

**Designer Drugs**

Category	Names	Active Ingredients	Pharmacology	How taken	Effects/toxicity	Epidemiology
Synthetic cathinones	Flakka, gravel	Alpha-PVP	Inhibit reuptake of serotonin, norepinephrine, dopamine	Oral ingestion, snorting, vaping	<ul style="list-style-type: none"> <li>• Serious cardiac and psychotic effects similar to other synthetic cathinones</li> <li>• 80 deaths in Florida 2014-2015</li> <li>• 100 deaths in Europe</li> </ul>	2nd most prevalent bath salt seized in U.S.
Stimulant	Benzo Fury, White Pearl	Benzofurans (6-aminopropyl-benzofuran)	Serotonin, norepinephrine receptor agonists	Oral ingestion, snorting	Hallucinogenic effects	Use still fairly rare
Stimulant	Bromo-dragonfly, 2-CB-FLY	Benzodifurans	Serotonin, norepinephrine receptor agonists	Oral ingestion, snorting	Severe vasoconstriction, sometimes resulting in limb amputation	Use still fairly rare
Synthetic cannabinoids	Spice, Kush, Fake Weed, Kronic	JWH-018, AB-PINACA, AB-FUBINACA, MAB-CHMINACA	Full agonists at cannabinoid (CB) receptors	Smoking, vaping	Growing prevalence of adverse cardiac and psychotic effects	<ul style="list-style-type: none"> <li>• Growing numbers of non-White users</li> <li>• Rapid growth in use by homeless people</li> </ul>
Synthetic opioids	China White, Tango & Cash, Synthetic heroin	Fentanyl, sufentanyl, remifentanyl; carfentanyl; octfentanyl, butyrfentanyl, acetylfentanyl	Mu opioid agonists	Snorting, injection	Higher rates of opioid overdose; rapid onset of effects; may take multiple doses of naloxone to reverse overdose	<ul style="list-style-type: none"> <li>• &gt;5000 deaths from opioid analogues since 2013</li> <li>• Fentanyl seizures by police increased 1400% from 2013 to 2015</li> </ul>
Synthetic opioids	Pink	U-47700	Mu opioid agonist	Snorting, injection	Typical opioid effects	Made DEA Schedule 1 in 2016
Synthetic opioids	Krokodil	Desomorphine	Cholinesterase inhibitor	Inject intravenously or intramuscularly	Corrosive residual byproducts of manufacturing process cause discoloration of skin around injection site, even gangrene (resembles crocodile skin); confusion, incontinence, salivation, seizures	Originated in Siberia in 2002, some use in U.S.
Sedative	Anvifen, Fenibut, Noofen	Phenibut	GABA-B agonist; chemically similar to baclofen; effects similar to gamma-hydroxybutyrate (GHB)	Oral (snorting is painful)	Seizures, agitated delirium; no deaths reported yet	Available in Russia as treatment for anxiety and insomnia
Dissociative	Mexxy, M-ket, K-max	Methoxetamine	NMDA receptor; near chemical analog of ketamine	Oral ingestion, snorting, injection	Tachycardia, hypertension, confusion, agitation, ataxia, nystagmus	Marketed as “bladder-safe” alternative to ketamine