

## **Clandestine Methamphetamine Labs: What's Cooking in Your Neighborhood?**

### **NYSNA Continuing Education**

*The New York State Nurses Association is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.*

All American Nurses Credentialing Center (ANCC) accredited organizations' contact hours are recognized by all other ANCC accredited organizations. Most states with mandatory continuing education requirements recognize the ANCC accreditation/approval system. Questions about the acceptance of ANCC contact hours to meet mandatory regulations should be directed to the Professional licensing board within that state.

NYSNA has been granted provider status by the Florida State Board of Nursing as a provider of continuing education in nursing (Provider number 50-1437).

## How to Take This Course

Please take a look at the steps below; these will help you to progress through the course material, complete the course examination and receive your certificate of completion.

### 1. REVIEW THE OBJECTIVES

The objectives provide an overview of the entire course and identify what information will be focused on. Objectives are stated in terms of what you, the learner, will know or be able to do upon successful completion of the course. They let you know what you should expect to learn by taking a particular course and can help focus your study.

### 2. STUDY EACH SECTION IN ORDER

Keep your learning "programmed" by reviewing the materials in order. This will help you understand the sections that follow.

### 3. COMPLETE THE COURSE EXAM

After studying the course, click on the "Course Exam" option located on the course navigation toolbar. Answer each question by clicking on the button corresponding to the correct answer. All questions must be answered before the test can be graded; there is only one correct answer per question. You may refer back to the course material by minimizing the course exam window.

### 4. GRADE THE TEST

Next, click on "Submit Test." You will know immediately whether you passed or failed. If you do not successfully complete the exam on the first attempt, you may take the exam again. If you do not pass the exam on your second attempt, you will need to purchase the course again.

### 5. FILL OUT THE EVALUATION FORM

Upon passing the course exam you will be prompted to complete a course evaluation. You will have access to the certificate of completion **after you complete the evaluation**. At this point, you should print the certificate and keep it for your records.

## Introduction

*JP is a 24-year-old male unable to maintain employment for the past 6 months. He used to hang around with his cousin GM and go camping or to concerts when they were bored. To cheer him up, his cousin came to visit him. GM was met at JP's door by a huge snarling dog. JP seemed angry, preoccupied, and yelled at his cousin, telling him to get out and to leave him alone. GM states that the home is looking more trashy than usual. There is a collection of barbecue gas tanks, jars, hoses, and fire extinguishers accumulating in his backyard. He also detected a strange smell but thought his cousin was re-finishing some cabinets or furniture.*

---

*CT is a 27-year-old father of 2 small children. He lives in a rural neighborhood and talks about the recent changes in his wife. He talks about how busy they keep his wife at work requesting her to work many hours over time into the night. She comes home and is too "charged up" to sleep. He has also noticed she has lost so much of the weight she often complained about, but at the same time is looking overly tired. He is concerned that her schedule keeps her too busy to see a dentist and that her teeth are beginning to show the neglect. When he asks her about it, she becomes very angry with almost paranoid-like behavior.*

---

*At the local city Home Owners Association, a landlord was talking about a tenant who she thought was a bit odd. She often wondered why the renters kept the windows dark with black-out curtains. Another landlord told her not to worry because they probably worked nightshifts. She responded that she didn't see that this was possible because the tenants frequently had visitors throughout the night, but at least they were considerate. When asked how so, she replied they always go outside to smoke and the apartment smelled like they were always cleaning it. She didn't want to complain because the renters always paid on time and in cash. She liked that.*

---

What do these scenes have in common? Why should you be concerned?

They are signs of methamphetamine drug abusers or clandestine methamphetamine drug labs. In some areas of the country, methamphetamine abuse is increasing in number. This wreaks havoc not only for the addict, their families and friends, but for communities as well. It also poses an extreme risk to children and the elderly when they are exposed to this type of environment.

This course will provide current information on methamphetamine and how to recognize clandestine methamphetamine laboratories. It will demonstrate the drastic physical changes that occur in methamphetamine abusers even over a short period of time. The chemicals and equipment used to manufacture methamphetamine will also be reviewed.

## **Objectives**

At the completion of this learning activity the learner will:

- Participants will be able to describe common appearances of methamphetamine users.
- Participants will be able to describe signs of methamphetamine use.
- Participants will be able to describe equipment and chemicals which may be signs of a clandestine methamphetamine laboratory.
- Participants will be able to define what drug endangered children are and who to report child endangerment to.

## **About the Author**

### **Cheryl J. Collins, RN, LMHC**

Ms. Collins is a nurse and mental health counselor who has worked in the addictions field for the past fifteen years. She co-founded a community based 350-hour training program for Credentialed Alcohol and Substance Abuse Counselors and currently teaches several classes within that curriculum. Ms. Collins is self-employed, developing courses for several human service agencies in the Capital District of New York and in Florida where she currently resides.

## Methamphetamine

### What is Methamphetamine?

Methamphetamine (meth) is a potent central nervous system stimulant. Meth can be smoked, snorted, injected, or administered orally. Users refer to meth in its smoked form as “crank,” “speed,” “crystal,” or “ice.” Early last century it was developed from amphetamine which is often used in cold remedies including bronchial inhalers and nasal decongestants. Methamphetamine is longer lasting and also enters the brain causing more harmful effects on the central nervous system than its predecessor amphetamine. As a schedule II stimulant, meth has a higher potential for abuse.

### What Does Methamphetamine Look Like?

Meth is available as a crystalline powder or in rock-like chunks. It is odorless and bitter in powder form, which mixes easily in liquids. Meth varies in color and may be white, yellow, brown, or pink. The following images of methamphetamine are courtesy of the United States Drug Enforcement Administration. Additional images may be viewed on their Web site at [http://www.usdoj.gov/dea/photo\\_library3.html#meth](http://www.usdoj.gov/dea/photo_library3.html#meth).



### Signs of Methamphetamine Use

Users who smoke or inject meth will experience an intense sensation, called a “rush” or “flash” that lasts only a few minutes and is described as extremely pleasurable. This is followed by a state of high agitation that in some individuals can lead to violent behavior. Snorting or swallowing meth produces a “high” but not a “rush.” The user may exhibit dilated pupils, sweating, dry mouth, flushed skin and tremors. They often experience increased wakefulness and insomnia, decreased appetite, irritability, anxiety, nervousness, and convulsions. They may also exhibit aggressive and psychotic behavior, irritability, anxiety, paranoia, and auditory hallucinations.

Long term effects of methamphetamine use include accelerated aging of the skin, hair, and body physique, wearing down of tooth enamel, including decay.

*“Meth Mouth” photos courtesy of:  
Sharlee Shirley, RDH, MPH; Jim Cecil, DMD, MPH, University of Kentucky, School of Dentistry*



### **Clandestine Methamphetamine Labs: What’s Cooking in Your Neighborhood?**



Please visit <http://www.drugfree.org/Portal/DrugIssue/MethResources/faces/index.html> to view additional images of the effects of methamphetamine use.

### Physiological Effects of Meth

Methamphetamine affects the body even for first time users. The smallest dose can cause hyperthermia with a body temperature rising above 104°F, hypertension, convulsions, and death. Just like stimulants, meth tricks the body into thinking it has an unlimited source of energy. Users find themselves up all night and sometimes are awake for days at a time. When they crash, meth users feel very tired from this energy drain and often depressed. This chemical imbalance can also lead to hallucinations, paranoia, violent behavior, auditory hallucinations, and delusions such as the sensation of insects creeping under the skin. The constant picking at these “bugs” can cause skin infections and abscesses leading to multiple scars from self mutilation.

Methamphetamine alters the ability to use good reasoning and judgment, which often leads to unsafe behaviors including risky sexual behavior. As a result, there is an increase in reported cases of HIV, Hepatitis B and C transmissions for both injecting and non-injecting meth users. The spread of disease is found primarily through re-use of syringes as well as engaging in unprotected sexual activities (National Institute on Drug Abuse, n.d.).

The rapid aging appearance seen in meth users is likely due to poor nutritional intake as well as sleep deprivation. Methamphetamine suppresses the appetite and the immune system. With a loss in polyphenol antioxidants, the body has a difficult time repairing damage inflicted by the drugs. Cellular regeneration occurs primarily during the sleep cycle, but this process is reduced in meth users due to lack of sleep. Poor personal hygiene, decreased saliva, and teeth grinding also contribute to the aging appearance, as well as rotten or broken teeth (National Institute on Drug Abuse, n.d.).

Even low use of methamphetamine can damage as much as half of the brain’s dopamine producing cells. What results is a brain that looks as if it has had several strokes, Alzheimer’s, or Parkinson’s disease

### **Clandestine Methamphetamine Labs: What’s Cooking in Your Neighborhood?**

(Southeast Michigan Community Alliance, n.d.). Meth has a neurotoxic effect thus damaging brain cells that contain dopamine and serotonin. This lack of neurotransmitters results in the unsteady gait and shakiness, which is often associated with Parkinson's disease.

Other physiological effects include: rapid, irregular heart rate and rhythm (can lead to heart attacks); accumulation of excess fluid in the lungs; damage to blood vessels in the brain (stroke); continuous/excessive dilation of the pupils; internal bleeding; damage to other organs caused by disruption of blood flow; and breakdown of muscle tissue leading to kidney failure, multiple organ shutdown, and eventually death (Halkitis, 2002).



## **Clandestine Laboratory**

### What is a Clandestine Laboratory?

The clandestine drug laboratory or clan lab is a mini-chemical lab designed for one purpose: to manufacture illegal drugs quickly and cheaply. Clandestine lab chemists can produce LSD, synthetic heroin and other drugs, but their drug of choice is methamphetamine.

These homemade drugs are dangerous, but the labs are equally dangerous and can be located in any neighborhood. Toxic chemicals, explosions, fires, booby traps, and armed criminals - are all common dangers of clandestine labs.

Clandestine labs can be found in:

- Rural rentals with absentee landlords (homes, barns, mobile homes or outbuildings).
- Urban home or apartment rentals with absentee landlords.
- Trailers and motor homes.
- Motel rooms.
- Houseboats.
- Mini-storage units. These are used to store chemicals, drugs, lab equipment and weapons.

## Why Should I Be Concerned?

Methamphetamine users are not the only persons poisoned by this drug. The manufacture of it is extremely dangerous and involves many common household chemicals. These chemicals, alone and in an array of combinations, can be toxic and even lethal. When mixed, these chemicals can damage the central nervous system, liver and kidneys. They can also burn or irritate the skin, eyes, nose and throat.

The chemicals and their fumes can permeate the wall, carpets, plaster, and wood in meth labs and the surrounding soil, making this a danger to anyone who enters. These chemicals are known to cause cancer, short-term and permanent brain damage, immune system problems, and respiratory problems.

Many clandestine meth lab operators are untrained in the use of dangerous chemicals. This results in fires and explosions that can injure and kill not only the meth producers but innocent bystanders, children, neighbors, law enforcement officials, firemen, and home health care providers. Some meth lab operators experiment with other chemical mixtures, producing unknown toxic and hazardous chemical waste and fumes that may kill several innocent people.

In addition, meth use increases the cost to society for medical and emergency room use. It also contributes to the domestic violence, child abuse, automobile accidents, and the spread of infectious diseases such as Hepatitis C and HIV.

### Potential Health Effects

<b>Types</b>	<b>Common Chemicals</b>	<b>Symptoms/Health Effects</b>
<b>Solvents</b>	Acetone, ether/starting fluid, Freon, hexane, methanol, toluene, white gas, xylene	Irritation to skin, eyes, nose and throat; headache; dizziness; depression; nausea; vomiting; visual disturbances; cancer
<b>Corrosives/irritants (acids/bases)</b>	Anhydrous ammonia, iodine crystals, hydrochloric acid ( <i>muratic acid</i> ), phosphine, sodium hydroxide ( <i>lye</i> ), sulfuric acid ( <i>drain cleaner</i> )	Cough; eye, skin and respiratory irritation; burns and inflammation; gastrointestinal disturbances; thirst; chest tightness; muscle pain; dizziness; convulsions
<b>Metals/salts</b>	Iodine, lithium metal, red phosphorus, yellow phosphorus, sodium metal	Eye, skin, nose and respiratory irritation; chest tightness; headache; stomach pain; birth defects; jaundice; kidney damage

## Recognizing a Methamphetamine Lab

### External Signs of a Meth Lab

Any single activity may or may not be sole proof that drug dealing or methamphetamine production is occurring. However, a combination of the following may be reason for concern:

- Frequent visitors at all times of the day or night
- Occupants appear unemployed, yet seem to have plenty of money and pay bills with cash
- Occupants display paranoid or odd behavior
- Windows blackened or curtains always drawn
- Chemical odors coming from the house, garbage or detached buildings
- Garbage contains numerous bottles, container, and materials such as those listed in below section
- Coffee filters, bed sheets or other material stained from filtering red phosphorus or other chemicals

### Common Chemicals Used in Meth Production

Common household cleaning chemicals and products, including over-the-counter medications, are frequently used in meth production.

<b>Chemical Name</b>	<b>Commonly found in:</b>
Alcohol	Isopropyl or rubbing
Toluene	Brake cleaner
Ether	Engine starter
Sulfuric Acid	Drain cleaner
Red Phosphorus	Matches/road flares
Salt	Table/rock
Iodine	Teat dip or flakes/crystals
Lithium	Batteries
Trichloroethane	Gun scrubber
MSM	Cutting agent
Sodium or Potassium Metal	
Methanol/Alcohol	Gasoline additives
Muriatic Acid	
Anhydrous Ammonia	Farm fertilizer
Sodium Hydroxide	Lye
Pseudoephedrine/Ephedrine	Cold tablets (Sudafed)
Acetone	Nail polish remover
Calcium bentonite or silica gel	Kitty Litter
Ammonium Sulphate Fertilizer	Used to make Anhydrous Ammonia
Liquid Propane	
Carbon dioxide	Dry Ice
Drierite	Used to remove water

### Common Equipment Used in Meth Production

The equipment used in meth production is common in name or type, but uncommon in the large quantities needed to produce meth.

- Pyrex or Corning dishes
- Jugs/bottles
- Paper towels
- Coffee filters
- Thermometer
- Cheesecloth
- Funnels
- Blenders
- Rubber tubing/gloves
- Pails/buckets
- Gas cans
- Tape clamps
- Internet documents/notes
- Strainers
- Aluminum foil
- Propane cylinders
- *“How to Make Methamphetamine”* books
- Hotplates
- Plastic storage containers/ice chests
- Measuring cups
- Scales
- Towels/bed sheets
- Laboratory beakers/glassware
- Mop pail

## Safety First

### Physical Contact with a Meth User

Heavy meth users are most dangerous when they have not slept for days due to the "high" of the drug. This is called tweaking. Tweakers become extremely paranoid and demonstrate great bouts of anger and violence. This is a period of time when they crave more drugs and will do anything to get their next high and become unpredictable. It is recommended not to attempt to detain them but one should call for a backup from law enforcement officers.

#### **Safety Tips for Approaching a Heavy Meth User**

1. Keep a safe distance. Invading their personal space can be perceived as threatening.
2. Slow your speech and movements. A tweaker already hears sounds at a fast pace and in a high pitch. Slowing your movement decreases the chances that the tweaker will misinterpret your physical actions.
3. Keep your hands visible. If you place your hands where the tweaker cannot see them, they might feel threatened and could become violent.
4. Keep the tweaker talking. A tweaker who falls silent can be extremely dangerous. Silence often means that his paranoid thoughts have taken over reality, and anyone present can become part of the tweaker's paranoid delusions.

*Source: National Drug Intelligence Center, U.S. Department of Justice*

### Actions to Take if You Encounter a Clandestine Meth Lab

Professional staff who provide care in the home may find themselves unexpectedly in an environment exposed to methamphetamine. Make note of it and leave as soon as possible while trying to avoid suspicion or confrontation with those around you.

<b>What to Do if you Encounter a Clandestine Methamphetamine Laboratory</b>	
<b>DO NOT</b>	<b>DO</b>
<ul style="list-style-type: none"><li>• touch anything in the lab.</li><li>• turn on or off any electrical power switches or light switches.</li><li>• eat or drink in or around a lab.</li><li>• open or move containers with chemicals or suspected chemicals.</li><li>• smoke anywhere near a lab.</li><li>• sniff any containers.</li></ul>	<ul style="list-style-type: none"><li>• decontaminate yourself, your clothing, or anything else that may have come in contact with the chemicals.</li><li>• wash your hands and face thoroughly.</li><li>• call your local authorities or DEA district office</li></ul>
<i>Source: U.S. Drug Enforcement Administration</i>	

### Remember! Your Safety is the First Priority

Personal safety is the first thing anyone should think of upon entering an unknown situation, site, or home. If the environment is questionable for any reason, does not smell right, suspicious in appearance, or has extraordinary security for the homestead, make note of it and leave as soon as possible. Meth labs are known to be very toxic, and flammable with great potential for explosions. It is also important not to confront individuals in this type of situation due to their probable volatile reaction. Call the appropriate agency as soon as you are in a safe place to report findings.

#### **Clandestine Methamphetamine Labs: What's Cooking in Your Neighborhood?**

## **Contemporary Issues**

In order to increase clientele, drug dealers look to ways to lure children into their market. MSNBC reports that candy has been found laced with methamphetamine. In Arkansas, a mix of strawberry flavored powder and methamphetamine was found marketed by drug dealers as "Strawberry Quick." When giving the drugs a sweet name, "it becomes more appealing to children because it doesn't have the stigma and are less afraid to get started" states Dr. Collin Goto, a toxicologist at Children's Medical Center in Dallas (May 8, 2007).

## Children at Risk

Thousands of children are neglected every year after living with parents, family members, or caregivers who are using meth or cooking meth. Children who reside in or near meth labs are at great risk of being harmed by toxic ingredients and noxious fumes. They are known as **drug-endangered children**. These children are often malnourished and are suffering the effects of physical and/or sexual abuse. Some of these children have dangerous chemicals or traces of illicit drugs in their systems. Others suffer burns to their lungs or skin from chemicals or fire. Some have died in explosions and fires. Many have behavior problems as a result of neglect.

Children who live at or visit drug-production sites or who are present during drug production face a variety of health and safety risks, including:

- inhalation, absorption, or ingestion of toxic chemicals, drugs, or contaminated foods that may result in nausea, chest pain, eye and tissue irritation, chemical burns, and death
- fires and explosions
- abuse and neglect
- hazardous lifestyle (presence of booby traps, firearms, code violations, poor ventilation)

Long term effects that can be seen include:

- Chronic headaches
- Fatigue
- Lack of coordination
- Irritation of skin and mucous membranes
- Brain damage
- Cancer
- Liver/spleen damage
- Damage to immunologic system

In many states, nurses and other professions are mandated by law to report suspicion of child abuse if they discover a child resides in a potential meth lab environment.

Senior citizens whose caretakers are lab operators are similarly vulnerable. Pets, including guard dogs, can also be harmed.

### Prevalence

According to the El Paso Intelligence Center (EPIC) National Clandestine Laboratory Seizure System, there were 1,660 children affected by or injured or killed at methamphetamine labs during calendar year 2005. A child affected by labs includes children who were residing at the labs but may not have been present at the time of the lab seizure as well as children who were visiting the site.

<b>Number of Children Affected by Labs, 2002–2005</b>				
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Child injured</b>	11	25	13	11
<b>Child killed</b>	2	1	3	2
<b>Children affected</b>	3,660	3,682	3,088	1,647
<b>Total injured/killed/affected</b>	<b>3,673</b>	<b>3,708</b>	<b>3,104</b>	<b>1,660</b>
Source: Office of National Drug Control Policy, March 2, 2007				

### **Clandestine Methamphetamine Labs: What's Cooking in Your Neighborhood?**

## How Do We Respond?

In October 2003, the Office of National Drug Control Policy announced National Drug Endangered Children (DEC) (<http://www.whitehousedrugpolicy.gov/news/press03/100603.html>) initiative to assist with coordination between existing state programs. This initiative created a standardized training program to extend DEC to states where such a program does not yet exist.

On February 27, 2007, the Drug Endangered Children Act of 2007 (HR 1199) (<http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.1199>;) was introduced in the House of Representatives. If passed, the bill would provide for \$20 million in DEC grants for fiscal years 2008 and 2009.

A variety of agencies are called upon to respond when drug laboratories are identified, including HAZMAT, law enforcement, and fire officials. When children are found at the laboratories, however, additional agencies and officials should be called in to assist, including emergency medical personnel, social services, and physicians.

Although coordination among child welfare services, law enforcement, medical services, and other agencies may vary across jurisdictions, interagency protocols developed to support drug-endangered children should generally address:

- staff training, including safety and cross training
- roles and responsibilities of agencies involved
- appropriate reporting, cross-reporting, and information sharing
- safety procedures for children, families, and responding personnel
- interviewing procedures
- evidence collection and preservation procedures
- medical care procedures

Actions of the responding agencies should include taking children into protective custody and arranging for child protective services, immediately testing the children for methamphetamine exposure, conducting medical and mental health assessments, and ensuring short- and long-term care.

For further information on recognizing clandestine methamphetamine labs please visit the New York State Office of Alcoholism and Substance Abuse Services Web site at <http://www.oasas.state.ny.us/meth/>.



## **Conclusion**

Methamphetamine destroys the human body causing physical illness, premature aging, and eventually death. Its use and production is a serious and hazardous problem in many communities throughout the United States. Methamphetamine use and production is seen not only in impoverished city projects but also in suburbs and rural areas. Due to the toxic process and extreme risk of fire with explosions, great concern for safety should be exercised for everyone who might come in contact with a potential clandestine methamphetamine laboratory.

## **Resources**

### **New York State Office of Alcoholism and Substance Abuse Services**

1450 Western Avenue

Albany, NY 12203-3526

(518) 485-1768 (General information)

<http://www.oasas.state.ny.us/meth/>

## References

- Crime and Violence Prevention Center, California Attorney General's Office. (1999). *Clandestine Drug Labs* [Brochure]. Sacramento, CA: Author.
- Drug Endangered Children*. (2007, March 2). Retrieved March 3, 2007, from [http://www.whitehousedrugpolicy.gov/enforce/dr\\_endangered\\_child.html](http://www.whitehousedrugpolicy.gov/enforce/dr_endangered_child.html)
- Drug Enforcement Agency, "Drug Intelligence Brief: The Forms of Methamphetamine," April 2002
- Halkitis, P. N. (2002). *Methamphetamine*. NIDA Conference on Blending Clinical Practice & Research. March 14-15, 2002, New York City, New York. Retrieved July 6, 2007, from <http://www.nida.nih.gov/pdf/blending/Halkitis.pdf>
- Meth 360*. (2006). Retrieved March 4, 2007, from <http://www.drugfree.org/Portal/DrugIssue/MethResources/default.html>
- MSNBC (May 8, 2007). *Drug dealers peddling new kid-friendly mixes*. Retrieved June 15, 2007 from <http://www.msnbc.msn.com/id/18557266/print/1/displaymode/1098/>
- National Institute on Drug Abuse. (n.d.). *Are methamphetamine abusers at risk for contracting HIV/AIDS and hepatitis B and C?* Research report series: Methamphetamine abuse and addiction. Retrieved July 6, 2007, from <http://www.drugabuse.gov/ResearchReports/methamph/methamph5.html#hiv>
- National Institute on Drug Abuse. (n.d.). What are the immediate (short-term) effects of methamphetamine abuse? Research report series: Methamphetamine abuse and addiction. Retrieved July 6, 2007, from <http://www.drugabuse.gov/ResearchReports/methamph/methamph3.html#short>
- Office of National Drug Control Policy. (2007, March 2). *Drug Endangered Children (DEC)*. Retrieved March 5, 2007, from [http://www.whitehousedrugpolicy.gov/enforce/dr\\_endangered\\_child.html](http://www.whitehousedrugpolicy.gov/enforce/dr_endangered_child.html)
- Southeast Michigan Community Alliance. (n.d.). *Know the facts about methamphetamines*. Retrieved July 6, 2007, from <http://www.semcaprevention.org/meth.html>
- United States Department of Justice. (2002). *Clandestine Drug Labs* (16th ed.) [Brochure]. Washington DC: Author.
- Www.streetdrugs.org. (2006). *Methamphetamine Labs* (Ver V) [Brochure]. Plymouth, MN: Author.

**Clandestine Methamphetamine Labs: What's Cooking in Your Neighborhood?  
Course Exam**

After studying the downloaded course and completing the course exam, you need to enter your answers online. **Answers cannot be graded from this downloadable version of the course.** To enter your answers online, go to e-leaRN's Web site, [www.elearnonline.net](http://www.elearnonline.net) and click on the Login/My Account button. As a returning student, login using the username and password you created, click on the "Go to Course" link, and proceed to the course exam.

1. Meth is a crystalline powder that is what color?
  - A. White
  - B. Pink
  - C. Brown
  - D. All of the above
  
2. Meth is a highly addictive drug that can be:
  - A. Smoked
  - B. Snorted
  - C. Injected
  - D. All of the above
  
3. Which of the following statements is **false**?
  - A. Meth users experience a "rush" and then a "high"
  - B. Meth can cause constricted pupils and decreased anxiety
  - C. Meth users can exhibit aggression and paranoia
  - D. Meth production is a highly explosive process
  
4. Long term use of meth can cause:
  - A. Skin abscesses
  - B. Constipation
  - C. Stroke, heart attack, and death
  - D. A and C
  
5. Clandestine labs are only found in rural areas where neighbors will not notice.
  - A. True
  - B. False
  
6. The chemicals involved in methamphetamine production are:
  - A. Generally safe household items
  - B. Toxic and highly irritating to skin, eyes, and lungs
  - C. Are used under controlled conditions by trained laboratory technicians
  - D. None of the above
  
7. People who are in danger from clandestine meth labs include:
  - A. Children and elderly
  - B. Firemen
  - C. Home health care workers
  - D. All of the above

8. Meth use contributes to domestic violence, child abuse, automobile accidents, and the spread of infectious diseases such as Hepatitis C and HIV.
- A. True
  - B. False
9. Which of the following is not a common chemical used in the production of meth?
- A. Brake cleaner
  - B. Sudafed
  - C. MSG
  - D. Kitty litter
10. Which of the following household items is not generally a sign of a clandestine meth lab?
- A. Pyrex dishes
  - B. Dish detergent
  - C. Coffee filters
  - D. Hot plates
11. Drug endangered children are children who have been exposed to drugs in utero.
- A. True
  - B. False
12. Child abuse/neglect, burns to the skin, and respiratory ailments may signal a drug-endangered child.
- A. True
  - B. False
13. A tweaker who falls silent
- A. Is sleepy due to exhaustion
  - B. Is often experiencing paranoid thoughts
  - C. Is not dangerous
  - D. Needs a tap on the arm to bring him/her back to focus
14. In many states, nurses and other professions are mandated by law to report suspicion of child abuse if they discover a child resides in a potential meth lab environment.
- A. True
  - B. False
15. If you suspect a clandestine meth lab, which of the following agencies may become involved?
- A. Local law enforcement
  - B. HAZMAT
  - C. Social Services
  - D. All of the above