

Marijuana 101

According to a recent National Safety Council employer survey, 80 percent of respondents said they were concerned about marijuana/cannabis having a negative impact on their workforce. Learn more about the basics of marijuana.

How Drugs Move Through the Body

Absorption: How the drug enters the body

When marijuana is inhaled or ingested, THC is absorbed into the blood stream through the lungs and digestive tract, respectively. Medically it can also be administered rectally.

Distribution: Movement of the drug to active sites/storage

Due to its nature, THC quickly moves out of the bloodstream to areas with higher lipid (fat) content including the brain, liver, and other major body organs and body fat.

Metabolism: The change (or breakdown) of the drug into active or inactive metabolites

The metabolism process makes THC less toxic and/or easier to eliminate from the body.

Elimination

THC is eliminated as metabolites mainly in the stool (>65%) and urine (20%).

Testing options: Testing does not equal impairment, it identifies cannabis use.

Blood – This testing measures THC in the blood at the time of blood collection. Blood THC concentrations are evaluated in driving under the influence of THC and workplace incident investigations. Blood THC concentrations decrease about 74% in the first 30 minutes after marijuana inhalation, making rapid blood collection critical. Blood THC concentrations are most useful when blood is collected within an hour of the incident.

Urine – The inactive Carboxy-THC metabolite is generally measured in urine. Urine Carboxy-THC indicates THC intake and can be detected in urine for days to months after use depending on how much, and how frequently, THC was used.

Oral fluid – Initial tests and Point of Contact (POC) screening for THC in oral fluid offer advantages as positive results indicate recent use depending upon the amount and frequency of THC intake. Positive oral fluid screens must be followed up by additional confirmation testing by chemical analysis like mass spectrometry if there are negative consequences for the individual being tested. This includes evidential testing where the confirmation may be performed on a blood sample collected after the initial screen.

Breath – At this time there is no validated breath test for THC for roadside or in laboratory testing.

Cannabis: It's Complicated

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Legality

According to the NSC employer survey, 71 percent of employers cover illicit use of marijuana/cannabis in their written policies while only 54 percent cover legal or prescribed use of marijuana.

Ingestion of THC is illegal federally and is not FDA regulated. Therefore, since federal law overrules state laws, there are no "prescriptions" for plant-based THC, only doctor "recommendations." A recommendation is a statement from a doctor indicating that medicinal THC would benefit the patient, and it is recognized by dispensaries and state governments.

- Marijuana is a Schedule I substance under federal law, meaning that it is considered to have a high abuse potential and no approved medical use.
- To be moved to Schedule 2, marijuana would have to be recognized as having a medical use.
- Synthetic THC, created in a laboratory, is treated differently than "cannabis extracts" from the marijuana plant. Marinol and Syndros are FDA-approved drugs and contain synthetic THC.

References:

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