

	Marijuana	Cocaine	Methamphetamine/ Amphetamines/Ecstasy	Opiates /Morphine/Heroin/ Methadone/Demerol/Meperidine Codeine
<b>Possible Physical Symptoms</b>	<ul style="list-style-type: none"> <li>Alters neurobehavioral performance (Barros et al., 2006)</li> <li>Lower gestational age at delivery</li> <li>Increased risk of prematurity (Sherwood et al., 1999)</li> <li>Reduction in the heart rate of the fetus (Schaefer, Peters, and Miller, 2007).</li> <li>Growth Reduction (Taeusch et al, 2005)</li> </ul>	<ul style="list-style-type: none"> <li>Low birth weight (Bateman et al., 1993)</li> <li>Lower length</li> <li>Lower head circumference (Bauer et al., 2005)</li> <li>IUGR</li> <li>Abnormal fetal monitoring and circulatory issues</li> <li>Higher heart rates (Schuetze and Eiden, 2006)</li> <li>Higher incidence of hypertension (Shankaran et al., 2006)</li> <li>Abnormal ABR, possible compromise to auditory system (Tax-Laxa et al, 2004)</li> <li>Higher incidence of respiratory distress syndrome</li> <li>Meconium staining</li> <li>Malformations (Taeusch et al, 2005)               <ul style="list-style-type: none"> <li>Urogenital</li> <li>Brain</li> <li>Midline deformities</li> <li>Skull defects, encephaloceles</li> <li>Ocular malformations</li> <li>Vascular disruptions, such as limb reduction and intestinal atresia</li> <li>Cardiac</li> </ul> </li> <li>Neurodevelopmental               <ul style="list-style-type: none"> <li>Hypertonia</li> <li>Tremors</li> <li>Strokes</li> <li>Seizures</li> <li>Brainstem conduction relays</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>More likely to have APGAR of &lt;7 (Ludlow et al., 2004)</li> <li>SGA</li> <li>Prematurity</li> <li>IUGR</li> <li>Smaller head circumference</li> <li>Lower birthweight</li> <li>Transient bradycardia and tachycardia</li> <li>Reports of higher incidence of cleft palate and cleft lip</li> <li>Congenital defects, including limb anomalies and cardiac septal defects have been reported with Ecstasy use (Taeusch et al, 2005)</li> </ul>	<ul style="list-style-type: none"> <li>More feeding problems (LaGasse et al., 2002)</li> <li>More likely to require resuscitation (Ludlow, et al, 2004)</li> <li>APGAR scores of methadone-exposed equivalent to those not exposed to opiates</li> <li>More feeding problems (LaGasse et al., 2002)</li> <li>Higher rates of prematurity, SGA,(Taeusch et al., 2005)</li> <li>Methadone treatment can cause bradycardia, tachycardia or an irregular heart rate (Hussain and Ewer, 2007)</li> </ul>
<b>Possible Post-Natal Symptoms</b>	<ul style="list-style-type: none"> <li>Neurological symptoms</li> <li>Hypertonicity</li> <li>Irritability</li> <li>Jitteriness</li> </ul>	<ul style="list-style-type: none"> <li>Tremors and jitters (Bauer et al., 2005)</li> <li>High pitched cry</li> <li>Excessive sucking</li> <li>Seizures</li> <li>Tachycardia</li> <li>Tachypnea</li> <li>Apnea</li> <li>Hyperirritability (may occur as late as 30 days after birth)</li> </ul>	<ul style="list-style-type: none"> <li>Same as cocaine</li> <li>Tremors and jitters (Bauer et al., 2005)</li> <li>High-pitched cry</li> <li>Excessive sucking</li> <li>Possible seizures</li> <li>Tachycardia</li> <li>Tachypnea</li> <li>Apnea</li> <li>Hyperirritability (may occur as late as 30 days after birth)</li> </ul>	<p>Symptoms of Neonatal Abstinence Syndrome (NAS)</p> <ul style="list-style-type: none"> <li>Central nervous system dysfunction               <ul style="list-style-type: none"> <li>Irritability</li> <li>Excessive crying</li> <li>Jitteriness</li> <li>Tremulousness</li> <li>Hyperactive reflexes</li> <li>Increased tone</li> <li>Sleep disturbance</li> <li>Seizures</li> </ul> </li> <li>Autonomic dysfunction               <ul style="list-style-type: none"> <li>Excessive sweating</li> <li>Mottling</li> <li>Hyperthermia</li> <li>Hypertension</li> </ul> </li> <li>Respiratory symptoms               <ul style="list-style-type: none"> <li>Tachypnea (rapid breathing)</li> <li>Nasal stuffiness</li> </ul> </li> <li>Gastrointestinal and feeding disturbances               <ul style="list-style-type: none"> <li>Diarrhea</li> <li>Excessive sucking</li> <li>Hyperphagia (eating too much)</li> </ul> </li> </ul>

	<b>Marijuana</b>	<b>Cocaine</b>	<b>Methamphetamine/ Amphetamines/Ecstasy</b>	<b>Opiates /Morphine/Heroin/ Methadone/Demerol/Meperidine Codeine</b>
<b>Issues at delivery</b>	<ul style="list-style-type: none"> <li>Late prenatal care (Burns et al., 2006)</li> <li>More often required NICU admission</li> </ul>	<ul style="list-style-type: none"> <li>Placental abruption (Ananth et al., 2006)</li> <li>Premature ROM (Addis et al., 2001)</li> <li>Pre term labor</li> <li>Less/late prenatal care (Fajemirokin-Odudeyi et al., 2004)</li> <li>Premature Delivery/prematurity</li> <li>High risk of maternal death from intracerebral hemorrhage</li> <li>Stillbirth</li> <li>High risk of perinatal HIV</li> <li>Higher risk of syphilis</li> </ul>	<ul style="list-style-type: none"> <li>Higher incidence of stillbirth</li> <li>Poor prenatal care</li> <li>Sexually transmitted diseases</li> <li>Abruption Placenta</li> <li>Postpartum hemorrhage</li> </ul>	<ul style="list-style-type: none"> <li>Late prenatal care (Burns et al., 2006)</li> <li>More often require NICU admission</li> <li>Antepartum hemorrhage</li> <li>Increased risk of HIV (if mother an intravenous heroin user)</li> <li>More likely to require resuscitation (Ludlow et al, 2004)</li> <li>Higher incidence of placental abruption</li> <li>Higher incidence of premature delivery, preterm labor</li> <li>Higher incidence of chorioamnionitis</li> <li>Higher rates of meconium staining</li> </ul>
<b>Long Term Impacts</b>	<ul style="list-style-type: none"> <li>First trimester exposure affects child’s depression and anxiety symptoms</li> <li>Second trimester affects reading comprehension (Goldschmidt et al., 2004)</li> <li>Speech and thought impairments (Schaefer, Peters, and Miller, 2007)</li> </ul>	<ul style="list-style-type: none"> <li>Higher infection rates</li> <li>Negative behavioral outcomes at 3, 5 and 7 year follow-up (Bada et al., 2007)</li> <li>Lower IQ scores</li> <li>Higher risk of SIDS</li> </ul>	<ul style="list-style-type: none"> <li>Hyperactivity</li> <li>Sleep disturbances</li> <li>Aggressiveness</li> </ul>	<ul style="list-style-type: none"> <li>Higher incidence of SIDS</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>In children and adults with pre-existing respiratory problems, worsening of these symptoms may occur with even the slightest exposure to these gases.</li> <li>(Martyny et al, 2004)</li> </ul>	<ul style="list-style-type: none"> <li>Mothers more likely to be poly drug users</li> </ul>	<ul style="list-style-type: none"> <li>Mothers have lower quality of life perceptions</li> <li>Greater likelihood of substance use in family and social system</li> <li>Increased risk for ongoing legal difficulties</li> <li>Increased likelihood of development of a substance abuse disorder (Derauf et al., 2007)</li> </ul>	
<b>Breastfeeding</b>	<ul style="list-style-type: none"> <li>Marijuana passes into the breast milk</li> <li>Half life of up to 57 hours.</li> <li>Breastfeeding should not occur if marijuana is being used. Exposure to marijuana via breast milk has been associated with delayed motor development (Schaefer, Peters, and Miller, 2007).</li> </ul>	<ul style="list-style-type: none"> <li>Cocaine appears in breast milk within 15 minutes</li> <li>Half life of less than ½ hour</li> <li>Clears within 5 hours.</li> <li>If a mother uses cocaine while breastfeeding, it is recommended that she pump and discard the breast milk for the following 24 hours.</li> <li>Mothers habitually using cocaine should not breastfeed (Schaefer, Peters, and Miller, 2007)</li> </ul>	<ul style="list-style-type: none"> <li>Amphetamines pass into breast milk.</li> <li>Half life is unknown.</li> <li>Women taking amphetamines should not breastfeed (Schaefer, Peters, and Miller, 2007)</li> </ul>	<ul style="list-style-type: none"> <li>All opiates pass into breast milk.</li> <li>Mothers using heroin should not breastfeed.</li> <li>Methadone does appear to be well tolerated by the infant when breastfed.</li> <li>Breastfeeding is strongly recommended, as the infant is not being quickly withdrawn from the methadone. The American Academy of Pediatrics (2007)</li> </ul>

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