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## **New Research Reveals Smartwatch Technology May Detect Cannabis Intoxication in Real Time**

### **Preliminary findings to debut at the American College of Medical Toxicology Annual Scientific Meeting in Boston**

As cannabis legalization expands across the United States and around the world, public health leaders are grappling with a pressing question: **how can we better identify and prevent cannabis related impairment, particularly when it comes to driving and injury risk?**

Innovative new research from investigators at the University at Buffalo and Colorado State University suggests the answer may be right on our wrists.

Preliminary data to be presented at the American College of Medical Toxicology Annual Scientific Meeting demonstrates that wearable sensor technology, including smartwatch devices, may offer a practical and objective way to detect cannabis intoxication. By measuring real time physiological markers such as heart rate variability and electrodermal activity, researchers were able to identify patterns associated with impairment.

*“Driving while high nearly doubles the risk of a fatal crash, and many individuals struggle to accurately gauge when they are no longer impaired,”* said lead investigator Dr. Eric Kazcor of the University at Buffalo. *“Smartwatch technology could potentially provide real time feedback to recreational users, empowering them to make safer decisions. We are grateful to ACMT’s Medical Toxicology Foundation and the ANTIDOTE Institute for their support and mentorship in advancing this work.”*

The study was supported by a 2024 Innovative Research, Teaching, and Practice Grant from the Medical Toxicology Foundation. It represents a promising step toward closing a significant public health gap by introducing objective, accessible tools to monitor cannabis related impairment.

The **2026 ACMT Annual Scientific Meeting will take place March 20–22, 2026, in Boston, Massachusetts**. Members of the media and interested professionals are invited to attend to hear the latest research and connect with leading experts in toxicology and public health.

As cannabis use continues to rise, findings like these underscore the vital role of medical toxicologists in developing evidence based solutions that protect patients and communities worldwide.



# ACMT

American College  
of Medical Toxicology

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[The American College of Medical Toxicology \(ACMT\)](#) is a professional, nonprofit association of physicians board certification in medical toxicology and other professionals with expertise in this area. ACMT members specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents, and work in clinical, academic, governmental, and public health settings, and provide poison control center leadership.

[The Medical Toxicology Foundation \(MTF\)](#) is a nonprofit organization dedicated to advancing the field of medical toxicology through education, research, and public health initiatives. MTF supports programs that enhance the prevention, evaluation, and treatment of toxic exposures and poisoning, and works to expand knowledge and training opportunities for medical professionals while promoting safer communities through improved toxicology awareness and response.