

**Stimulants** – A chemically diverse group of substances (including phenethylamines, cathinones, aminoindanes and piperazines), which act as central nervous system stimulants by mediating the actions of dopamine, norepinephrine and serotonin, resulting in a range of effects e.g. stimulant, entactogenic and hallucinogenic. Substances mimic the effects of traditional drugs such as cocaine, amphetamine, methamphetamine and ecstasy.

Opioids - A chemically diverse group of substances (e.g. fentanyls, derivatives of opiates) which are central nervous system' depressants. They bear structural features that allow binding to specific opioid receptors, resulting in morphine-like effects e.g. analgesia.

4%

(SCRAs, synthetic cannabinoids) - These substances bear structural features that allow binding to one of the known cannabinoid receptors and produce effects similar to those of delta-9-tetrahydrocannabinol (THC), the only known psychoactive component in cannabis. These SCRAs are often laced onto herbal products and sold as Spice, K2, Kronic, etc.

Synthetic cannabinoid receptor agonists

36%

**Effect groups of** 

5%\*\*

16%

32%

Sedatives / Hypnotics - Substances in this group are central nervous system depressants, with actions derived from their activation of receptors in the GABA receptor complex in the brain. They mimic the effects of substances under international control such as the benzodiazepines diazepam and alprazolam.

The central nervous system (CNS) is a part of the nervous system, which comprises the brain and spinal cord, and is responsible for most functions of the body, including processes under voluntary and involuntary control. Functions range from breathing and blinking, which are involuntary processes, to speaking and walking, which are voluntary processes, and to emotions and perceptions.

"Not yet assigned

Note: The analysis of the pharmacological effects comprises of 781 synthetic NPS registered in the EWA until December 2017. Plant-based substances were excluded from the analysis as they usually contain a large number of different substances some of which may not even be known and whose effects and interactions are not fully understood.

**Dissociatives** - These substances form a class of hallucinogens which modulate effects at the N-methyl-D-aspartate (NMDA) receptor in the brain and produce feelings of detachment and dissociation of "the self and the environment". Substances in this group include the controlled substance phencyclidine (PCP) and ketamine.

Classic hallucinogens (psychedelics) - A chemically diverse group of substances (e.g. ring-substituted phenethylamines, tryptamines and lysergamides) which mediate specific serotonin-receptor activities and produce hallucinations. Substances in this group mimic the effects of traditional drugs such as 2C-B, LSD and DMT but may also possess residual stimulant activity (e.g. 25C-NBOMe).