

Potential Effects of Substance Use Disorder in Pregnancy

| Drug | Concerning Causative Impact | Physical Impact | Neurological Impact | Other Impact | Effects Noted at Birth |
|--------------------------|---|---|--|--|--|
| Alcohol | Alters growth and development, Changes brain structure so left and right don't connect properly | Fetal Alcohol Syndrome: Facial abnormalities like the vertical groove between the nose and lip is smooth, thin upper lip, small palpebral fissure (opening between eyelids) | Attention problems, cognitive delays, reading, learning deficits, poor memory and executive functioning | Preterm labor, Low birth weight, increased risk for miscarriage, stillbirth | Sleep problems, poor sucking patterns, irritability, tremors, may be more difficult to console |
| Cigarettes | Blood vessels constrict, reduces blood and oxygen flow to baby | Possible link to oral / facial clefts, increased risk childhood respiratory illnesses | Possible impulsivity, attention problems | Preterm labor, low birth weight, smaller size, increased risk for stillbirth, SIDS | Poorer self-regulation, may be more difficult to console |
| Cannabis | Exposure to carbon monoxide, reduces blood and oxygen flow to baby | Unknown at this time, but do see low birth weight, 2-3x increased risk of stillbirth | Possible impulsivity, attention problems, cognition delays | Preterm or very rapid labor, passes meconium in amniotic fluid | Increased startles, tremors, poor feeding, poor muscle tone, sleep problems |
| Cocaine | Reduces blood and oxygen flow to baby | Unknown at this time, may change brain structure | Subtle attention deficits, memory problems, impulsivity, learning problems | Preterm labor, small size, placenta detaches before birth, miscarriage | Tremors, high-pitched cry, irritability, excessive sucking |
| Meth-amphetamines | Reduces blood and oxygen flow to baby | Unknown at this time, possible decreased head circumference and length, heart and brain abnormalities | Increased anxiety, emotional problems, aggressive behaviors, inhibitory control, ADHD-like symptoms up to 7.5 years of age | Preterm labor, low birth weight and small size, placenta detaches before birth, fetal death | Disorganized state, NAS may present/less often needs pharmacologic intervention |
| Opioids | Reduces blood and oxygen flow to baby | Unknown at this time, possible overall growth deficits, hearing loss | Cognitive impairment, academic under-achievement in verbal, arithmetic, reading ability | Preterm labor, placenta detaches before birth, low birth weight, meconium in amniotic fluid, LBW | NAS often needing pharmacologic management |

NAS: Neonatal Abstinence Syndrome. The broad, specific term given to the withdrawal presentation in a newborn that can occur after exposure to opioids and other drugs during pregnancy

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