



Legalization of Marijuana – Implications for Workplace Safety

A Statement from the American College of Occupational and Environmental Medicine

As the U.S. Congress considers the legalization of marijuana, the American College of Occupational and Environmental Medicine (ACOEM) recommends that the implications for workplace safety be a primary consideration. ACOEM is the pre-eminent physician-led organization that champions the health of and safety of workers and workplaces. The College is dedicated to improving the care and well-being of workers through science and the sharing of knowledge. From this perspective, ACOEM offers the following insights for Congress' consideration.

To date, 33 states and the District of Columbia have legalized the medical and/or recreational use of marijuana. With most Americans living and working in states that allow some form of legal marijuana use, it is critical that safety be at the forefront of any policy discussions regarding the use of cannabinoids outside of the standard U.S. Food and Drug Administration (FDA) approval process. The current patchwork of laws to address marijuana use and workplace safety is detrimental to employees, employers, and the general public.

Similar to other FDA-approved medications, marijuana can cause impairment which will interfere with safe and acceptable performance in the workplace. This is particularly concerning for those individuals working in safety-sensitive positions where impairment can affect the health and safety of other workers, customers, the general public, or others.

Employers have a legal responsibility to protect employees from workplace illness or injury under the Occupational Safety and Health Administration's (OSHA's) general duty clause. Employers also have an ethical responsibility to prevent impaired workers from exposing themselves, their co-workers, and/or the general public to risk of harm. Regardless of marijuana's legal status in a jurisdiction, ACOEM strongly supports legislative proposals that would allow employers to prohibit those employed in safety-sensitive positions from working while under the influence of marijuana.

Without measurable concentrations of psychoactive ingredients in marijuana-containing products, known potency of the active ingredient, delivery mechanism, or scientifically established dose or dosing schedule, it is impossible to use evidence-based methods to evaluate marijuana impairment in the workplace. While there is much we do not know about marijuana and other cannabinoids, there is enough current knowledge of their effects. In addition, there are enough acknowledged significant gaps in scientific evidence to raise concern and caution in the legislative process surrounding marijuana use:

- Marijuana can significantly impair judgment, motor coordination, and reaction time. Studies have found a direct relationship between blood (usually serum) THC concentrations and impaired driving ability, although the degree of impairment cannot be defined by the level, especially at lower levels.
- It is well documented that persons experiencing impairment from any drug or medication tend to underestimate the severity of their impairment.
- States with legal recreational or medical marijuana are reporting an increase in fatal motor vehicle crashes involving THC.
- Those in safety-sensitive identified positions should be held to a higher standard until a scientifically valid method to identify impairment has been developed. There is a lack of consensus among the states on what occupations are considered to be safety-sensitive positions and when employers may conduct drug testing or institute a zero-tolerance drug policy for those positions. If marijuana is removed from the Controlled Substances Act, it is imperative that the ability of employers to obtain objective measurement of body fluid levels of marijuana be maintained.

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The following are areas that ACOEM advises to be considered as part of the process for implementing new legislation:

- Reconcile the differences between state and federal laws regarding marijuana use.
- Assess the impact of marijuana on workplace safety through research. The effects of marijuana can vary greatly. The time course of these effects, onset, and duration depend on the route of ingestion (inhalation, oral, sublingual, or topical) as well as an individual's body composition. Unlike alcohol where there is a very predictable relationship between elimination from the body, impairment, dose, and the time since ingestion, THC (the main psychoactive ingredient in marijuana) is lipid-soluble (stored in fatty substances like body fat and brain tissue) and its elimination is much less predictable. This makes it more difficult to determine the duration of impairment.
- Define the correlation of THC concentrations and impairment.
- Allow employers the latitude to manage risk. In an area where knowledge of risk and impairment is falling far behind the rapidly expanding use of marijuana and other cannabinoids, employers must be able to manage risk in the workplace.
- Identify a reliable, practical mechanism for employers to assess fitness for duty. This is especially important in those states where medical and/or recreational use of marijuana is legal. Until the science of impairment by marijuana is better defined, a reasonable approach is to set a period of time between the use of marijuana and performing safety-sensitive work. This is the current approach to marijuana use in Canada and to alcohol use in the United States.

As previously stated, except where specified by law, the employer has primary responsibility to ensure the safety of both employees and the general public. Employers are the ones best suited to determine if a job is safety sensitive and, until the science of marijuana impairment is resolved, an employer should not be expected to manage a risk until that risk can be measured. While the definition of "safety sensitive" should ultimately be left up to the employer, ACOEM supports the essential criteria to classify a position as safety sensitive if impairment would:

- Increase safety and health risks to fellow employees, self, contract personnel, or the public;
- Adversely affect the environment through contamination of air, water, soil, flora, or fauna;
- Jeopardize the community through property damage or peril to members of the public;
- Involve the use of firearms, emergency response, and judgment and decision-making that have an immediate impact on the life and health of others.

Marijuana is an impairing substance and its legalization has huge public health implications. Before Congress passes any legislation regarding marijuana, the College urges that the impact of such legislation on workplace safety be considered.

The American College of Occupational and Environmental Medicine (ACOEM), an international society of more than 4,000 occupational physicians and associated professionals, provides leadership to promote optimal health and safety of workers, workplaces, and environments. Occupational and environmental medicine is the medicine specialty devoted to prevention and management of occupational and environmental injury, illness and disability, and promotion of health and productivity of workers, their families, and communities.

This document was prepared by the ACOEM Task Force on Marijuana and approved by ACOEM on September 27, 2019. ACOEM requires all substantive contributors to its documents to disclose any potential competing interests, which are carefully considered. ACOEM emphasizes that the judgments expressed herein represent the best available evidence at the time of publication and shall be considered the position of ACOEM and not the individual opinions of contributing authors.