After delivery, babies who were exposed to amphetamines before birth appear to undergo withdrawal-like symptoms, including jitteriness, drowsiness and breathing problems.

**What is the long-term outlook for babies exposed to Ecstasy, methamphetamine and other amphetamines before birth?**
The long-term outlook for these children is not known. Children who are born with low birthweight are at increased risk of learning and other problems. Children with reduced head circumference tend to do worse than those with low birthweight and normal head size (5). More studies are needed to determine the long-term outlook for children exposed to amphetamines before birth.

**What are the risks with use of heroin during pregnancy?**
Women who use heroin during pregnancy greatly increase their risk of serious pregnancy complications. These risks include poor fetal growth, premature rupture of the membranes (the bag of waters that holds the fetus breaks too soon), premature delivery and stillbirth.

As many as half of all babies of heroin users are born with low birthweight (6). These babies, many of whom are premature, often suffer from serious health problems during the newborn period, including breathing problems, and are at increased risk of lifelong disabilities.

Use of heroin in pregnancy also may increase the risk of a variety of birth defects (6). What is not entirely clear is whether these effects are directly due to the drug itself or related to the poor health behaviors that women who take heroin often have, or whether these effects are due to the substances that the heroin often is mixed with when it is made.

Most babies of heroin users suffer from withdrawal symptoms after birth, including fever, sneezing, trembling, irritability, diarrhea, vomiting, continual crying and, occasionally, seizures. Babies exposed to heroin before birth also face an increased risk of sudden infant death syndrome (SIDS).

While heroin can be sniffed, snorted or smoked, most users inject the drug into a muscle or vein. Pregnant women who share needles are at risk of contracting HIV (the virus that causes AIDS) and passing it on to their babies.

A pregnant woman who uses heroin should not attempt to suddenly stop taking the drug. This can put her baby at increased risk of death. She should consult a health care provider or drug treatment center about treatment with a drug called methadone. Although infants born to mothers taking methadone also have withdrawal symptoms, they can be safely treated in the nursery and generally do better than babies born to women who continue to use heroin.
What is the long-term outlook for babies exposed to heroin before birth?
The outlook for these children depends on a number of factors, including whether they suffered serious prematurity-related complications. Some studies suggest that children exposed to heroin before birth are at increased risk of learning and behavioral problems.

What are the risks of use of “T’s and Blues” during pregnancy?
This is the street name for a mixture of a prescription opioid (related to morphine) painkiller called pentazocine and an over-the-counter allergy medicine. Individuals who abuse the mixture inject it into a vein. Babies of women who use T’s and Blues during pregnancy are at increased risk of slow growth and may suffer withdrawal symptoms (7).

Babies of women who abuse prescription oral (taken by mouth) opioid painkillers such as oxycodone (OxyContin) also may undergo withdrawal.

What are the risks with use of cocaine during pregnancy?
Cocaine use during pregnancy can affect a pregnant woman and her baby in many ways. During the early months of pregnancy, cocaine may increase the risk of miscarriage.

Later in pregnancy, it may trigger preterm labor (labor that occurs before 37 completed weeks of pregnancy) or cause the baby to grow poorly. As a result, cocaine-exposed babies are more likely than unexposed babies to be born prematurely and with low birthweight (less than 5½ pounds). Premature and low-birthweight babies are at increased risk of health problems during the newborn period, lasting disabilities such as mental retardation and cerebral palsy, and even death. Cocaine-exposed babies also tend to have smaller heads, which generally reflect smaller brains (8).

Some studies suggest that cocaine-exposed babies are at increased risk of birth defects involving the urinary tract and possibly other birth defects (9, 10, 11). Cocaine may cause an unborn baby to have a stroke, which can result in irreversible brain damage or a heart attack, and sometimes death.

Cocaine use during pregnancy can cause placental problems, including placental abruption. In this condition, the placenta pulls away from the wall of the uterus before labor begins. This can lead to heavy bleeding that can be life-threatening for both mother and baby. (Prompt cesarean delivery, however, can prevent most deaths.)

After delivery, some babies who were regularly exposed to cocaine before birth may have mild behavioral disturbances. As newborns, some are jittery and irritable. They may startle and cry at the gentlest touch or sound (11). These babies may be difficult to comfort and may be described as withdrawn or unresponsive. Other cocaine-exposed babies “turn off” surrounding stimuli by going into a deep sleep for most of the day. Generally, these behavioral disturbances are temporary and resolve over the first few months of life (11).
Cocaine-exposed babies may be more likely than unexposed babies to die of SIDS. However, studies suggest that poor health practices that often accompany maternal cocaine use (such as use of other drugs and cigarette smoking) may play a major role in these deaths (12, 13).

**What is the long-term outlook for babies who were exposed to cocaine before birth?**
Most children who were exposed to cocaine before birth have normal intelligence (14). This is encouraging, in light of earlier predictions that many of these children would be severely brain damaged. A 2004 study at Case Western Reserve University in Cleveland, Ohio, found that 4-year-old children who were exposed to cocaine before birth scored just as well on intelligence tests as unexposed children (14).

However, the Case Western and other studies suggest that cocaine may sometimes contribute to subtle learning and behavioral problems, including language delays and attention problems (14, 15, 16). A good home environment appears to help reduce these effects (14, 16). Researchers continue to follow cocaine-exposed children through their teen years to clarify their long-term outlook.

**What are the risks of “club drugs,” such as PCP (angel dust), ketamine (Special K) and LSD (acid)?**
There are few studies on the risks of these drugs during pregnancy. Babies of mothers who used PCP in pregnancy may have withdrawal symptoms (7, 17). Babies exposed before birth to PCP or ketamine may be at increased risk of learning and behavioral problems (7, 17). There have been occasional reports of birth defects in babies of women who used LSD during pregnancy, but it is not known whether or not the drug contributed to the defects (7).

**What are the risks of inhaling glues and solvents during pregnancy?**
Individuals, pregnant or not, who inhale these substances risk liver, kidney and brain damage and even death. Abusing these substances during pregnancy can contribute to miscarriage, slow fetal growth, preterm birth and birth defects (7).

**How can a woman protect her baby from the dangers of illicit drugs?**
Birth defects and other problems caused by illicit drugs are completely preventable. The March of Dimes advises women who use illicit drugs to stop before they become pregnant or to delay pregnancy until they believe they can avoid the drug completely throughout pregnancy.

The March of Dimes also encourages pregnant women who use illicit drugs (with the exception of heroin) to stop using the drug immediately, because of the harm continued drug use may cause. Women who use heroin should consult their health care provider or a drug treatment center about methadone treatment.

**Where can someone find more information on stopping drug use?**
To learn more about stopping drug use, ask a health care provider or contact:

- National Council on Alcoholism and Drug Dependence (NCADD), (800) 622-2255
Does the March of Dimes support research on illicit drug use during pregnancy?
The March of Dimes has supported a number of research grants on drug use during pregnancy.
For example, a recent grantee was studying physical and behavioral reasons that motivate pregnant women to abuse drugs such as cocaine, in order to improve drug treatment programs for pregnant women and reduce the risks to their babies. The March of Dimes also produces a variety of information and educational materials that inform pregnant women and others of the dangers of drugs during pregnancy.

For more information
Read fact sheets provided by the Organization for Teratology Information Services (OTIS).

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