

other topics

ALCOHOL

AMPHETAMINES

CANNABIS

COCAINE

HALLUCINOGENS

OPIOIDS

TOBACCO

Opioid drugs are effective painkillers. Made from the opium poppy or synthetically produced, opioids can induce feelings of euphoria (intense pleasure). All opioids are addictive to some degree, and all have the potential for abuse. Opioid medications include codeine, methadone, morphine, hydromorphone (Dilaudid®), oxycodone (Percodan®, OxyContin®), fentanyl (Duragesic®), meperidene (Demerol®), pentazocine (Talwin®) and propoxyphene (Darvon®).

Heroin belongs to this group of drugs. On the street, it is also called “smack,” “horse,” “junk” and “H.” Heroin is a highly addictive illegal drug. It is made by chemically changing morphine. Street heroin can be pure or diluted (“cut”) with substances like starch, powdered sugar, talcum powder, other drugs, or strychnine.

Methadone is a synthetic opioid commonly used in the treatment of heroin addiction. It acts on the same brain receptors as other opioids, but blocks the effects of other opioids without necessarily causing euphoria or sedation. Methadone also lasts longer than other opioids and generally reduces cravings for opioids.

Effects on general health

- Long-term use of opioids can result in depression, difficulty concentrating and sleeping, and sexual problems.
- Constipation can become a very serious problem after long-term use.
- After exposure to opioid drugs for a long time, the body stops making natural painkillers, so even small pains seem severe when the drug leaves the body.
- Taking large doses for long periods can cause agitation, tremors and seizures.
- Higher doses can lower heart rate, blood pressure and breathing.
- Very high doses can cause disorientation, convulsions and hallucinations.
- Heroin decreases appetite, which can result in malnutrition.
- Symptoms of withdrawal from opioids can range from mild (some anxiety, sleeplessness, drug craving) to moderate (nausea, cramping, diarrhea, tremors, insomnia) to severe (agitation and pain, kicking legs, elevated temperature).³

Effects on women’s health

Women are at increased risk for irregular or disrupted menstrual cycles while using opioids.⁷

Effects during pregnancy

There is no known safe level of opioid consumption for pregnant women.

It is unclear whether a child’s health problems are caused solely by a mother’s use of drugs during pregnancy or in combination with other factors including

- poor nutritional habits
- smoking

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Alberta Alcohol and Drug Abuse Commission
An Agency of the Government of Alberta

effects

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- alcohol consumption
- use of more than one drug
- lack of sleep
- a mother's general health prior to pregnancy
- genetics
- how much alcohol, tobacco or other drugs are consumed during pregnancy
- at what stage in the pregnancy the substance is consumed
- the length of time the substance is consumed

The effects of drugs such as opioids have been difficult to study because these other factors also have an impact on the pregnancy. Until more is known about the specific effects of alcohol, tobacco and other drugs, it is safest to avoid using them while pregnant.

Methadone maintenance during pregnancy

Current research suggests it is better to continue opioid use than to attempt quitting while pregnant.³ Alternating between intoxication and withdrawal can result in an unstable intrauterine environment, which puts the fetus at risk—it can lead to spontaneous abortion, miscarriage, premature labour, placental abruption or stillbirth.³ Because of these risks, pregnant women who have an opioid dependency may want to consider methadone maintenance, where dosages are monitored and controlled. If methadone maintenance is not an option, pregnant women may be advised to continue their substance use in a safe manner.

Women who are on a methadone maintenance program have fewer complications during pregnancy and childbirth, and are healthier in general, than those who are using heroin. This is probably due to a combination of clean and controlled drug use, easier access to medical/prenatal care, and an easing of some of the stresses caused by the need to raise money to buy drugs.

Effects on the fetus

If a mother uses needles and contracts HIV/AIDS, or hepatitis B or C, she can pass these on to her unborn child.

The use of opioids during pregnancy increases the risk of medical and obstetric complications, potentially affecting both the woman and the fetus. Opioids cross the placenta and enter the fetal bloodstream. The level of opioids in the fetal bloodstream is lower than in the mother's, but drug concentrations are often high enough to harm the fetus.

Using opioids during pregnancy may lead to intrauterine growth restriction (the fetus does not grow to its full size while in the uterus), low birth weight, decreased head circumference, and minor developmental delays.^{1, 2, 3, 4}

effects

SERIES

Effects on birth

Complications that can occur during pregnancy as a result of opiate use include

- maternal abruption: the premature separation of the placenta from the wall of the uterus, a potentially very serious situation for the mother and baby
- eclampsia: a life-threatening condition involving high blood pressure and seizures
- placental insufficiency: insufficient blood circulation in the placenta
- breech birth
- ruptured membranes
- premature labour and delivery: the baby is born before full term
- stillbirth

Babies born to women who use opioids during pregnancy are sometimes born dependent on the drug. The withdrawal these infants experience after they are born is called neonatal abstinence syndrome (NAS). NAS usually affects the infant's central nervous system and gastrointestinal tract; symptoms include muscle spasms, irritability, high-pitched crying, diarrhea, disturbed sleep and feeding, vomiting, hiccups, stuffy nose, sneezing, and breathing problems. The onset and persistence of these symptoms vary, but symptoms generally begin 48 to 72 hours after birth and typically subside in a week. Infants born to mothers who take prescribed methadone can also show symptoms of withdrawal, but these are typically treated safely in hospital after birth.^{1, 2, 5, 6}

Effects on breastfeeding

Codeine: It is considered relatively safe for women who take codeine to breastfeed. Consultation with a medical professional is recommended while nursing.^{2, 8}

Heroin: Women who use heroin are advised not to breastfeed, because the drug transfers to the child via breast milk and can cause prolonged addiction in exposed infants.^{2, 3, 8, 10}

Methadone: The American Academy of Pediatrics has stated that a woman may choose to breastfeed regardless of the amount of her methadone dose, as long as she has no blood-borne infections (like HIV/AIDS, tuberculosis, or hepatitis B or C), is on a well-controlled dosage, and is not actively injecting or using other substances. Choices regarding breastfeeding while on methadone maintenance should be made in consultation with a medical professional.^{3, 9, 10}

Effects on child development

Effects on long-term development

While research on animals suggests that exposure to any drug in utero has long-term physiological effects across the entire life span, there has been very little research on the long-term effects of intrauterine opioid exposure in people. To date, research into long-term effects has been inconclusive, leading some researchers to suggest that if there are long-term effects, they may be quite sub-

tle or may take years to appear. For example, children as old as six who have been exposed to opioids before birth show signs of slowed growth (lower weight and height than average) and impaired behavioural, developmental and organizational abilities.^{1,2}

Because not everything is known about how using alcohol, tobacco and other drugs during pregnancy may affect child development, it is safest to avoid using them while pregnant.

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