Cannabinoids

INTRODUCTION

Cannabis use has become more common and is legal in many countries. However, within the aviation industry, cannabis is still not allowed. Cannabis use, whether legal or not, is incompatible with flying due to its impacts on cognitive, mental, and physical performance. Pilots are strongly advised to abstain from cannabis use.

THC vs CBD vs HEMP

THC (tetrahydrocannabinol) is often confused with CBD (cannabidiol), but they come from different parts of the cannabis plant and have different effects. THC most commonly comes in the form of herbs or flowers which can be smoked or ingested.

CBD is derived from the cannabis plant and is chemically related to THC, but unlike THC, it does not produce the psychoactive effects typically associated with the "high" feeling.
CBD is commonly found in oils and lotions, although other forms such as ingestible foods (e.g. gummies, brownies, etc.) are popular.

Hemp is often sold in the form of lotions, seeds, and oils and is derived from the cannabis plant as well. It is supposed to have less than 0.3% THC, and while it appears to be safe for pilots, a recent study found that some athletes tested positive after using hemp products[1]. It is not recommended for pilots to use hemp or CBD products, because a positive drug test is possible due to possible residual THC in its composition.

Caution should also be used when visiting certain “bodywork” practitioners such as chiropractors or massage therapists, as CBD or hemp products may be used on patients without their knowledge.

CANNABIS (THC) TESTS

There are multiple ways to test for cannabis consumption and all of the tests detect the THC ingested when consuming cannabis products. Depending on the test, the lookback can range from several days to several months. Each test has its own detection window and accuracy depending on various factors.

[1] https://pubmed.ncbi.nlm.nih.gov/35633098/

The most common tests include:

- **Urine Tests:** The most widely used method; detects THC metabolites. Can show use up to 30 days after consumption, depending on frequency.
- **Blood Tests:** Measures active THC in the bloodstream. Typically indicates recent use, usually within the last few hours to a couple of days.
- **Saliva Tests:** Detects THC and its metabolites in saliva. Usually indicates recent use, often within 24 hours.
- **Hair Tests:** Analyzes hair follicles for THC metabolites. Can indicate use over a longer period (up to 90 days), but less commonly used.
- **Sweat Tests:** Involves wearing a patch that collects sweat over time to detect THC. Less common and typically used in specific contexts, like probation.

PASSIVE SMOKING

Tests of passive cannabis smoking demonstrate that extreme cannabis smoke exposure can produce positive urine tests. Positive tests are likely to be rare, limited to the hours immediately post-exposure, and occur only under environmental circumstances where exposure is obvious, (J Anal Toxicol. 2015 Jan; 39(1): 1–12.). This means exposure in closed, non-ventilated indoor space could produce a positive test result, but a positive test is highly unlikely with, for example, outdoor exposure.

LEGAL?

Worldwide, the legality of private cannabis consumption varies, ranging from full legalization for recreational use to penalties as severe as a year-long prison sentence or even the death penalty.

ICAO Annex 1, Chapter 1 defines cannabinoids as psychoactive substances. In the context of aviation, psychoactive substances are not compatible with flying duties, and aviation authorities do not allow any non-prescribed use of psychoactive substances. Transport Canada has exception of 28-day abstinence before flight concerning cannabis.

IFALPA RECOMMENDATION

IFALPA fully supports an aviation industry free of substance use. Pilots must be aware of all substances they are ingesting, either directly or indirectly, and must recognize the potential for a positive drug test if consuming products that may contain any amount of THC.