

Guidelines for Managing Children Found at Clandestine Methamphetamine Laboratory Sites

**A collaboration of
the Georgia Bureau of Investigation,
the Georgia Department of Human Resources, and
the Georgia Poison Center**

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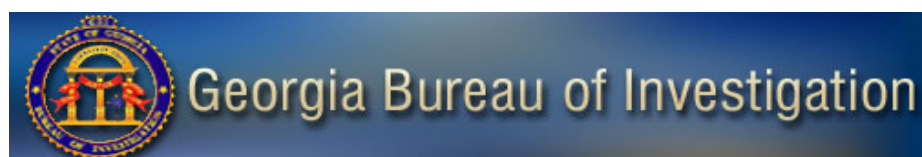


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ACKNOWLEDGEMENTS

The recommendations presented in this collaborative document are intended to serve as guidelines. It is impossible to anticipate all combinations of circumstance that may occur. The individuals at the scene should use their best judgment. At times this may require the use of a different approach than listed below. It is appropriate for those using a different approach to clearly document why they chose to follow the path they did, in the event that questions arise at a later date.

We acknowledge the leadership and expertise of Robert Geller, M.D. in launching these guidelines. We would also like to acknowledge the contributions of Rosalyn K. Bacon M.P.H., Claudia Barthold M.D., Consuelo Campbell M.S.P.H., Wilfred Hamm M.S.S.W., Janet Oliva Ph.D., Phil Price, Janice Saturday, and Carla Simms M.S.W., as well as many other members of the Georgia Department of Human Resources, Division of Public Health Meth Workgroup too numerous to mention.

I GLOSSARY OF TERMS

Airborne Chemical Exposure: Contact in the air with one or more chemicals in either gas or droplet form.

Clandestine Drug Lab/Laboratory: Facilities equipped and used in the production of illegal drugs. For the manufacture of methamphetamines, these can be located in a variety of locations such as homes, hotel rooms, fields, abandoned buildings, and even automobiles.

Cook/Cooking: The process of preparing individual chemicals to react with other substances to produce a new product with the ultimate goal of producing an illicit drug. A cook is “active” when chemicals are in the process of being heated or mixed or are otherwise in use.

Entry Team: The individuals, most often public safety or hazardous material technicians, who are designated to make the first entrance into a suspected meth lab.

Gross Contamination: Clearly visible evidence of chemicals on an individual or item. Examples include but are not limited to, large fresh stains or obvious odor. Since there is a wide variety of substances and chemicals used in the production of methamphetamine, there is no single type of odor or stain that implies contamination. An odor is not always detectible. Gross contamination should be clear to an untrained observer in close proximity to an individual or item.

Personal Protective Equipment (PPE): Items of clothing or tools that may be used to insulate a worker from chemical, thermal or other hazards encountered while he or she is working. PPE commonly includes goggles, masks, gloves, suits, hoods, respirators or boots. The type of equipment used depends on the suspected hazards to be encountered.

Reasonable Observation Period: A span of time deemed by a medical professional to be adequate to see signs or symptoms of a toxic exposure. This decision can be made based on a medical professional’s personal knowledge or in concert with a medical toxicologist or the Georgia Poison Center. Knowledge of the type and amount of potentially toxic exposure is helpful in determining an adequate amount of time needed for this purpose.

Visible Contamination: Clearly apparent evidence of the presence of chemicals on an individual or item. (see Gross Contamination).

**ITEMS LISTED IN THIS GLOSSARY ARE MARKED IN BOLD
IN THE FOLLOWING GUIDELINES**

Georgia Guidelines for Managing Children Found at Clandestine Methamphetamine Laboratory Sites

II INTRODUCTION

Methamphetamine production and use appear to be growing problems in the state of Georgia. The manufacture of methamphetamine and related compounds may occur in hidden or clandestine laboratories. These can be located in virtually any location including houses, trailers, cars, or hotels. There are a variety of methods used to make methamphetamine, each utilizing different chemicals. Many of the chemicals used are potentially hazardous, not only to those directly involved in the manufacture of the drugs, but also to those who live in or around the laboratories. The desired final methamphetamine product is potentially dangerous as well. Children living in or around such laboratories are at risk of exposure to hazardous chemicals by inhalation, ingestion and/or direct skin contact.

This document presents guidelines for the handling of children found in and around **clandestine drug laboratories** after law enforcement entry into these facilities. The overriding goals of these guidelines are:

1. To assure the safety of the children found at meth laboratories;
2. To assure the safety of law enforcement, health care providers, state agency personnel and the general public interacting with and caring for children found at meth laboratories; and
3. To minimize the psychosocial trauma to the children while protecting their health and safety.

These guidelines address the situation where children have been found at a site believed to be a **clandestine drug laboratory** and where concern exists that the children may have been exposed to the chemicals used in that process. It is recommended that law enforcement personnel contact DHR's Division of Family and Children Services (DFCS) and obtain their assistance either prior to entering a site if it is known that children are present or once children have been found at a site. These guidelines do not address the long-term management of children found in or around **clandestine drug laboratories**, lab site remediation, recommendations for **PPE** (personal protective equipment) for law enforcement, or specific hazardous-materials protocols for decontamination, though they are important issues.

Published data, as well as peer comments reviewed up to April 1, 2005, demonstrates a general lack of data on which informed decisions can be made. The available data does show clear risk of gradual pulmonary injury to individuals recurrently involved in entry, seizure and processing of methamphetamine laboratories, but provides little evidence of injury to occasional responders to sites contaminated by lab activity. There are no data available at this time that specifically address the acute injury to children at the time of their removal from a **clandestine drug lab**. It is unclear what long term effects might ensue for children residing in a methamphetamine lab. Concerns exist that neglect and/or chemical exposure may impact physical and neurodevelopmental health.

For information about the toxicology of chemicals encountered at a scene, the Georgia Poison Center may be contacted 24 hours a day, 7 days a week at 1-800-222-1222 within Georgia, or at 404-616-9000 from outside Georgia.

III PROTOCOLS FOR HIGH RISK SITUATIONS

1. Definition of a High Risk Situation:

- a. Lab entered while drug **cooking** in progress, AND/ OR
- b. Lab found with evidence of recent **cooking** (e.g. warm vessels or odor present) in an area with shared ventilation (The area in which the child is residing.).

2. Initial Encounter

- a. Police or other members of **entry team** in appropriate **PPE** (personal protective equipment) bring children to the Division of Family and Children Services (DFCS) or Emergency Medical Services (EMS) staff waiting at a safe distance outside the house.
- b. Unless **grossly contaminated**, possessions immediately brought with the child should include:
 - i. Eyeglasses
 - ii. Hearing aids
 - iii. Durable medical equipment attached to the child (such as feeding tubes or IV access ports entering the skin)
 - iv. Prescription medications
 - (1) It may be appropriate to validate that contents are compatible with the label. This can be done by comparing the contents with those expected. The Georgia Poison Center will assist in deciphering the codes imprinted on tablets or capsules, if contacted.
- c. No cloth or paper possessions should be brought with the child at the time of the evacuation from the site.
 - i. It may be appropriate to claim items important to the child at a later time once re-entry into the home is deemed safe. See “Moderate Risk Situation” section on possessions (Section 12, a through e) for guidance.

3. Decontamination

- a. If the patient is **visibly contaminated**, remove clothes immediately and decontaminate as appropriate for specific chemicals in use at that site.
- b. Decontamination should be performed by the agency responsible for this task at the scene and should follow appropriate procedures as defined by that agency.
- c. With issues of gender sensitivity, appropriate attention should be given to changing, and related issues. Maintenance of appropriate protection from cold weather should be taken into account as well, especially when decontaminating infants and small children. Infants and small children are at increased risk of cold stress due to their smaller size and disproportionately large body surface area. Care must be taken not to wash infants or young children with cold water. Even when washed with warm water, care should be taken to promptly dress them after washing.
- d. If the patient is not visibly contaminated, have the patient change into clean clothes and leave contaminated clothing behind at the site. Additional steps may be necessary, depending on the specific chemicals in use at that site. This decision should be made by the agency or team members tasked with decontamination decisions.
- e. Eye glasses, hearing aids or durable medical equipment attached to the child who was evacuated should be cleansed or wiped down thoroughly (i.e. every surface needs to be cleaned). Items in this category that have no visible contamination can generally be cleaned by use of typically available household multi-surface cleaners (such as Fantastik™, Formula 409™, or similar agents) while wearing household rubber gloves.

However, best practices should be determined in consultation with decontamination staff, hazardous materials experts and/or the Georgia Poison Center.

- f. Children should be bathed at the earliest possible opportunity that protects their privacy and health, unless on-scene decontamination was necessary as per section 3.a. above.

4. Clothes

- a. Change the child's clothes on scene. Given that prompt clothing change is in the best interest of the child, this should be done as soon as is feasible.
- b. If the child is able to independently undress and dress without assistance, the child should be offered an appropriate area to do so.
- c. In the event that the child requires assistance, DFCS or any other agency's staff capable of doing so should assist the child.
- d. Consultation with hazardous materials/decontamination staff is encouraged in case of questions regarding proper procedures and disposition of the removed clothing.
- e. It is preferable to use clean clothes from outside the home (e.g. newly purchased items or items from neighbors or family).
 - i. If not available, use paper scrubs,
 - ii. If none of the above are available wrap child in a clean blanket from outside the home after decontamination,
- f. Do not dress the children in clothing from inside the home in which a **cook** is active at the time of evacuation until they have been laundered. Clothing from inside the home should be laundered before children wear them. Rationale: The concern is that any cloth material taken from the home during a "cook" or shortly after a "cook" may expose clothing to airborne chemicals, which would contaminate previously clean porous items.

5. Medical Evaluation

- a. If possible, initial evaluation should take place on scene to identify immediate threats to life. If there are any questions regarding the presence of such threats, rapid consultation with EMS or other medical personnel should be performed.
- b. Even if an on-scene examination takes place, the child should be taken to the most appropriate emergency department for evaluation prior to placement. Rationale: The medical examination in the emergency department should be geared to find and treat acute toxicity, and rule out delayed toxicity during a **reasonable observation period** from exposure to **airborne** chemicals from the **cook**. It is neither intended to be a comprehensive physical or neurodevelopmental examination nor is it intended to diagnose chronic condition that pose no acute danger to the health or well being of the child.
 - i. The emergency department physician should be informed of what chemicals were at the scene (if known) and be informed that a **cook** was apparently in progress or apparently had recently been in progress prior to the evacuation of the child. (see also the GBI Clandestine Laboratory Guideline document for cross referencing and coordination, section 4.B.8)
 - ii. While the extent of evaluation and disposition is the choice of the treating physician, it is recommended that the emergency department (ED) evaluation include at least the following:
 - (1) Measurement of vital signs including heart rate, blood pressure, respiratory rate, oxygen saturation and temperature;
 - (2) Physical examination with specific attention paid to the cardio-pulmonary systems and skin examinations; and

- (3) Observation for development of delayed toxicity for approximately 6 hours.
 - iii. No specific laboratory or radiological testing is recommended to be performed at the time of the ED evaluation unless medically indicated.
 - (1) Urine or blood toxicological testing does not need to be sent unless the clinician feels it is medically indicated. In general urine toxicology screens do not add much clinical information in this setting.
 - iv. If a forensic sample is desired by law enforcement agencies, standard forensic sample handling, including chain of custody procedures, should be followed.
 - c. Once released from the initial evaluation, follow-up of the child should be arranged by DFCS for full medical examination including laboratory work and neurodevelopmental evaluation.
 - i. The first choice should be to arrange follow-up with the child's own pediatrician, possibly in through referral to with a neurodevelopmental specialist.
 - ii. If the child's pediatrician or neurodevelopment specialist is not available, a clinic or hospital practice should evaluate the child within 72-96 hours for follow-up examination and laboratory testing to assess for chronic toxicity.
 - (1) Laboratory evaluation should generally include a Complete Metabolic Panel, including sodium, potassium, chloride, CO₂, BUN, creatinine, and liver function tests.
 - iii. Given the child's toxicological exposure, it may be beneficial to consider the following tests as the clinician deems them to be indicated:
 - (1) Complete Blood Count
 - (2) Chest Radiograph
 - (3) Pulmonary Function Tests as appropriate for age

6. Possessions

- a. During evacuation from a site in which a **cook** is in progress or believed to be recently completed, no items should be removed from the home, except for those items in section 2.b. above in compliance with forensic protocols.
- b. Consideration should be given to claiming items potentially important to the child once investigation of or evaluation of the scene has been processed and is deemed safe. This decision should be made by those local officials responsible for scene clean-up.

IV PROTOCOLS FOR MODERATE RISK SITUATIONS

1. Definition of Moderate Risk Situation:

- a. No **cook** in progress and no evidence of recent **cook**, BUT chemicals and **cook** apparatus were found in an area where children share ventilation (area in which child resides).

2. Initial Encounter

- a. Police or other members of **entry team**, in appropriate **PPE**, bring children to DFCS or EMS staff waiting at a safe distance outside the house.
- b. Unless **grossly contaminated**, possessions immediately brought with child should include:
 - i. Eyeglasses
 - ii. Hearing aids
 - iii. Durable medical equipment attached to the child (such as feeding tubes or IV access ports entering the skin)
 - iv. Prescription medications
 - (1) It may be appropriate to validate that contents are compatible with the label. This can be done by comparing the contents with those expected. The Georgia Poison Center will assist in deciphering the codes imprinted on tablets or capsules, if contacted.

3. Decontamination

- a. If the patient is **visibly contaminated**, remove clothes immediately and decontaminate as appropriate for specific chemicals in use at that site.
- b. Decontamination should be performed by the agency responsible for this task at the scene and should follow appropriate procedures as defined by that agency.
- c. Appropriate attention should be given to issues of gender sensitivity, including appropriate cover while changing and related issues. Maintenance of appropriate protection from cold weather should be taken into account as well, especially when decontaminating infants and small children. Infants and small children are at increased risk of cold stress due to their smaller size and disproportionately large body surface area. Care must be taken not to wash infants or young children with cold water. Even when washed with warm water, care should be taken to promptly dress them after washing.
- d. Eyeglasses, hearing aids or durable medical equipment attached to the child who was evacuated should be wiped down thoroughly (i.e. every surface needs to be cleaned). Items in this category that have no visible contamination can generally be cleaned by use of typically available household multi-surface cleaners (such as Fantastik™, Formula 409™, or similar agents) while wearing household rubber gloves. However, best practices should be determined in consultation with decontamination staff, hazardous materials experts and/or the Georgia Poison Center.
- e. Children should be bathed at the earliest possible opportunity that protects their privacy and health, unless on-scene decontamination was necessary as per section (3.a) above.

4. Clothes

- a. Change the child's clothes on scene. Given that prompt clothing change is in the best interest of the child, this should be done as soon as is feasible.
- b. If the child is able to independently undress and dress without assistance, the child should be offered an appropriate area to do so.
- c. In the event that the child requires assistance, DFCS or any other agency's staff capable of doing so should assist the child.
- d. Consultation with hazardous materials/decontamination staff is encouraged in case of questions regarding proper procedures and disposition of the removed clothing.
- e. It is preferable to use clean clothes from outside the home (e.g. newly purchased items or items from neighbors or family).
 - i. If not available, use paper scrubs,
 - ii. If none of the above are available wrap child in a clean blanket from outside the home after decontamination,
- f. Do not dress the children in clothing from inside the home in which a **cook** is active at the time of evacuation until they have been laundered. Clothing from inside the home should be laundered before children wear them. Rationale: The concern is that any cloth material taken from the home during a "cook" or shortly after a "cook" may expose clothing to airborne chemicals, which would contaminate previously clean porous items.

5. Medical Evaluation

- a. If the child has ANY acute health complaints or there are concerns regarding the child's acute health, or if the child was rescued from a burning structure, the child should be evaluated before placement.
 - i. If possible initial evaluation should take place on scene to identify immediate threats to life. If there are any questions regarding the presence of such threats, rapid consultation with EMS or other medical personnel should be performed.
 - ii. Even if an on-scene examination takes place, the child should be taken to the most appropriate emergency department for evaluation prior to placement. Rationale: The medical examination in the emergency department should be geared to find and treat acute toxicity and rule out delayed toxicity during a **reasonable observation** period in the symptomatic child. It is neither intended to be a comprehensive physical or neurodevelopmental examination nor is it intended to diagnose chronic condition that pose no acute danger to the health or well being of the child.
 - iii. The emergency department physician should be informed of what chemicals were at the scene (if known) and be informed that no evidence of a recent cook, but chemicals and cook apparatus were found during evacuation of the child (see the GBI Clandestine Lab Guidelines 4.B.8.).
 - iv. While the extent of evaluation and disposition is the choice of the treating physician, it is recommended that the ED evaluation of the symptomatic child include at least the following:
 - (1) Measurement of vital signs including heart rate, blood pressure, respiratory rate, oxygen saturation and temperature;
 - (2) Physical examination with specific attention paid to the cardiac, pulmonary and skin examinations; and

- (3) Observation for development of delayed toxicity for approximately 6 hours.
 - v. No specific laboratory or radiological testing is recommended to be performed at the time of the ED evaluation unless medically indicated.
 - (1) Urine or blood toxicological testing does not need to be sent unless the clinician feels it is medically indicated. In general urine toxicology screens do not add much clinical information in this setting.
 - vi. If a forensic sample is desired by law enforcement agencies, standard forensic sample handling including chain of custody procedures should be followed.
- b. If the child does NOT have any acute health complaints and there are NO concerns regarding the child's acute health DFCS should follow the standard procedure for any child taken into DFCS custody. The temporary custodian should be given a written and verbal explanation of any warning signs, and when to call the physician.
- c. Follow up should be arranged for all children in coordination with DFCS for full medical examination, including laboratory work and neurodevelopmental evaluation.
 - i. The first choice should be to arrange follow up with the child's own pediatrician, possibly through referral to a neurodevelopmental specialist.
 - ii. If the child's pediatrician or neurodevelopment specialist is not available, a clinic or hospital practice should evaluate the child within 72-96 hours for follow-up examination and laboratory testing to assess for chronic toxicity.
 - (1) Laboratory evaluation should generally include a Complete Metabolic Panel, including sodium, potassium, chloride, CO₂, BUN, creatinine, and liver function tests.
 - iii. Given the child's toxicological exposure, it may be beneficial to consider the following tests as the clinician deems them to be indicated:
 - (1) Complete Blood Count
 - (2) Chest Radiograph
 - (3) Pulmonary Function Tests as appropriate for age

6. Possessions

- a. Items can be removed:
 - i. At the time of the child's removal from site, AND/OR
 - ii. Once the site has been processed and deemed safe for entry by law enforcement personnel in compliance with forensic protocols.
- b. Items that are **grossly contaminated** should be left at the scene for later assessment and possible handling as contaminated goods.
- c. Unless **grossly contaminated**, solid surface items should be thoroughly cleansed or wiped down (i.e. each side of the object should be cleaned) after which the item may be given to the child (e.g. plastic toys, Nintendo™ type game systems, computers and other electronics). Items in this category that have no visible contamination can generally be cleaned by use of typically available household multi-surface cleaners (such as Fantastik™, Formula 409™, or similar agents) while wearing household rubber gloves. However, best practices should be determined in consultation with decontamination staff, hazardous materials experts and/or the Georgia Poison Center.
- d. Clothes or stuffed items housed in covered or enclosed areas (i.e. dresser drawers or boxes) that do not have visible contamination can be sent with the child to the foster family, where they can be washed safely using the following guidelines:
 - i. Items should be transported in plastic bags that can be tied closed in transit.
 - ii. Each bag should contain no more than several items (about 3 to 5 pounds per bag maximum).

- iii. The foster family should be notified that each bag of clothes should be washed alone as a single wash load, using hot water and warm rinse, and generous amounts of detergent.
- e. If there is uncertainty as to whether an item is contaminated or not, leave it at the scene for later assessment.

V PROTOCOLS FOR MINOR RISK SITUATIONS

1. Definition of Minor Risk:

- a. No **cook** in progress and no evidence of recent **cook**.
- b. No chemicals or **cook** apparatus or evidence of contamination found in an area with shared ventilation with the area in which the children were residing (e.g., children are found in a house without any immediately evident contamination *and* the house does not share any ventilation [i.e. ducts or doors or windows] with a trailer in which chemicals and cooking vessels were housed.).

2. Initial Encounter

- a. Police or other members of **entry team** in appropriate **PPE** bring children to DFCS or EMS.
- b. Possessions immediately brought with child should include:
 - i. Glasses
 - ii. Hearing aids
 - iii. Durable medical equipment attached to the child (such as feeding tubes or IV access ports entering the skin).
 - (1) If any of these possessions are **visibly contaminated** the “moderate risk” guidelines should be followed (Section 3.d).
 - iv. Prescription medications
 - (1) It may be appropriate to validate that contents are compatible with the label. This can be done by comparing the contents with those expected. The Georgia Poison Center will assist in deciphering the codes imprinted on tablets or capsules, if contacted.

3. Decontamination

- a. If the patient is **visibly contaminated**, the “moderate risk” guidelines should be followed (see Moderate Risk Guidelines in Section 4).
- b. The child does not need decontamination at the scene.
- c. Children should be bathed at the earliest possible opportunity that protects their privacy and health. This should occur in a setting that is appropriately heated, in order to minimize the risk of cold stress.
- d. Eyeglasses, hearing aids or durable medical equipment attached to the child who was evacuated should be wiped down to remove household dirt and other potential debris. Items in this category that have no visible contamination can generally be cleaned by use of typically available household multi-surface cleaners (such as Fantastik™, Formula 409™, or similar agents) while wearing household rubber gloves. However, best practices should be determined in consultation with decontamination staff, hazardous materials experts and/or the Georgia Poison Center.

4. Clothes

- a. The child should change clothes in this situation, as follows:
 - i. Clothing from outside the home (e.g. newly purchased items or items from neighbors or family), or paper scrubs can be used.
 - ii. Clothes from inside the site can be used as long as the clothes are not **visibly contaminated** (by visual inspection or smell).

5. Medical Evaluation

- a. If the child has ANY acute health complaints, or there are ANY concerns regarding the child's acute health, or if the child was rescued from a burning structure, the child should be evaluated by a physician before placement.
- b. If the child does NOT have any acute health complaints and there are NO concerns regarding the child's acute health, DFCS should follow the standard procedure for any child taken into DFCS.
- c. Once released from the initial evaluation, follow up of the child should be arranged by DFCS for full medical examination including laboratory work and neurodevelopmental evaluation.
 - i. The first choice should be to arrange follow up with the child's own pediatrician, possibly in conjunction with a neurodevelopmental specialist.
 - ii. If the child's pediatrician or neurodevelopment specialist is not available, a clinic or hospital practice should evaluate the child within 72-96 hours for follow-up examination and laboratory testing to assess for chronic toxicity.
 - (2) Laboratory evaluation should generally include a Complete Metabolic Panel (including sodium, potassium, chloride, CO₂, BUN, creatinine, liver function tests).
 - iii. Given the child's toxicological exposure it may be beneficial to consider the following tests as the clinician deems them to be indicated:
 - (3) Complete Blood Count
 - (4) Chest Radiograph
 - (5) Pulmonary Function Tests as appropriate for age

6. Possessions

- a. Items can be removed at the time of the child's removal from the site AND/ OR once the site has been processed and deemed safe for entry by law enforcement personnel in compliance with forensic protocols.
- b. Items that are **grossly contaminated** should be left at the scene for later assessment and possible handling as contaminated goods.
- c. Unless **grossly contaminated**, solid surface items should be thoroughly be cleansed or wiped down (i.e. each side of the object should be cleaned), after which the item may be given to the child (e.g. plastic toys, Nintendo™ type game systems, computers and other electronics). Items in this category that have no visible contamination can generally be cleaned by use of typically available household multi-surface cleaners (such as Fantastik™, Formula 409™, or similar agents) while wearing household rubber gloves. However, best practices should be determined in consultation with decontamination staff, hazardous materials experts and/or the Georgia Poison Center.
- d. Clothes or stuffed items that do not have visible contamination can be sent to the foster family to be washed.
 - v. Items should be transported in plastic bags that can be tied closed in transit.
 - vi. The foster family should be notified that clothes should be washed, using hot water and warm rinse, and generous amounts of detergent, prior to wearing.
- e. If there is uncertainty as to whether an item is contaminated or not, leave it at the scene for later assessment.

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