

# Key Points to Diagnosing and Treating Drug Exposed Infants and Children

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- Symptoms exhibited by infants/children exposed to drugs or alcohol may vary.
- Some of the symptoms that drug-exposed infants and children exhibit are not “exclusive” to drug exposed infants/children and may be seen in non-exposed infants and children. Therefore it is difficult to diagnose an infant or child as drug exposed based only on the symptoms. A detailed history of drug/alcohol use during pregnancy is key to the diagnosis.
- Treatment is based on the symptoms that the infant/child may be exhibiting, not solely on the fact that the child is drug exposed.
- The drug exposed infant may be at risk for problems later in life, such as speech delay, attention deficit hyperactivity disorder and behavioral problems that may not be clinically present until the child is over age two or even school age.
- Not all infants/children exposed to drugs will have problems. The effects of drugs on infants/children will depend upon the amount of drug used during pregnancy and how long the drug was used during the pregnancy.

- The risk posed from drug exposure before birth should be balanced against the protective effects of a stable environment and early intervention services.

## **Methamphetamine and Cocaine**

Both methamphetamine and cocaine are psychostimulants that result in increased dopamine release. Dopamine is a neurotransmitter present in regions of the brain that regulate movement, emotion, motivation and feelings of pleasure. Excessive dopamine is responsible for the euphoric feelings experienced by the user. Although both are psychostimulants, there are differences in transmission at the level of the nerve cell.

**Methamphetamine**

**Cocaine**

**Information and illustrations from the National Institute on Drug Abuse (NIDA) website: [www.nida.nih.gov](http://www.nida.nih.gov)**

## **Methamphetamine**

Man-made

Smoking produces a high that  
Lasts 8-24 hours.

50% of the drug is removed  
from the body in 12 hours

Limited medical use

Dopamine depletion followed  
by CNS stimulation in the  
newborn.

Nicknames: “speed”, “meth”,  
“chalk”. *When smoked*, “ice”,  
“crystal”, “crank”, “glass”.

## **Cocaine**

Plant –derived

Smoking produces a high  
that lasts 20-30 minutes.

50% of the drug is removed  
from the body in 1 hour.

Used as a local anesthetic  
in some surgical proced.

CNS stimulation in the  
newborn.

Nicknames: “coke”, “C”,  
“snow”, “flake”, “blow”.  
*Freebase (smokeable)*  
“crack”

### **Symptoms of Methamphetamine use in Adults:**

Increase wakefulness and physical activity

Decrease appetite

Rapid heart rate

Irregular heart rate

Increased Blood pressure

Irreversible, stroke-producing damage to the small blood vessels in the  
brain

Hyperthermia (elevated body temperature)

Seizures

Inflammation of the heart lining

Damaged blood vessels  
Skin abscesses  
Episodes of violent behavior  
Paranoia  
Anxiety  
Confusion  
Insomnia  
Social and occupational deterioration  
Psychotic symptoms such as auditory hallucinations or delusions like  
the sensation of insects crawling on the skin (formication).

**Symptoms of Cocaine use in Adults:**

Euphoria  
Energetic  
Talkative  
Mentally alert, especially to sensations of sight, sound, and touch  
Temporarily decrease the need for food and sleep  
May feel enhancement of or decreased ability to perform simple  
physical and intellectual tasks  
Constricted blood vessels  
Dilated pupils  
Increased temperature, heart rate and blood pressure  
Bizarre, erratic and violent behavior.  
Tremors  
Vertigo  
Muscle twitches  
Paranoia  
Restlessness, irritability and anxiety  
Cardiac arrhythmia's  
Chest pain  
Strokes  
Seizures  
Headaches  
Abdominal pain and nausea  
Sudden death (in rare cases)  
Cardiac arrest