



**Department
of Health**

**Request for Information (RFI)
For
Recommended Approaches to Evaluate Methodologies and Technologies for the
Detection of Cannabis-Impaired Driving**

Issued: September 26, 2022

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A. CALENDAR OF EVENTS

The table below lists the key dates and timeline that vendors must consider in the preparation of responses to this Request for Information (RFI). If the State finds it necessary to revise these dates, an addendum or updated RFI will be provided to all interested parties.

Event	Date and Time
Release the RFI	9/26/2022 – 4PM ET
RFI Response Due Date On or Before	10/14/2022 – 4PM ET

B. PURPOSE OF THE REQUEST FOR INFORMATION (RFI)

Pursuant to § 60.2 of the Marihuana Regulation and Taxation Act, the New York State Department of Health (DOH) is examining methodologies and technologies used for the detection of cannabis-impaired driving and how these methodologies and technologies can be used to assess impairment of operators of motor vehicles. The purpose of this RFI is to identify the current state of research on impairment due to cannabis ingestion, identify the current state of research on devices that can be used to detect impairment due to cannabis ingestion, and identify higher education research institutions that are currently performing this type of research to assist DOH in:

- Obtaining information on current and emerging methodologies and technologies that can be used to measure tetrahydrocannabinol (THC), the primary psychoactive substance in cannabis. Note: Cannabis Law defines THC as Delta-9-tetrahydrocannabinol; Delta-8-tetrahydrocannabinol; Delta-10-tetrahydrocannabinol; and the optical isomer of such substances.
- Obtaining information on the accuracy and reliability of current and emerging methodologies and technologies for detecting THC in human specimens.
- Understanding the relationship between specimen THC concentration and the actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities that would impact a person's ability to safely operate a motor vehicle.
- Obtaining information on the impact of the time and manner of the consumption of cannabis, as well as the impact of the THC concentration and form of the cannabis products consumed, on impairment.
- Obtaining information on methodologies and technologies that can distinguish an actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities from the presence of cannabis metabolites and potential tolerance acquired by a person's habitual cannabis use.
- Obtaining information on the role and extent of impairment by cannabis as a causal or significant contributing factor in motor vehicle crashes and the extent of such cannabis-impaired driving, including an examination of motor vehicle crash, fatality, and injury statistics on an annual basis.
- Identifying higher education research institutions that are capable of and interested in conducting a controlled research study designed to evaluate methodologies and technologies for the detection of cannabis-impaired driving.

Input from all interested parties is welcome, but the State is especially interested in receiving feedback from those higher education research institutions who have in the past or are currently

researching cannabis impairment technologies that could be used to accurately detect whether a driver's abilities are impaired by cannabis.

C. BACKGROUND

The Marijuana Regulation & Taxation Act (MRTA) was signed into law on March 31, 2021, legalizing adult-use cannabis (also known as marijuana or recreational marijuana) in New York State. With the legalization of adult-use cannabis, there are concerns of increased incidences of driving while impaired after cannabis use. In New York State, it is illegal to drive while under the influence of, or impaired by, alcohol, any controlled substance, or cannabis. Identifying drivers impaired by cannabis use is of critical importance. DOH is seeking information from higher education research institutions to obtain an understanding of the methods and technologies that can be used for testing, the specimen types that can be used for testing (e.g., blood, oral fluid, or breath samples), the relationship between THC concentrations and degrees of impairment, and the role and extent of impairment by cannabis as a causal or significant contributing factor in motor vehicle crashes. However, unlike alcohol, there are currently no evidence-based methods to detect cannabis-impaired driving¹. Information DOH is seeking includes, but is not limited to, the following:

- Analysis of the current methodologies and technologies that exist that can be used to measure THC concentrations in various specimen types.
- Emerging methodologies and technologies that could be used to measure THC concentration. This includes information on laboratory-based tests and tests that can be used at the point-of-collection (e.g., tests that can be used at the roadside or in a police station).
- Information on how laboratory-based tests and tests that can be used at the point of collection (e.g., tests that can be used at the roadside or in a police station) have been validated for use in measuring THC, including information on the sensitivity, specificity, and accuracy of the tests.
- The specimen types that can be used to measure THC and how the effectiveness of measuring THC is impacted by the sample type that is tested (e.g., blood, urine, and/or saliva). Information on laboratory-based tests and tests that can be used at the point of collection (e.g., tests that can be used at the roadside or in a police station).
- The most effective sample types and method of collection that could be used to determine if an individual was under the influence of cannabis at the time of the test.
- Differences in methodologies and technologies that are used for screening testing and confirmatory testing and an exploration of how that relates to the evidentiary standards used in court.
- How the different forms of adult-use cannabis impact testing, including information on how test results are impacted by the form of cannabis consumed (e.g., smoked, vaped, ingested, etc.).
- Analysis of the current methodologies and technologies that are used to accurately and reliably determine if a person driving a motor vehicle is impaired by cannabis, including an exploration of how per se limits those states have used do not measure cannabis impairment at the roadside.
- Methodologies that are currently being used to determine impairment caused by cannabis.

- The relationship between specimen THC content and the actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities.
- The relationship between the time of cannabis consumption and level of impairment.
- How the manner of cannabis consumption (i.e., by smoking, vaping, ingesting, etc.) impacts on the degree of impairment.
- How the THC concentration of cannabis products impact the level of impairment.
- Information on distinguishing actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities from the presence of cannabis metabolites and potential tolerance acquired by a person's habitual cannabis use.
- The role and extent of impairment by cannabis as a causal or significant contributing factor in motor vehicle crashes.
- Statistical data that examines cannabis-impaired driving and motor vehicle crashes, fatalities, and injuries.
- The institution's capability of and interest in conducting the research necessary to establish levels of cannabis-associated impairment specific to the operation of a motor vehicle and a device to accurately measure that impairment, as described above.

¹Compton, R. (2017, July). Marijuana-Impaired Driving - A Report to Congress. (DOT HS 812 440). Washington, DC: National Highway Traffic Safety Administration. See: www.nhtsa.gov/sites/nhtsa.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf.

D. VENDOR QUESTIONS

D.1 General Questions

1. Please indicate if the applicant is a higher education research institution.
2. Please provide a brief overview of the type of research that is performed at the institution. Include information on applicable private/commercial partnerships the institution may have in the development of research and technologies.
3. Please indicate if the institution would consider bidding on a future procurement to conduct a controlled research study designed to evaluate methodologies and technologies for the detection of cannabis-impaired driving.
4. Describe the infrastructure that is in place at the institution to effectively perform scientific research pertaining to cannabis impairment and technologies used to identify impairment by cannabis.
5. Please provide the estimated number of staff and number of hours needed for the institution to conduct a controlled research study designed to evaluate methodologies and technologies for the detection of cannabis-impaired driving.

D.2 Research on Drug and Cannabis Testing on Human Specimens

1. Is the institution currently performing research on cannabis?
2. Is the institution currently performing research on the development of drug testing methods? If yes, please include information on the types of drug testing methods being developed and if they are being developed for screening purposes or for confirmatory testing.
3. Is the institution currently performing research on the development of devices used for drug testing? If yes, please include information on the types of drug testing devices being developed and if they are being developed for screening purposes or for confirmatory testing.
4. Is the institution currently performing research on the development of devices used for drug testing at the point of collection (e.g., tests that can be used at the roadside or in a police station)? If yes, please include information on the types of drug testing devices being developed and if they are being developed for screening purposes or for confirmatory testing.
5. Is the institution currently performing research on the development of cannabis testing methods? If yes, please include information on if they are being developed for screening purposes or for confirmatory testing and information on the approaches used to determine the most effective sample type for testing.
6. Is the institution currently performing research on the development of devices used for cannabis testing? If yes, please include information on if they are being developed for screening purposes or for confirmatory testing and information on the approaches used to determine the most effective sample type for testing.
7. Is the institution currently performing research on the development of devices used for cannabis testing at the point of collection (e.g., tests that can be used at the roadside or in a police station)? If yes, please include information on if they are being developed for screening purposes or for confirmatory testing and information on the approaches used to determine the most effective sample type for testing.
8. Does the institution have experience in performing validation studies to evaluate the sensitivity, specificity, and accuracy of methods used for drug testing?
9. Does the institution have experience in performing validation studies to evaluate the sensitivity, specificity, and accuracy of methods used to measure THC?
10. Is the institution currently performing research on how the different forms of recreational cannabis impact test results?

D.3 Research on Impairment Testing Methodologies and Technologies

1. Is the institution currently performing research on methodologies and technologies that can be used to accurately and reliably determine if a person driving a motor vehicle is impaired? If yes, please include information on the types of methodologies and technologies being researched.
2. Is the institution currently performing research on methodologies and technologies that can be used to accurately and reliably determine if a person driving a motor vehicle is impaired by

cannabis? If yes, please include information on the types of methodologies and technologies being researched and how these methodologies and technologies can distinguish an actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities from the presence of cannabis metabolites and potential tolerance acquired by a person's habitual cannabis use.

3. Is the institution currently performing research on how THC content causes impairment?
4. Is the institution currently performing research on how the level of impairment caused by cannabis is impacted by potency, the time after consumption, and the manner in which cannabis is consumed (i.e., by smoking, vaping, ingestion, etc.)?
5. Is the institution currently performing research on methodologies and technologies that can distinguish an actual and currently present impairing effect by cannabis on a person's physical and cognitive abilities from the presence of cannabis metabolites and potential tolerance acquired by a person's habitual cannabis use?

D.4 Motor Vehicle Crashes and Cannabis Impairment

1. Is the institution currently performing research on the role and extent of impairment by cannabis as a causal or significant contributing factor in motor vehicle crashes and does it have any statistical data that examines cannabis-impaired driving and motor vehicle crashes, fatalities, and injuries?
2. Is the institution currently performing research on the role and extent advanced driver assistance technology (i.e., driver monitoring, front crash prevention, lane departure/lane keep assist, blind spot detection, etc.) contributes to preventing impaired driving and motor vehicle crashes, fatalities, and injuries and does it have any statistical data that examines cannabis-impaired driving specifically?

E. RESPONDENTS RFI SUBMISSION INSTRUCTIONS

NOTE: This RFI is for planning purposes only and should not be interpreted as a solicitation for bids on the part of the State. DOH will not be responsible for expenses incurred in preparing and submitting responses to this RFI.

E.1 Cover Letter

Respondents **must** provide a cover letter that includes the following corporate information:

- Institution Name
- Contact Name
- Contact Title
- Contact phone #
- Contact e-mail address
- Mailing Address

E.2 RFI Response and Submission Requirements

Please submit cover letter and response to this RFI in an electronic format such as MS Word, MS Excel, MS PowerPoint and/or PDF to cannabisstudyrfi@health.ny.gov with the subject line "Cannabis Impairment Technologies RFI".

IMPORTANT: Responses to all questions in **Section D: Questions** must include the question identifier, the question, and the respondent response. Each question should be answered on a new page in the document/response.

Respondents are encouraged to elaborate and/or provide any general recommendations not covered by the questions posed in **Section D: Questions**.

Information in addition to the prescribed questions is welcome. However, we ask that pre-printed marketing material and cost information **not** be included in your response.

We kindly ask that responses be received by DOH no later than the RFI Response Due Date specified in the Section A. Calendar of Events.

F. GENERAL TERMS

F.1 Freedom of Information Law ("FOIL")

All responses may be disclosed or used by DOH to the extent permitted by law. DOH may disclose a response to any person for the purposes of research and planning, or for any other lawful purpose. All responses will become State agency records, which will be available to the public in accordance with the Freedom of Information Law (FOIL).

Any portion of the response that a Vendor believes constitutes proprietary information entitled to confidential handling, as an exception to the Freedom of Information Law, must be clearly and specifically designated in the response.

If DOH agrees with the proprietary claim, the designated portion of the response will be withheld from public disclosure. Blanket assertions of proprietary material will not be accepted, and failure to specifically designate proprietary material may be deemed a waiver of any right to confidential handling of such material.

F.2 DOH's Reserved Rights

The Department of Health reserves the right to:

1. Reject any or all responses received to the RFI.
2. Withdraw the RFI at any time, at the agency's sole discretion.
3. Seek clarifications and revisions of responses.
4. Utilize any ideas submitted in the responses received.
5. Request to meet with vendors.

F.3. Future Procurements

DOH may conduct a competitive procurement to conduct a controlled research study designed to evaluate methodologies and technologies for the detection of cannabis-impaired driving. However, this RFI is for planning purposes only and should not be interpreted as a solicitation for bids on the part of the State.