

2023 Annual Report

Cannabis Research Review Board

October 1, 2023

To: Health and Human Services (HHS) Interim Committee
From: Cannabis Research Review Board
Subject: 2023 Annual Report

Executive summary

This report, submitted by the Cannabis Research Review Board (CRRB), summarizes the Board activities from October 2022 to September 2023. The content of the report is as follows:

- (1) the Board's recommendations to the HHS Interim Committee
- (2) Board history;
- (3) Board duties;
- (4) Board composition;
- (5) Board members and qualifications;
- (6) Board meetings;
- (7) description of how the Board fulfills its duties; and
- (8) highlights from the Board's evaluation of scientific research.

Current members

Chair: Matthew McIff, MD
Vice Chair: Michael Moss, MD
Jennifer Norris, MD
Melissa Chan, MD
Misty Smith, PharmD
Russel Cashin, Ph.D.

For questions about the report, email Sarah Dash at sdash@utah.gov.

1. Board recommendations

The Board has recommendations to share with the Health and Human Services Interim Committee. These recommendations are outlined below:

- Ongoing communication between lawmakers and the Board. The Board welcomes lawmakers and staff to participate in meetings virtually and proactively review our meeting agendas, minutes, and other materials published at <https://medicalcannabis.utah.gov/resources/cannabinoid-product-board/>.
- Address concerns regarding the popularity of products with high THC concentrations. A review and ongoing effort to create a readily accessible list of the more than 1,000 products available to medical cannabis cardholders in Utah reveals that the vast majority of the products available for purchase greatly exceed THC doses and THC:CBD ratios recommended by evidence-based dosing guidelines that have been adopted or promoted by the Board. Risks of high-dose THC exposure, especially regularly, greatly exceed any known or potential therapeutic benefits. The absence of controls on dosing regimens poses long-term severe individual and public health risks that have not been sufficiently addressed by policy or regulations. The Board recommends restricting high-dose THC product availability to be a priority for legislative review and action.
- Address concern regarding the effects of cannabis obtained from approved sources on driving impairment. Updated traffic safety reports indicate cannabis was the most common drug detected in fatal crashes in Utah from 2017-2022, accounting for 34.9% of drugs detected. Of those testing positive for cannabis, 69.6% also tested positive for additional drugs. This trend has been reasonably steady, although 2022 had the highest absolute number of fatal crashes with cannabis detected. More work is needed to understand this relationship. Board member Dr. Michael Moss has volunteered to take on this assignment. The Board recommends that the appropriate legislative committee become involved in this effort to understand and mitigate risk.
- Address concerns regarding insomnia as a qualifying condition. The legislature requested the Board's review of literature this year for consideration of insomnia as a new qualifying condition. A thorough review of the scientific literature does not support the use of cannabis for insomnia. Expert consensus suggests that risks outweigh potential benefits compared with other readily available conventional approaches to insomnia management. The Board recommends that lawmakers address this concern.
- Address concerns regarding medical cannabis patient evaluations and clinical screenings. [Board member Dr. Matthew Mccliff has created a guide for cannabis recommenders on completing initial medical cannabis patient evaluations.](#) The use of medical cannabis requires a thorough assessment to determine if it is the

best form of treatment. This tool can help determine if medical cannabis would be a good fit. The assessment tool lists considerations to take into account during patient selection. This includes qualifying conditions, absence of contraindications, age, experience with controlled substances, mindset about cannabis, ability to self-evaluate, and more. The Board recommends that lawmakers consider requiring medical cannabis providers to complete a standard evaluation.

2. Board history

The Utah Legislature created the Board in 2017 upon passing the Cannabinoid Research Act and House Bill 130. It was first known as the Cannabinoid Product Board. In 2022, lawmakers changed the name to the Cannabis Research Review Board (CRRB).

3. Board duties

Utah law outlines the Board's duties as follows:

- (1) to review scientific research regarding cannabis use;
- (2) to evaluate the safety and efficacy of cannabis products; and
- (3) to develop guidelines for treatment with cannabis products.

4. Board composition

Utah law requires that the Board consist of seven members appointed by the Department of Health and Human Services (DHHS). Three Board members must be medical research professionals, and four must be physicians registered with DHHS as qualified medical providers (QMPs) in the state's medical cannabis program. DHHS must consult with the Utah Medical Association when selecting Board members, and at least one Board member is to sit on the Controlled Substances Advisory Committee (CSAC). The Board elects its leadership and votes on all recommendations as a Board.

5. Board members and qualifications

The Board consists of seven medical research professionals who reside throughout the state of Utah. Four of the seven Board members are QMPs participating in the medical cannabis program. The remaining members are medical research professionals who bring expertise in evaluating study methodology, statistical analysis, and evaluation of scientific rigor.

Matthew McIff, MD (QMP, clinician, and Board chair)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Graduate Fort Wayne Medical Education Program in Family Medicine; Board Certified by the American Board of Family Medicine; 15 years of clinical experience treating patients, including chronic pain. Adjunct faculty University of Utah School of Medicine, Preceptor Family Medicine clerkships; 3.5 years of experience treating patients with cannabis therapy.

Michael Moss, MD (clinician, researcher, and Board vice chair)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Board certified in Medical Toxicology, Addiction Medicine, & Emergency Medicine; Assistant Professor of Emergency Medicine and Adjunct Professor in College of Pharmacy and Department of Psychiatry at University of Utah; Medical Director of the Utah Poison Control; Emergency physician at the University of Utah; Addiction medicine practice at University of Utah Hospital; Member of Utah Drug Monitoring Initiative state working group; Member of Utah Traffic Records Coordinating Committee; Joint author of American College of Medical Toxicology position statement: Addressing Pediatric Cannabis Exposure; Research published on cannabinoids in breast milk and adolescent cannabis use; University of Utah Medical Cannabis Education Course: Acute Adverse Effects of Cannabis and Drug Interactions; Ongoing research: Emergency Department Drug Surveillance project, Novel Psychoactive Substances Screening project; Expertise in cannabis adverse effects, drug interactions, drug safety, accidental cannabis exposures, overdose, intoxication/impairment, and addiction.

Jennifer Norris, MD (QMP, clinician, and Board member)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Board Certification: Internal Medicine; Managing Physician at Harris County Hospital Clinic, Strawberry Clinic, Pasadena, TX - 1986-1990; Managing Physician at Kelsey-Seybold Clinic, Pasadena, TX - 1990-1996; Physician Partner at Wasatch Internal Medicine/Granger Medical Clinic, Salt

Lake City, UT - 1996-Current; Chairperson for Credentialing Committee at St. Mark's Hospital, Salt Lake City, UT – 2009-2013; Population Health Committee and Accountable Care Committee for Wasatch Internal Medicine/Granger Medical, Salt Lake City UT – 2020-2021; Board of Directors for Granger Medical Clinic, Salt Lake City, UT – 2020-2021.

Russell H. Cashin, Ph.D. (educator, researcher, and Board member)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Bachelor's and Master's degrees in psychology; Ph.D. in Nutritional Psychology with an emphasis on Medical Cannabis; instructor at Utah Tech University, offering adult courses in Medical Cannabis and Nutrition-based health; Adjunct Professor of Psychology at Mohave Community College; Certified Cognitive-Behavioral Group Therapist; Member of the National Association of Cognitive Behavioral Therapists; Member of the Society for the Teaching of Psychology; Affiliate Member of the American Psychology Association.

Misty Smith, Ph.D. (researcher and Board member)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Assistant Professor, Department of Pharmacology & Toxicology, College of Pharmacy, University of Utah; Associate Professor, Oral Biology, Medicine & Pathology Section, School of Dentistry, University of Utah; Co-Investigator, NIH/NINDS Epilepsy Therapy Screening Program (ETSP) contract site, Department of Pharmacology & Toxicology, University of Utah; Behavioral Pharmacologist with >21 years of experience in preclinical drug discovery and development. National & International Society Memberships: American Epilepsy Society (AES), American Society for Pharmacology & Experimental Therapeutics (ASPET), Society for Neuroscience (SFN), Women in Neuroscience (WIN), American Dental Education Association (ADEA), American Pain Society (APS) (until 06/2019), US Association of Study of Pain (USASP); Recipient, Epilepsy Foundation Targeted Research Initiative regarding Cannabidiol and Epilepsy (TRICE) grant; Member, American Epilepsy Society (AES) Scientific Programming Committee; Former Member at Large, Executive Committee, Neuropharmacology Division, American Society for Pharmacology & Experimental Therapeutics; NIH Principles of Clinical Pharmacology Education Course certification, Office of Clinical Research Training & Medical Education,

NIH Clinical Center, Bethesda, MD; Chair, College of Pharmacy Safety Committee; Member, University of Utah Campus Health & Safety Committee; more than 175 lectures (local, regional, national, international); 42 research publications in peer review journals; 6 chapters and/or review articles published; 33 refereed abstracts/posters at professional meetings.

Melissa M. Chan, MD (QMP, clinician, and Board member)

Disclosure: No financial ties to the cannabis industry or pharmaceutical companies.

Qualifications: Board Certified in Family Medicine and Addiction Medicine; provides full spectrum of medical care on the East and West Coasts of the USA and New Zealand; assisted in the early stage of cannabis procedures in large medical organizations in California prior to medical and recreational adoption; former medical director of a local outpatient addiction clinic; currently working in an outpatient clinic that combines Eastern and Western medicine for holistic care with outreach to underserved communities.

6. Board meetings

The Board holds quarterly meetings and additional meetings on an as-needed basis. All meetings are open to the public and held in compliance with the Utah Public Meetings Act. Since the beginning of the COVID-19 pandemic, the Board has held its meetings virtually.

The Board meeting agenda consists of administrative items, presentations, published research discussions, and collaboration with DHHS staff to develop resources and guidelines for QMPs. Research reports and findings are shared via email with Board members.

The Board also discusses the scientific quality of the data and implications for medical cannabis use in Utah. The Board uses this research to assist staff in developing resources and treatment guidelines for QMPs. The Board invites subject matter experts to present at the Board meetings. The subject matter experts provide an in-depth analysis of contemporary peer-reviewed literature on cannabis use as medicine for various clinical conditions.

7. Description of how the Board fulfills its duties

The Board's duties are outlined in [Utah Code 26B-1-420](#). Each duty and a description of how the Board completes them are listed below:

Review scientific research regarding cannabis use. The Board reviews any

available scientific research related to the human use of cannabis products that: (1) was conducted under a study approved by an IRB; (2) was conducted or approved by the federal government; or (3) was conducted in another country and demonstrates, as determined by the Board, a sufficient level of scientific reliability and significance to merit the Board's review.

- In 2022, the DHHS contracted with an academic pharmacist, Lauren Heath, PharmD, MS, BCACP, to perform ongoing literature reviews of scientific research on the human use of cannabis. Based on her thorough literature reviews, Ms. Heath brings the Board's attention to research studies of scientific rigor that warrant review and discussion.
- It is essential to the DHHS and the Board that the industry and the public always feel welcome to submit studies for the DHHS and the Board to review and discuss during its meetings. The DHHS and Board seek to create an inclusive program and educated community by continuing to consider studies submitted by the industry and the public.

Evaluate the safety and efficacy of cannabis products. The Board evaluates the safety and efficacy of cannabis products, including (a) medical conditions that respond to cannabis products; (b) cannabis and cannabinoid dosage amounts and medical dosage forms; (c) interaction of cannabis products with other treatments; and (d) contraindications, adverse reactions, and potential side effects from the use of cannabis products.

Over the last two years, the Board has done the following:

- Systematically reviewed the evidence supporting medical cannabis for qualifying conditions.
- Invited subject matter experts to present literature and data reviews.
- Performed internal reviews of studies containing human clinical trials that use ethically and methodologically sound standards.

The work products and actions of the Board are found at <https://medicalcannabis.utah.gov/resources/cannabinoid-product-board/>. The recent research and review topics are outlined in Section 7 of this report. Based on the Board's evaluation of scientific research, members develop guidelines for treatment with cannabis products. The guidelines are available under the menu titled "CRRB Documents." These guidelines are updated with any new clinically relevant data every two years.

8. Highlights from the Board's evaluation of scientific research

- Cannabis driving impairment. Michael Moss, MD, presented to the Board on this

topic on October 11, 2022. Dr. Moss concluded that: (1) no consensus regarding safe THC serum levels; (2) THC impairs driving ability; (3) alcohol makes it worse; (4) overall impact may be confounded; and (5) do not drive for 6-8 hours after use. The conclusions and findings are titled [CRRB cannabis driving impairment](#) and are located at medicalcannabis.utah.gov under "Presentation Documents."

- [Synthetic and derivative cannabinoids Q&A](#). Brandon Forsyth, Ph.D., presented to the Board on this topic on November 8, 2022. The Board's discussion is located at https://youtu.be/x6HvNhR7b90?si=LBT_fI7s7Hc55Tv0, and Dr. Forsyth's presentation titled [Synthetic and derivative cannabinoids Q&A](#) and is located at medicalcannabis.utah.gov under "Presentation Documents."
- [Cannabis exposures reported to poison centers](#). Michael Moss, MD, presented to the Board on this topic on January 10, 2023. Dr. Moss concluded that: (1) cannabis exposures increase when cannabis access expands; (2) adults experience anxiety/panic attacks; (3) children are more severely affected; (4) serious outcomes are rare but do occur; and (5) laws/rules/outreach help reduce adverse effects or accidental exposures similar to prescribed medications. The conclusions and findings are titled [Cannabis exposures reported to poison centers](#) and are located at medicalcannabis.utah.gov under "Presentation Documents."
- [Treatment of insomnia with cannabis](#). Katherine Carlson, MD, led the Board discussion on April 11, 2023. The Board concluded that the insufficient evidence from randomized controlled trials of patients with insomnia is inconclusive regarding the effects of cannabinoid products on insomnia. The Board's discussion is located at <https://youtu.be/ioluk84DKjw?si=GfYxLHR46uIBEDT0>.
- [Cannabis use disorder](#). Adam Gordon, MD, presented to the Board on this topic on May 9, 2023. Dr. Gordon concluded that: (1) cannabis use is increasing; (2) more deaths are occurring due to cannabis exposure; (3) cannabis use causes cannabis use disorder (30%); and (4) medical cannabis may be implicated in cannabis use disorder. The conclusions and findings are titled [Cannabis use disorder](#) and are located at medicalcannabis.utah.gov under "Presentation Documents."
- [Treatment of multiple sclerosis with cannabis](#). Lauren Heath, PharmD, presented to the Board on this topic on July 11, 2023. Ms. Heath concluded that the systematic review offered new scientific evidence to update the current multiple sclerosis guidance document. Ms. Heath's presentation is titled [Cannabis: evidence from recent systematic reviews on the treatment of multiple sclerosis](#), and is located at medicalcannabis.utah.gov under "Presentation Documents." The Board agreed with these conclusions and findings, and the discussion is noted in the meeting minutes.

