

Novel psychoactive substances (NPS)

Novel psychoactive substances (NPS), sometimes incorrectly called “legal highs,” include a multitude of substances, with many different effects. This infographic classifies NPS into their major groupings and provides information on the desired effects of these compounds, common methods of usage, and their associated risks.



Stimulant NPS

Cathinone family, such as mephedrone (M-cat)

“Bath salts” “Plant food”

Increase synaptic levels of serotonin, dopamine, and/or noradrenaline to produce a sense of euphoria and wellbeing - a “high”

Commonly:  Swallowed “Bombing”/pills  Nasal “Snorting”

Less commonly:  Injected “Slamming”  Rectal “Plugging”

Short term risks:

Agitation Psychotic symptoms Hyperthermia
Anxiety Hypervigilance Cardiovascular toxicity
Seizures Renal/respiratory failure
Delirium Serotonin syndrome Stroke

Long term risks:

Impulsive behaviour Dependency
Depression Cognitive impairments Psychosis
Psychological withdrawal effects common after cessation

Hallucinogenic NPS

Psychedelics

5-MeO-DALT

NBOMe-series

2C-series


Produce perceptual alterations and quasi-mystical experiences. Some have stimulant properties


Dissociatives


Methoxetamine (mexxy)

Similar to ketamine and phencyclidine

Produce a euphoric, dissociated state, with a perception of disconnection from physical body

 Swallowed Paper/capsules/liquid

 Swallowed “Bombing”/pills

 Nasal “Snorting”

 Injected

Short term risks:

Accidents/trauma Aggressive/psychotic states
Acute cerebellar toxicity Cardiovascular toxicity
Respiratory failure

Long term risks:

Addiction Problems with mood/memory
Cardiovascular problems Abdominal pain
Kidney/bladder/urinary tract damage (ketamine/methoxetamine)


Cannabinoid NPS


Synthetic cannabinoid receptor agonists (SCRAs)

“Spice” “Noids” “Black mamba”

“Clockwork Orange” “Pandora’s Box”

Typically full agonists of cannabinoid receptors, producing a pleasant state of relaxation and of feeling “stoned”

 Smoked after being sprayed on to herbal mixtures

 Inhaled using e-cigarettes and vapourisers

Short term risks:

Psychosis Agitation Confusion
Slurred speech Cognitive impairment Renal failure
Tachycardia Hypertension Myocardial infarction
Pulmonary damage Seizures

Long term risks:

Psychological dependency Addictive potential
Psychotic illnesses
Psychological withdrawal effects likely after cessation

Depressant NPS

Opioids

AH-7921 MT-45

Novel fentanyl

Similar to established recreational opioids, but with the potential for much longer durations of action


Benzodiazepines

Clonazepam

Flubromazepam

Sedative, anxiolytic, hypnotic, and anticonvulsant properties—some with long duration of action

 Smoked

 Swallowed Pills / tablets

 Injected

 Nasal

Short term risks:

Overdose Confusional states — Novel opioids may need more naloxone than traditional opioids
Seizures after withdrawal

Long term risks:

Addiction Impaired cognition
Potential for withdrawal effects after cessation