ Unusual, strong odors, similar to cat urine or fingernail polish remover; ether; ammonia, or acetone.
- ♦ Large amounts of products such as cold medicines, antifreeze, drain cleaner, lantern fuel, coffee filters, batteries, duct tape, or clear glass beakers and containers.
- ♦ Residents who pay their rent in cash.
- ♦ Residences with windows blacked out.
- ♦ Increased amount of traffic, with people coming and going at unusual times. For example, there may be little traffic during the day, but lots of nighttime activity.

Anyone suspecting a meth lab should immediately notify a local law enforcement agency.