



PROTECTING FIRST RESPONDERS FROM THE HAZARDS OF CLANDESTINE METH LABS

A Publication of the Oklahoma Department of Labor

Public employees have a right to a safe and healthful workplace. Sometimes, the hazards include those found in or from a clandestine meth lab, where methamphetamines are produced illegally. This publication answers some of the most frequently asked questions about protecting first responders, law enforcement officers and hospital staff, from the hazards of clandestine meth labs in Oklahoma.

What is Methamphetamine? Methamphetamines are stimulants that are produced and sold illegally in pill form, capsules, powder, and chunks. It may be known by several street names such as: crank, glass, speed, crystal meth, ice, batu, chalk, shabu, zip, or simply meth. Clandestine production accounts for nearly all the meth sold and abused in the U.S.

What chemicals are used to make meth? Hydrogen chloride gas, alcohol, ammonia or anhydrous ammonia, red phosphorous, acetone, iodine, muriatic acid, sodium hydroxide, and cold pills are common ingredients.

Where are meth labs typically found? Meth can be made anywhere. Reports have been found of meth “labs” in both occupied and abandoned homes, storage buildings, trailer houses, RVs, trucks, cars, apartments, hotel rooms, bathrooms, commercial buildings, campgrounds, and vacant lots.

How can you tell if a meth lab is present? Some of the warning signs of a suspected meth lab include: strong or unusual odors (solvents, ammonia, and ether; vinegar, pungent, or acrid); unusual security systems or devices; increased activity, especially at night; unusual structures; windows covered in plastic or tin foil; renters who pay landlords in cash; excessive trash; discoloration of structures, pavement and soil.

Why is meth a hazard to first responders? When combined and heated, these chemicals can create a hazardous atmosphere and pose a serious risk of fire and explosion. They also can create serious health hazards, even from short-term exposures. Meth makers, also known as cooks, have been known to boobytrap their labs, adding to the risk officers and first responders face when they make entry into a lab. Additionally, meth may cause users periods of high energy, rapid speech, delusions, hallucinations, paranoia and violent behavior. Law enforcement officers and other first responders who encounter a person using meth are at risk because the drug affects the person’s ability to make rational decisions and, as a result, the person may be more violent and harder to control.

What is the likelihood of a first responder becoming ill from entering a meth lab? One study shows that responding to an active meth lab has been associated with a 7- to 15-times higher risk of becoming ill when compared to other activities with apparently lower chemical exposures. (*Burgess et al., 1996; Burgess et al., 2003; Witter et al., 2007*).

Who’s getting hurt out there? According to a study done by the CDC, police officers were the most frequently injured group; respiratory irritation, eye irritation, dizziness/central nervous system symptoms were among the most frequently reported symptoms. Of these incidents, 78.9% of the injured police officers identified they had not worn any type of personal protective equipment at the time of the exposure. Fire fighters, EMTs and hospital personnel also reported injuries and illnesses, including respiratory irritation, dizziness/central nervous system symptoms, nausea/vomiting and eye irritation (*CDC, 2006*).

What precautions must be taken by first responders and law enforcement officials before entering a known or suspected meth lab? First responders should NEVER enter an active meth lab without appropriate training and personal protective equipment. Because of these requirements, smaller first response agencies may be unprepared for entry into meth labs and may have to rely on mutual aid partners from surrounding communities and/or state & federal officials.

What kinds of policies/procedures are required for employers who respond to potential meth labs? The Oklahoma Occupational Health & Safety Act requires public sector employers to “develop written programs which are appropriate to the work site and the nature of the hazards encountered by the employees...” By having a clear written policy that includes management commitment, employee involvement, hazard recognition and control, and employee training, many of the hazards that may be found in the work environment can be addressed and mitigated through engineering controls, administrative controls and safe work practices, as well as personal protective equipment.

The Hazardous Waste Operations and Emergency Response Standards (HAZWOPER) in OSHA’s 29 CFR 1910.120 have been adopted by the Oklahoma Occupational Health & Safety Act for public sector employers in Oklahoma. Section (b)(4)(ii) details specific elements of a written safety and health plan for hazardous waste operations. Emergency response procedures, required by 29 CFR 1910.120(1)(2) must also be included in the written plan.

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What kind of personal protective equipment (PPE) is required to enter a meth lab? The OSHA PPE Standard (29 CFR 1910.132) requires the employer to conduct an assessment of each job or task to determine what hazards are present, or likely to be present, and select appropriate personal protective equipment based on the assessment. This assessment must be certified (i.e., signed and dated) and employees must be trained on the assessment, as well as on how to use their personal protective equipment. PPE should be selected based on the requirements of the HAZWOPER standards and the hazards likely to be present.

Employers are expected to provide the personal protective equipment, in most cases at no cost to the employee, and are expected to require and enforce its use.

What kind of monitoring devices are required? Monitoring devices, such as direct reading instruments for identifying combustible gas, explosive atmospheres, oxygen deficiency, toxic substances, and ionizing radiation must be available and be utilized prior to a potentially hazardous atmosphere. Once the presence of specific hazardous substances has been established, the risks associated with these hazards must be identified. Risks to consider include, but are not limited to:

1. Exposures exceeding the permissible exposure limits and published exposure levels;
2. Concentrations that are immediately dangerous to life or health (IDLH);
3. Potential skin absorption and irritation sources;
4. Potential eye irritation sources;
5. Explosion sensitivity and flammability ranges;
6. Oxygen deficiency.

What kind of medical surveillance is required for hazardous operations? Part of your written safety and health program for hazardous operations must include medical surveillance requirements. Employees who are engaged in specific operations must be covered by a medical surveillance program. This includes members of HAZMAT teams; employees who are or may be exposed to hazardous substances; those who must wear a respirator as required by 1910.134; and employees who are injured, become ill, or develop signs or symptoms due to possible over-exposures. Medical examinations must be conducted prior to assignment, at least once every twelve months, unless the attending physician believes longer intervals (not greater than biennially) are appropriate.

Additional medical evaluations are required at termination or reassignment to an area where the employee is not covered, but only if the employee has not had an examination within the last six months. The employer must also provide

medical evaluation when employee develops signs and symptoms indicating possible overexposure to hazardous substances or health hazards, or if the employee has been injured or exposed above the permissible exposure limits in an emergency situation.

What kind of training requirements must be met for responding to meth labs? The HAZWOPER standard requires that workers be trained to perform their anticipated job duties without endangering themselves or others. To determine the level and type of training your workers need, you must consider the potential hazards, and what capabilities your personnel need to have to respond to those hazards. You should make your determination based on worst-case scenarios. Personnel who enter a former or active meth lab should have the 40-hour HAZWOPER training. If personnel are not entering the lab or handling hazardous materials, they may need only awareness level training.

Initial training *must* be provided at the time of assignment to a job where the potential for exposure is possible, and refresher training must be provided annually. Documentation of the training should be maintained at all times.

What kind of decontamination is required for personnel and equipment responding to a meth lab? Decontamination procedures may vary depending upon the extent of the exposure and what materials are contaminated. Any personnel or equipment with potential gross contamination must be decontaminated before leaving the site. Shoes and boots are known for picking up chemical residues and cross-contaminating police cars, fire trucks, ambulances, offices, hospitals, and other locations.

Clandestine meth labs are an occupational hazard to responders at the scene and hospital staff. However, public sector employers have a duty to provide a safe and healthful workplace, and to take every effort necessary to protect employees from the risk of chemical exposures, fires, explosions, and other hazards posed by illegal drug manufacturers.

For more information on public employee safety and health, visit our web site at www.ok.gov/odol. Sign up to receive regular updates related to the Public Employee's Occupational Safety & Health Division, workplace safety and other Agency news.

Additional guidelines for methamphetamine laboratory cleanup are available from the EPA web site at: <http://www2.epa.gov/emergency-response/voluntary-guidelines-methamphetamine-laboratory-cleanup-document>

*"All Oklahoma workers have a right to a safe and healthful workplace. First responders may risk their lives every day, but their safety is no less important."
— Labor Commissioner Melissa McLawhorn Houston*

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