Guidance for Health Care Providers

Environmental Methamphetamine Exposure

Who is at risk?

- Patients living in or near an active clandestine methamphetamine
- Exposure to a former clandestine methamphetamine lab that has been improperly decontaminated

What is the risk?

RISK OF EXPOSURE BY LABORATORY STATUS	
Highest Risk  No Risk	• Active laboratory with cooking in process • Methamphetamine laboratory fire • Inactive laboratory that is still set up • Laboratory is packed up in crates, boxes, cabinets, or trunks • Laboratory area after nonprofessional clean up • Laboratory area after professional clean up

Methamphetamine synthesis involves a variety of toxic caustics and solvents that are hazardous to human health. *Exposures to active clandestine methamphetamine labs have the greatest risk of adverse health effects from environmental exposures***.** Those who become symptomatic from environmental methamphetamine exposure are often the "cooks" or first responders to an active clandestine lab.

However, if not properly decontaminated, former clandestine labs pose a risk for adverse health effects. These exposures are often dermal or inhalation exposures to methamphetamine and the chemicals associated with synthesis.

Symptoms associated with acute exposure to former clandestine labs:

- Headache
- Nausea/vomiting
- Respiratory tract irritation
- Skin irritation
- Eye irritation
- Difficulty breathing

Chronic Environmental Methamphetamine Exposure

Little information exists on the effects of chronic environmental exposure to methamphetamine. Individuals at most risk are those who have lived in a house while it was an active lab. Methamphetamine is released during cooks, and there is a possibility for systemic methamphetamine effects. Similar to acute exposures, there is a much smaller risk of adverse health effects from chronic environmental methamphetamine exposure for those living in an improperly decontaminated former lab.

Symptoms associated with chronic methamphetamine exposure:

- Insomnia
- Irritability
- Compulsive behavior
- Personality changes
- Anorexia/weight loss
- Poor concentration
- Anxiety
- Hyperactivity

Management of Environmental Methamphetamine Exposure from Suspected Former Lab

Laboratory Testing

- Due to the wide variety of chemicals involved in methamphetamine synthesis, there are no recommendations for routine laboratory screening in asymptomatic patients
- Metal salts are occasionally involved in methamphetamine synthesis, however routine heavy metal screening in adults or children are not recommended
- If a patient has symptoms consistent with chronic environmental methamphetamine toxicity, a urine drug screen for methamphetamine is recommended
- Consult the Utah Poison Control Center with patient specific questions

Dermal Exposure

- Irrigate exposed area, launder clothes, and mange with proper wound care if necessary

Ocular Exposure

- Irrigate eyes for 10-15 minutes
- Conduct eye exam if visual changes present or corneal abrasion suspected

Inhalational Exposure

- Pulmonary injury is much less likely when lab is inactive
- Treat complaints of respiratory symptoms
  - Supplemental oxygen
  - Chest X-ray for cough or chest pain
  - Bronchodilators for wheezing/bronchospasm
  - If symptoms persist > 3 hours despite supportive care, admission for observation of pulmonary edema may be warranted

Source Control: Instruct patients to have their home or potential source of exposure tested for methamphetamine, and properly decontaminated if necessary.