



# Cocaine/Crack-Cocaine



**Common Names:** Coke, Coca, Joy dust, Stardust, Bianca, Perico, Nieve, Soda, Blow, Bump, Candy, Rock, Snow, Speedball (cocaine combined with heroin)<sup>2</sup>

## Characteristics (Stimulant)

### Cocaine

- Inhibits dopamine and serotonin reuptake, stimulating the brain's reward pathway<sup>3</sup>
- Onset of action and plasma half-life varies depending on route of use (i.e IV peaks in 30 sec, half-life 54 min; snorting peaks in 15-30min, half-life 75 min).<sup>3</sup>
- Cocaine's metabolite benzoylecgonine can be found in the urine for 2-5 days after a binge. The metabolite remains detectable in the urine of heavy users for up to 10 days<sup>4</sup>

### Crack-Cocaine

- Free based and a more potent form of cocaine (volatilized and inhaled)<sup>3</sup>
- May be used with heroin ("dynamite", "speedballs"), morphine ("whizbang"), or cannabis ("cocoa puffs") for increased intensity<sup>3</sup>
- Powerful psychological dependence occurs; dysphoria can last for weeks or months

## Presentation during Intoxication

### Common signs and symptoms of intoxication may include<sup>3</sup>:

- |                       |                          |                  |
|-----------------------|--------------------------|------------------|
| • Rapid euphoria      | • Insomnia               | • Delusions      |
| • Increased energy    | • Anxiety                | • Hallucinations |
| • Anorexia            | • Agitation              | • Nausea         |
| • Vomiting            | • Headaches              | • Tachycardia    |
| • Hypertension        | • Chest Pain             | • Pyrexia        |
| • Diaphoresis         | • Mydriasis              | • Ataxia         |
| • Increased alertness | • Tactile hallucinations | • Depression     |

### Extreme intoxication signs and symptoms may include<sup>3,6</sup>:

- Toxic effects include hypertension, paroxysmal atrial tachycardia, hyperreflexia, irregular respiration, hyperthermia, seizures, unconsciousness, and death
- Fatalities are more common with IV use.

## Monitoring and support during intoxication

### Monitor<sup>6,11</sup>

- Assess level of disorientation and if possible time of last ingestion and amount consumed
- Monitor for falls risk
- Monitor vitals every 15 minutes initially and less frequently as acute symptoms subside
- Monitor respiratory pathways
- Monitor risk for seizures
- Monitor mental status

### Supportive Interventions<sup>3,11</sup>

- Provide reassurance and comfort
- Ensure a quiet room with minimal stimulation
- Provide privacy if possible to preserve dignity and ensure safety
- Institute seizure precaution strategies
- Control of elevated body temperature if warranted with hydration, sedation, cold water, ice packs or in extreme cases a hypothermic blanket
- Treat sustained hypertension to prevent CNS haemorrhage
- Seizures may be controlled with doses of IV diazepam of 5 to 20mg injected very slowly and repeated as required



<b>Monitoring and support during intoxication</b> <i>(Continued)</i>	<ul style="list-style-type: none"> <li>CT scans and lumbar puncture may be performed in the confused or unconscious patient to rule out cerebral haemorrhage</li> <li>Excretion of cocaine can be hastened through acidification of the urine with 500mg ammonium chloride orally every 3-4 hours</li> <li>Low doses of an antipsychotic such as haloperidol may be used to manage psychosis (extra monitoring required due to increased seizure risk)</li> </ul>				
<b>Withdrawal presentation</b> (Withdrawal effects peaks in 2-4 days <sup>3,6</sup> Dysphoric symptoms may persist for up to 10 weeks <sup>6</sup> )	<b>Withdrawal Symptoms may include<sup>3,6</sup>:</b> <ul style="list-style-type: none"> <li>Anxiety</li> <li>Distorted Sleep</li> <li>Vivid, unpleasant dreams</li> <li>Paranoia</li> <li>Nausea</li> <li>Diarrhea</li> <li>Chronic fatigue</li> <li>Irritability</li> <li>Difficulty concentrating</li> <li>Anorexia</li> <li>Hunger/Increased appetite</li> <li>Insomnia/hyperinsomnia</li> <li>Craving</li> <li>Depression</li> <li>Suicidal or homicidal ideation</li> <li>Myalgia</li> <li>Diaphoresis</li> <li>Convulsions<sup>3,6</sup></li> </ul>				
<b>Monitoring and support during withdrawal</b>	<b>Goal<sup>11</sup></b> <ul style="list-style-type: none"> <li>Reduce drug cravings and manage depression</li> </ul> <b>Monitor<sup>11</sup></b> <ul style="list-style-type: none"> <li>Mental status (including suicide risk and agitation)</li> <li>Physical status (including vital signs, hydration, electrolytes, seizures and possible serotonin syndrome)</li> </ul> <b>Interventions<sup>3,10</sup></b> <ul style="list-style-type: none"> <li>Provide a calm and quiet environment</li> <li>Allow client to eat and sleep as much as desired</li> <li>Use calming techniques/ reassurance/ supportive measures</li> <li>Suicide precautions may need to be established</li> <li>Supportive care of excessive sympathomimetic stimulation may be required</li> <li>Benzodiazepines have been used for severe agitation and seizure prevention</li> <li>High potency antipsychotics have been used for psychotic symptoms</li> <li>Antidepressants have been used to treat depression following withdrawal, and to decrease craving.</li> </ul>				
<b>Potential Complications</b>	<ul style="list-style-type: none"> <li>Chronic use can lead to panic disorder, paranoia, dysphoria, irritability, agitation, and delirium<sup>3</sup></li> <li>Snorting can lead to stuffy nose, runny nose, eczema around nostrils, atrophy of nasal mucosa, bleeding, and perforated septum.<sup>3</sup></li> <li>Sexual dysfunction is common<sup>3</sup></li> <li>Chronic use of crack can lead to microvascular changes in the eyes, lungs and brain.</li> <li>Respiratory symptoms include asthma, pulmonary hemorrhage and edema<sup>3</sup>.</li> <li>Dehydration can occur due to effect on temperature regulation, with possible hyperpyrexia.<sup>3</sup></li> </ul>				
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<p><b>Notable Interactions (Continued)</b></p>	<p>myocardial infarction</p> <p><b>With Dihydroergotamine<sup>9</sup></b></p> <ul style="list-style-type: none"><li>Increases blood pressure</li></ul> <p><b>With Carbamazepine<sup>8,9</sup></b></p> <ul style="list-style-type: none"><li>Combination may lead to large elevations in blood pressure and heart rate (increase cardiac side effects)</li></ul> <p><b>With MAOIs<sup>8</sup></b></p> <ul style="list-style-type: none"><li>May lead to hypertensive crisis</li></ul> <p><b>With St. John's Wort<sup>8</sup></b></p> <ul style="list-style-type: none"><li>May lead to serotonin syndrome</li></ul> <p><b>With Hyaluronidase<sup>8</sup></b></p> <ul style="list-style-type: none"><li>Anesthetic hyperreactivity</li></ul> <p><b>With Amphetamines, MDMA<sup>8</sup></b></p> <ul style="list-style-type: none"><li>Blood pressure elevation</li></ul> <p><b>With TCAs<sup>9</sup></b></p> <ul style="list-style-type: none"><li>Arrhythmia -&gt; Avoid!</li></ul> <p><b>With Trazodone<sup>9</sup></b></p> <ul style="list-style-type: none"><li>Minor physiological effects</li></ul> <p><b>With Citalopram/Escitalopram, Sertraline, Fluvoxamine, Paroxetine<sup>9</sup></b></p> <ul style="list-style-type: none"><li>May lead to serotonin syndrome</li></ul> <ul style="list-style-type: none"><li>May increase QTc prolongation, when used in combination</li></ul> <p><b>With Bupropion<sup>9</sup></b></p> <ul style="list-style-type: none"><li>May lead to seizures</li></ul> <p><b>With Buprenorphine<sup>9</sup></b></p> <ul style="list-style-type: none"><li>May reduce buprenorphine concentration</li></ul> <p><b>With Disulfiram<sup>9</sup></b></p> <ul style="list-style-type: none"><li>Increase concentration of cocaine and lead to paranoia</li></ul> <p><b>With Benzodiazepines, Zopiclone, Zolpidem<sup>2</sup></b></p> <ul style="list-style-type: none"><li>Lead to increased sedation</li></ul> <p><b>With Alcohol<sup>3</sup></b></p> <ul style="list-style-type: none"><li>Co-occurring use leads to tachycardia, increase in plasma levels of cocaine and elevated blood pressure. May increase risk of cardiovascular toxicity.</li></ul>
<p><b>Psychiatric effects</b></p>	<ul style="list-style-type: none"><li>Stimulants can cause euphoria, exhilaration, alertness, improved task performance, and exacerbation of obsessive-compulsive symptoms<sup>3</sup></li><li>During cocaine intoxication, individuals can present with delusions, paranoia, hallucinations (especially tactile), delirium and severe anxiety. Symptoms may persist for months after the person has stopped using cocaine.</li><li>Paranoid delusional disorders and other types of psychoses have been linked with chronic cocaine use.</li><li>Cocaine can also induce severe depression and increase the risk of suicide.</li><li>Concurrent cocaine and alcohol use increase the risk of depression<sup>1</sup></li></ul>



## References

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