

**TESTIMONY BY:**

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**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

February 19, 2020  
4:00 P.M.  
State Capitol, Room 308

**H.B. 2097, H.D. 2**  
**RELATING TO MEDICAL CANNABIS**

House Committee on Finance

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The Department of Transportation (DOT) **opposes** H.B. 2097, H.D. 2, as it relates to edibles.

Among other provisions, this bill allows licensed retail dispensaries to sell edible cannabis products. Edible marijuana is very different from “joints” and other marijuana products, and the effects of THC when consumed in edibles compared to smoking sometimes takes several hours. People are more likely to eat more than the recommended serving since they don’t immediately feel the effects. These same people may get into a car and start driving, which may lead to serious or fatal consequences.

Cannabis can impair a driver’s cognitive function, affecting a driver’s time/space perception, reaction time, ability to concentrate, etc. Contrary to popular belief, marijuana does not make someone a better, more careful driver. According to the “Drug Recognition Expert (DRE) Examination Characteristics of Cannabis Impairment” study published in the July 2016 Accident Analysis & Prevention Journal, an evaluation of 302 toxicologically-confirmed cannabis-only DRE cases saw that in 72.3 percent of cases, one or more moving violations were listed as reasons for the traffic stop. Speeding was the number one violation (27.7 percent), followed by weaving (19.0 percent). Similarly, in a two-year study of THC in drivers in Orange County, California, published in the August 2016 Journal of Forensic Science, the top five moving violations were speeding (24 percent), unable to maintain lane position (23.2 percent), ran red light or stop sign (13.0 percent), unsafe lane change (8.7 percent) and involved in a collision (8.3 percent).

In Hawaii, a local study on motor vehicle crash fatalities and undercompensated care associated with legalization on medical marijuana finds that “THC positivity among driver fatalities increased since legalization, with a threefold increase from 1993-2000 to 2001-2015. THC positivity among all injured patients tested at our highest level trauma center increased from 11% before to 20% after legalization. From 2011 to 2015, THC

positive patients were significantly less likely to wear a seatbelt or helmet (33% vs 56%).” The study was published in the Journal of Trauma and Acute Care Surgery in May 2018.

DOT is primarily concerned about improving highway safety and protecting the lives of our community members and visitors. DOT coordinates specialized training and certifies law enforcement officers to recognize impairment in drivers under the influence of drugs through its DRE program to combat this issue.

Thank you for the opportunity to provide testimony.

DEPARTMENT OF THE PROSECUTING ATTORNEY  
**CITY AND COUNTY OF HONOLULU**

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**THE HONORABLE SYLVIA LUKE, CHAIR**  
**HOUSE COMMITTEE ON FINANCE**  
**Thirtieth State Legislature**  
**Regular Session of 2020**  
**State of Hawai`i**

February 19, 2020

**RE: H.B. 2097, H.D. 2; RELATING TO MEDICAL CANNABIS.**

Chair Luke, Vice-Chair Cullen and members of the House Committee on Finance, the Department of the Prosecuting Attorney of the City and County of Honolulu (“Department”) submits the following testimony in opposition to H.B. 2097, H.D. 2, specifically to the portions regarding “edible cannabis products” (page 5, line 21; page 6, lines 5-20; page 7, lines 1-8).

The purpose of H.B. 2097, H.D. 2, is to allow medical cannabis dispensaries to sell medical cannabis in the form of “edible cannabis products,” on top of the currently allowed forms of medical cannabis products (capsules, lozenges, pills, oils and oil extracts, tinctures, ointments and skin lotions, transdermal patches, aerosols and other products specified by the Department of Health). The Department is strongly opposed to the proposal to allow edible products, as they will greatly increase the likelihood that people—including children—will inappropriately or even inadvertently consume cannabis.

When Colorado began permitting medical cannabis dispensaries in 2010, the annual number of hospitalizations and Emergency Room visits for possible cannabis exposure, for children under 9 years old, increased 5-fold in years 2010-2013, as compared to the nine years prior.<sup>1</sup> In the same time period, the average number of calls to the Rocky Mountain Poison and Drug Center for cannabis exposure nearly doubled.<sup>2</sup> Clearly, allowing dispensaries to sell commercially-made food-like products will increase the likelihood that children will be drawn to and actually ingest these products, whether intentionally or accidentally, and will likely increase the chances of adults ingesting these products unnecessarily as well. This may be one of the

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<sup>1</sup> Colorado Department of Public Health and Environment, *Monitoring Health Concerns Related to Cannabis in Colorado: 2014: Changes in Cannabis Use Patterns, Systematic Literature Review, and Possible Cannabis-Related Health Effects*, Jan. 30, 2015, at 170, available at [https://www.colorado.gov/pacific/sites/default/files/DC\\_MJ-Monitoring-Health-Concerns-Related-to-Cannabis-in-CO-2014.pdf](https://www.colorado.gov/pacific/sites/default/files/DC_MJ-Monitoring-Health-Concerns-Related-to-Cannabis-in-CO-2014.pdf).

<sup>2</sup> *Id.*, at 162.

reasons why no prescription medication currently on the market is legally manufactured and sold in snack-form; medication is not meant to be delicious or tantalizing.

In addition to overall public safety and welfare concerns, allowing medical cannabis dispensaries to sell commercially manufactured food-products containing medical cannabis will make it even harder to enforce Hawaii's laws regarding marijuana and medical cannabis, including possession of an "adequate supply." Simply stated, there is no practicable way for law enforcement to accurately analyze the contents or potency of these food-products, particularly when potency could vary widely throughout the product or different portions of the product (as with baked goods).

At the time H.B. 321, H.D. 1, S.D. 2, C.D. 1 (2015)—the bill that first established Hawaii's medical cannabis dispensary system—was enacted as Act 241 (2015), there was significant attention given to a federal document commonly known as "the Cole memorandum."<sup>3</sup> As suggested by that document, our Legislature appeared to take great efforts to create a dispensary system that not only provides registered medical cannabis patients with regular access to cannabis, but also provides a "strong and effective regulatory and enforcement system[] to control the cultivation, distribution, sale, and possession of cannabis." Perhaps in light of this, and in the overall interest of public safety and welfare, our Legislature chose—and has continued to choose—not to grant authority for dispensaries to sell medical cannabis in the form of "edibles" such as those proposed in H.B. 2097, H.D. 2.

While the Department understands that individuals with certain debilitating conditions rely on medical cannabis for some modicum of respite at this stage in their life, the public, social and economic risks associated with establishing and regulating a medical cannabis dispensary system cannot be underestimated, particularly after seeing the effects in other states. Because of the high risk for abuse, accidental ingestion, and the unique legal and medical standing of medical cannabis and medical cannabis dispensaries—and the ongoing demand for illicit "marijuana"—the Department believes it is crucial that Hawaii's dispensary system be held to the strictest regulations and parameters. Dispensaries must not be permitted to sell food products that further broaden the appeal of these products beyond actual, debilitating, medical needs. Not only does this limitation help to protect public safety and welfare—which is always the Department's highest concern—but may also help to establish and maintain the integrity of the medical cannabis dispensary system itself.

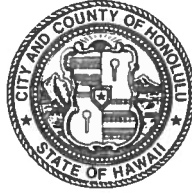
For all the foregoing reasons, the Department of the Prosecuting Attorney of the City and County of Honolulu strongly opposes the passage of H.B. 2097, H.D. 2. Thank you for the opportunity to testify on this matter.

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<sup>3</sup> Memorandum from Deputy Attorney General James M. Cole to U.S. Attorneys (Aug. 29, 2013), available online at <http://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf> (last accessed Feb. 12, 2018).

POLICE DEPARTMENT  
CITY AND COUNTY OF HONOLULU

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DEPUTY CHIEFS

OUR REFERENCE PJ-FG

February 19, 2020

The Honorable Sylvia Luke, Chair  
and Members  
Committee on Finance  
House of Representatives  
Hawaii State Capitol  
415 South Beretania Street, Room 308  
Honolulu, Hawaii 96813

Dear Chair Luke and Members:

SUBJECT: House Bill No. 2097, H.D. 2, Relating to Medical Cannabis

I am Acting Major Phillip Johnson of the Narcotics/Vice Division of the Honolulu Police Department (HPD), City and County of Honolulu.

The HPD opposes House Bill No. 2097, H.D. 2, Relating to Medical Cannabis.

This bill, in part, seeks to amend Section 329D-10 of the Hawaii Revised Statutes to include edible cannabis products. Edible marijuana products should not be allowed. Hospitals in Colorado report an increase in the number of children who are treated for illnesses/injuries related to the accidental consumption of edible marijuana products. The Colorado Veterinary Medical Association has stated that veterinarians are treating an increased number of animals for accidental marijuana ingestion. If marijuana is made available in more edible forms, it will likely increase the exposure to children and pets.

The HPD urges you to oppose House Bill No. 2097, H.D. 2, Relating to Medical Cannabis, and thanks you for the opportunity to testify.

APPROVED:

Sincerely,

Handwritten signature of Susan Ballard in cursive script.

Susan Ballard  
Chief of Police

Handwritten signature of Phillip Johnson in cursive script.

Phillip Johnson, Acting Major  
Narcotics/Vice Division

**HB-2097-HD-2**

Submitted on: 2/18/2020 11:39:24 AM

Testimony for FIN on 2/19/2020 4:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Kat Brady	Community Alliance on Prisons	Support	No

Comments:

Aloha Chair Luke, Vice Chair Cullen and Members of the Committee!

Community Alliance on Prisons supports HB 2097 HD2. We are especially focused on the section about edible products. This is important as many of our suffering community folks can only ingest the cannabis in food as they are contending with weight loss.

Please pass this measure!

# HAWAI'I CANNABIS INDUSTRY ASSOCIATION

February 19, 2020

TO: Representative Sylvia Luke, Chair Finance  
Representative Ty J.K. Cullen, Vice Chair Finance  
Members of the House Committee on Finance

FR: Teri Freitas Gorman, 2020 Chair, Hawai'i Cannabis Industry Association (HCIA)

RE: **HB2097 HD2 RELATING TO MEDICAL CANNABIS. - SUPPORT**

Allows for a process to remediate any batch of cannabis or manufactured cannabis product that fails laboratory testing standards so long as any final cannabis or manufactured cannabis product passes all the laboratory standards. Authorizes licensed dispensaries to manufacture and distribute edible cannabis products, under certain conditions, and circulate, sponsor, and promote educational and scientific information and events related to cannabis. Effective 7/1/2050.

The Hawai'i Cannabis Industry Association (HCIA), formerly known as the Hawai'i Educational Association for Licensed Therapeutic Healthcare (HEALTH), represents all eight of the state's licensed medical cannabis dispensaries plus associate members. HCIA **supports** HB2097 HD2 as the provisions of HB2097 HD2 ensures i) registered patients have access to an adequate, affordable supply of manufactured medical cannabis products; ii) provides patients with a wider selection of safety-assured products for those who choose not to inhale cannabis for personal or health reasons; and iii) benefits registered and prospective cannabis patients by allowing dispensaries to disseminate scientific and educational information to increase awareness of the potential therapeutic benefits of quality-assured medical cannabis.

**FLOWER REMEDIATION:** *"Consider processes that allow any batch of product that fails testing standards to be remediated and manufactured so long as any final product passes testing standards."*

This provision reflects widespread industry practice while upholding the Department of Health's foundational principles of product safety, patient safety, and public safety. In accordance with these principles, Hawai'i's testing standards have been among the most stringent in the industry, requiring comprehensive testing for flowers and manufactured products. In fact, Hawai'i testing standards have led the industry, especially with regard to the most dangerous pathogens.

For example, it wasn't until September 15, 2019 that Colorado mandated that cannabis plant material that failed yeast and mold testing, and is remediated through extraction to produce cannabis concentrates, must be retested for mycotoxins prior to sale.<sup>1</sup> In fact, Hawai'i's threshold for failure due to the presence of mycotoxins is zero. *Regulations of the Hawai'i Department of Health have always mandated a full battery of lab tests for manufactured cannabis products prior to sale.*<sup>2</sup>

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<sup>1</sup> Colorado Revised Statutes (C.R.S) 44-11-202 (3)(a)(I) & 44-12-202(3)(a)(IV)

<sup>2</sup> Hawai'i Administrative Rules §11-850-85: Laboratory Standards & Testing

Prevention is the best way to halt biological contamination in cannabis, so Hawai'i's medical cannabis licensees use measures such as dehumidification, air filtration and biological controls.

According to Michael Covington, chief operating officer for Steep Hill Hawai'i, when cannabis flowers fail mandated testing in Hawai'i, its due to the detection of "biological organisms," including mold, yeast and bacteria. Pesticide residues are very rarely detected, as Hawai'i's licensed growers tend not to use pesticides.<sup>3</sup>

The biological and chemical contaminants that can trigger dried cannabis flowers to fail Hawai'i's testing standards can often be safely rectified using industry standard processes, such as supercritical CO2 extraction and processing methods common in the food industry. Bottom line: *remediated products available to patients at state-licensed medical cannabis dispensaries have passed a full battery of stringent lab tests administered by independent labs regulated by the State Laboratory Division at Hawai'i DOH.*

**CANNABIS-INFUSED EDIBLE PRODUCTS:** Hawai'i's medical cannabis dispensaries began operating nearly two and a half years ago and throughout this time, a common patient question has been "Why do you not offer edibles?"

The medical cannabis dispensary program's current list of approved products includes ingestible products like tinctures, capsules or lozenges, but many patients prefer to consume cannabis in food for medical reasons. Patients with damaged or diseased lungs cannot inhale cannabis; cancer patients coping with severe nausea or loss of appetite often find edibles to be the most palatable method of administration; and many patients with severe chronic pain prefer edibles for longer pain relief enabling them to enjoy sound sleep for 6 to 8 hours.

Banning edible products from regulated dispensaries leaves patients with two risky alternatives: making their own edible products at home or purchasing products on the black market. Home-cooks discover it is nearly impossible to accurately calculate THC potency in homemade cannabinoid-infused foods. This greatly increases the danger of accidental overdose by an adult and homemade edibles are often accessible to children and other unsuspecting adults seeking a snack.

The recent vaping illnesses demonstrated the health hazards of purchasing illicit products from the black market. Plus, THC-infused, gummy bears and candies in colorful packages are much more enticing to children than the plain packaging mandated by Hawai'i's medical cannabis program.

Currently, edible products are approved for medical cannabis patients in Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida (pending regulations), Illinois, Maine, Maryland, Massachusetts, Michigan, Nevada, Ohio, Oregon, Rhode Island, Vermont, and Washington. These states have successfully passed laws and regulations that ensure product safety while effectively barring minors from accessing cannabinoid-infused products and preventing accidental overdose by adults.

We believe this bill contains industry best practices for dispensing edible cannabis products for medical use including:

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<sup>3</sup> Hawai'i lab rejects more than 20% of medical marijuana tested, *Marijuana Business Daily*, October 12, 2018  
Hawai'i Cannabis Industry Association (HICIA)  
220 S King St #1600, Honolulu, HI 96813  
[www.808hcia.com](http://www.808hcia.com)



- Edible products must undergo and pass all laboratory tests;
- A mandatory warning on the label that states: "WARNING: CONTAINS CANNABIS FOR MEDICAL USE. THIS IS NOT FOOD. KEEP OUT OF REACH OF CHILDREN";
- Labels must contain a list of all ingredients;
- Ensuring that the words "candy" or "candies" or "gummy" or "gummies" do not appear on product packaging; and
- Be regulated and approved by the Department of Health's Office of Medical Cannabis Control & Regulation as a medical cannabis manufactured product.

Removing the existing legislative restriction on licensed dispensaries for cannabis-infused edibles will ultimately allow the DOH to exercise its regulatory authority to approve or refuse any cannabis product available in a state-licensed dispensary.

### **AMEND ADVERTISING RESTRICTIONS TO ALLOW PROMOTION OF PUBLIC EDUCATION**

With the passage of HB 321 in 2015 the legislature intended to offer education as part of the medical cannabis program. "HRS §329D-26 (a) provides for a continuing education and training program...for community partner agencies, physicians and other healthcare providers, patients, and caregivers, law enforcement agencies, law and policy makers, and the general public." The DOH has been able to educate other agencies, but public education is a huge task best shared among stakeholders.

The association believes that Hawai'i's citizens would benefit from a more thorough understanding of the risks and benefits of medical cannabis usage. Current legislation prevents licensees from promoting or advertising scientific or medical information or events produced for educational purposes. This bill amends current law to allow dispensaries to promote educational events while limiting the purpose to ensure such activity does not promote only commercial interests. We believe this amendment will help dispensaries to replace misinformation and stigma with a more accurate and balanced view of medical cannabis based upon scientific and medical evidence.

Mahalo for the opportunity to testify on behalf of the state's eight medical cannabis licensees and for your consideration to move this bill forward on behalf of the state's 27,152 registered medical cannabis patients.



February 17, 2020

To: Representative Sylvia Luke, Chair  
Representative Ty Cullen, Vice Chair  
Members of the House Finance Committee

Fr: Kalani Ho-Nikaido, Maui Wellness Group, dba Maui Grown Therapies

Re: TESTIMONY IN SUPPORT OF HB2097 HD2

**RELATING TO MEDICAL CANNABIS.**

Allows for a process to remediate any batch of cannabis that fails laboratory testing standards so long as any final product passes all such laboratory standards. Authorizes licensed retail dispensaries to sell edible cannabis products, under certain conditions, and circulate, sponsor, and promote educational and scientific information and events related to cannabis.

**REMIEDIATION:** Maui Grown Therapies (MGT) supports HB2097 HD2 because this measure embraces best industry practices for remediation of cannabis flowers under the supervision of a state agency focused on safeguarding public health. MGT uses supercritical CO2 extraction when processing dried cannabis flowers to produce the ingredients used in cannabis product manufacturing. With the passage of this bill, patients can take comfort that the Department of Health (DOH) will determine if and when remediation may occur and, if so, ensuring that the resulting products pass testing standards that are among the most rigorous in the United States.

**CANNABIS-INFUSED EDIBLE PRODUCTS:** Since January 2019, MGT patients have signed and mailed 636 postcards addressed to the director of DOH respectfully requesting that the department support the addition of edible cannabinoid-infused products to the list of approved products under HRS 329D. Many of these registered patients report conditions where other forms of administration are difficult or impossible to use. For example, patients undergoing treatment for emphysema or lung cancer cannot use inhalation for cannabis. Other patients prefer edibles for extended pain management since the analgesic effects of some edible products can last up to 8 hours. Finally, many cancer patients prefer edible products over other methods to stimulate appetite and manage nausea. This bill will allow the DOH to supervise a careful and thoughtful introduction of edibles, using lessons learned in other states.

**AMEND ADVERTISING RESTRICTIONS TO ALLOW PROMOTION OF PUBLIC EDUCATION**

HB2097 HD2 will amend current law to allow dispensaries to promote educational events under DOH oversight. Even as we enter into our third year of operation, we continue to meet patients who are still unaware that Hawai'i medical cannabis dispensaries are open. There is a great public need for science-based education about the medical use of cannabis. HB2097 HD2 will allow dispensaries to educate both existing patients and prospective patients to help replace misinformation and folklore with facts.

Mahalo for the opportunity to testify.



**KUSH BOTTLES**

HAWAII

**TO: Committee on Finance**

**FROM: Miles Wesley Tuttle & Adealani Wesley**

**HEARING DATE: 19 February 2020, 4:00 PM**

**RE: HB2097 HD2, Relating to Medical Cannabis, STRONG SUPPORT**

**Dear Chair Luke, Vice Chair Cullen, and Members of the Committee,**

The introduction of manufactured, Cannabis-infused edible products to the list of approved Cannabis products in the state of Hawaii presents many positive solutions to patient health and preference. This introduction also raises concerns about the possible negative consequences, mostly the unintentional ingestion of edible Cannabis-infused products by Hawaii's children. Following two years of a state Medical Dispensary Program, it is becoming apparent that Hawaii's Medical Cannabis patients and Out-of-State Patients (OSP) are asking for edible Cannabis-infused products more frequently to serve as an alternate method of ingesting their medicine. To better inform all parties involved in this process of considering the approval of Cannabis-infused edible products, we are conducting a Health Impact Assessment focused on preventing the unintended ingestion of edible Cannabis-infused products by Hawaii's children, the potential role that child-resistant packaging, a mandatory edible-specialist/patient consultation, and a systematic addition or narrowing of allowable edible types of products could play in mitigating the problem. After reviewing the scientific evidence and incorporating stakeholder input, we make the following recommendations:

- 1. Require Certified Child-Resistant Packaging that is non-attractive to children and possesses a Universal Warning Symbol.**
- 2. Implement Accurate and Proper Labeling Requirements.**
- 3. Systematic addition of types of edible Cannabis products, beginning with Chocolated Medicinal Pieces.**
- 4. Mandatory Consultation with Cannabis-infused edibles safety specialist.**
- 5. Specify a maximum milligram/container content for edible Cannabis products.**
- 6. Access to educational material provided to patients regarding the consumption of edible Cannabis products.**

## **Background**

The introduction and allowance of retail sale of Cannabis-infused edible products has been on the legislative table for a couple of years. Act 116 Medical Cannabis Outstanding Issues Working Group was established by the legislature pursuant to H.B. 2729, H.D. 2, S.D. 2, C.D. 1, Act 116 (2018). The working group was convened by the Department of Health, Office of Medical Cannabis Control, and Regulators to consider and make recommendations regarding edible products. Their recommendation was focused on the authorization and regulation of the manufacture and dispensing of edible Cannabis products by a licensed Medical Cannabis Dispensary.

This Working Group concluded the following recommendations:

1. Amend the definition of “manufactured medical cannabis product” to differentiate edibles from other manufactured products.
2. Eliminate edible products that are not shelf-stable, are potentially hazardous, may increase the toxicity of cannabis, may create an unsafe combination with other psychoactive substances, or any item attractive to children.
3. Amend edibles product-packaging requirements to include the use of a universal symbol.
4. Implement a system of reporting product complaints, such as a State Poison Control Hotline toll free number included on edible Cannabis packaging.
5. Specify cannabis edible product labeling requirements to include information applicable to consumption, such as estimated activation time, serving size, number of servings per container, cannabinoid content per serving, and ingredients.
6. Require product packaging to be continually child-resistant.
7. Incorporate appropriate provisions for manufacturing protocol.
8. Implement manufacturing standards, including limitations of cannabinoid concentration per serving, and providing tools to help with portioning.
9. Create a process for the systematic addition of product categories to help control uniform distribution of cannabinoids within each product.
10. Implement a product recall system.
11. Establish mandatory pre-purchasing education protocol for patients new to the purchase of edibles.

## **The Need for Cannabis-Infused Edibles**

During the last two years of operation, the Medical Cannabis Dispensaries in the state of Hawai'i have had multiple requests for the availability of ready-to-eat Cannabis products. Patients who try to make their own edible products at home have found that it is a difficult process to properly and accurately extract

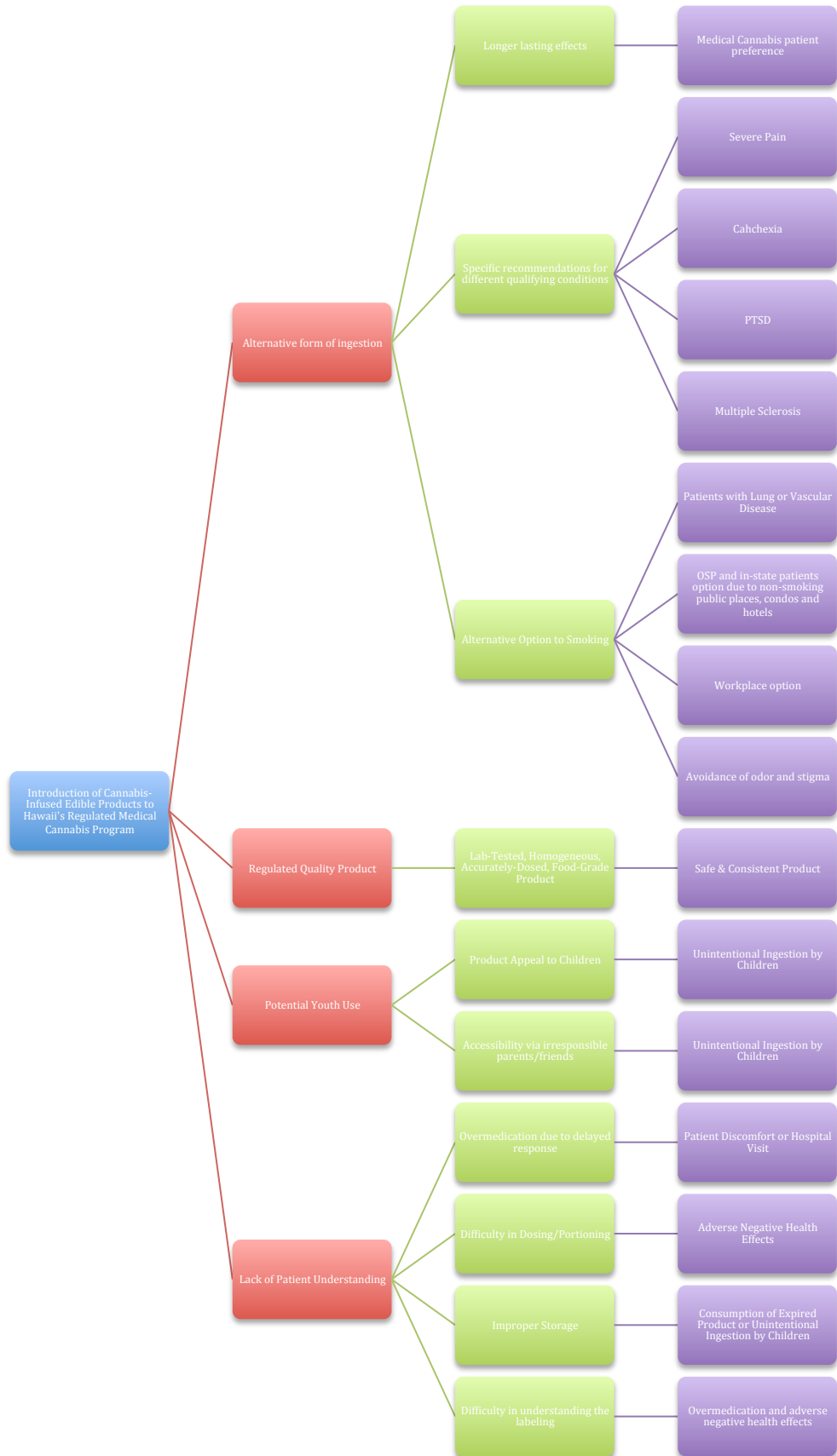
cannabinoids from the Cannabis flower provided in Medical Dispensaries, and/or accurately dose and homogenize the cooking oil provided as well.

A majority of Hawaii's Medical Cannabis patients use Cannabis to help relieve their chronic and severe pain. Through research, it has been found that THC ingested via the gastrointestinal tract provides a longer lasting effect, and is more suitable for overnight relief than a smoked Cannabis product.

Other qualifying conditions that specifically recommend the usage of edible Cannabis products are Cachexia for nausea/vomiting and stimulating appetite; Multiple Sclerosis for spasticity; PTSD symptoms, and those suffering from lung disease, due to the inability to inhale Cannabis via smoking or vaporizing.

Hawai'i has an incredible tourist population throughout the year. Our Out-of-State Medical Cannabis program (OSP) is slowly becoming more popular with other Medical Cannabis patients throughout the United States that visit our islands, however these out-of-state patients are presented with a difficult situation as to where they are able to consume their medicine. Hotels and Condo-hotels are non-smoking residences, as are public places within the state. As Medical Dispensaries are currently not allowed to offer edibles, it leaves our out-of-state patients with purchased medicine and nowhere to medicate... legally.

The Causal Map below identifies these impacts of the introduction of Cannabis-infused edible products to Hawaii's Regulated Medical Cannabis Program. It highlights the positive impacts of offering an alternative form of ingestion, and having regulated, quality edible products. It also addresses the unintended negative impacts, including a potential increase in youth use, and the result of patients' lack of understanding concerning dosing.



## **Impact**

The introduction of Cannabis-infused edible products into Hawaii's Medical Cannabis Program will have intended positive impacts as well as unintended negative impacts, the latter of which we hope to mitigate.

The main impact is presenting Hawaii's resident and out-of-state patients with an alternative form of ingestion of Cannabis. By making this alternate option available to patients, it will allow them the flexibility of using their medicine in a form that is complimentary to their specific qualifying condition, preference, environment, or activity/time of day. Patients with lung disease will be able to have an efficient and effective way to consume their Medical Cannabis. This positive impact of an alternative form of Cannabis ingestion could lead to an increase in the overall Medical Cannabis resident and out-of-state patient population in the State of Hawaii. This increase could lead to a higher number of legal patient purchases, and therefore would boost the Medical Cannabis Dispensary sales in the state and hopefully save the patients (who have no Cannabis cooking experience) the time, money and frustration of trying to make edibles themselves. This alternative form of ingestion would also solve the problem of out-of-state patients having no physical location to consume Cannabis due to public places and hotels being non-smoking environments. Resident patients would benefit from this impact as well, as many live in condominiums or apartments that do not allow smoking. A vast number of patients prefer edible consumption based on the longer lasting effect, especially beneficial for sleeping. This option of ingestion also eliminates the odor of Cannabis smoke and the ongoing negative stigma toward Cannabis that many patients are still dealing with.

Another positive impact of the introduction of Cannabis-infused edible products into the Medical Cannabis Program in the state of Hawai'i is the ability of the Medical Cannabis Dispensaries to manufacture a regulated, quality product for its patients. As the Medical Dispensaries are strictly regulated by the Department of Health, they must have all of their products lab-tested and THC content accurately dosed. Based on the advanced technologies that the current production centers of the State Medical Cannabis Dispensaries already possess for the extraction/processing of other manufactured Cannabis products, achieving homogeneity within an edible product would be feasible: a task that is extremely difficult to accomplish in a home kitchen. The current dispensaries would also already have the capabilities to label the edible products appropriately to mitigate any misunderstanding of contents, as they already implement this practice for other Cannabis products. These standards that Hawaii's Medical Cannabis Dispensaries would be able to offer to its patients would ultimately lead to a healthier, safer edible product. This would make its consumption a positive experience, and decrease the number of patients who may suffer from the risks involved in the actual manufacturing or cooking of the edible Cannabis-infused product, and potentially over-medicating unintentionally.

An unintended negative impact of the introduction of Edible Cannabis-infused products is the potential increase in Cannabis use among youth, mainly in the form of unintentional ingestion by Hawaii's children. This is an issue that is incredibly important in every stakeholder's eyes. Edible foods, especially those that are worthy of the title "treat," are already more appealing to children than other forms Cannabis, such as flower or concentrated material. A Cannabis-infused "gummy bear" might look the same as a non-Cannabis-infused "gummy bear". The accessibility of edible Cannabis-infused products to children is a problem that could be a result of the adult patient's irresponsibility when considering its storage. It is up to the adult patient to protect their children or grandchildren from accessing Cannabis products, similar to other prescription medications that they may have to be responsible for. The dispensaries and doctors should be able to help their patients to be fully aware of how to accomplish this task, as well as inform the patients of the risks of this form of ingestion, such as overconsumption.

Another unintended negative impact of introducing Cannabis-infused edibles to the Hawaii Medical Cannabis Program is the potential overmedication of patients. This overmedication usually results from being under-informed in regards to the consumption and safety of edible Cannabis products. As edible products have a delayed response in the effects felt, it is common to be impatient and overmedicate. It is also sometimes difficult to dose or portion out pieces of edible products appropriately. Labeling of the product can be quite extensive, and there can be difficulty in understanding the consumption and storage instructions on the label. All of these situations could lead to unintentional overmedication, which could be followed by patient discomfort or anxiety, increased hospital visits, or other adverse negative health effects.



## Impact Map

Recommendation	Anticipated Magnitude of Health Impact*	Distribution	Strength of Evidence
Certified Child-Resistant Packaging	Strong	Patients/Caregivers	Strong
Opaque Packaging	Medium	Patients/Caregivers	Medium
Packaging Non-Attractive to Children	Medium	Patients/Caregivers/Public	Medium
Universal Warning Symbol	Low	Patients/Caregivers/Public	Low
Accurate & Proper Labeling	Medium	Patients/Caregivers/Public	Medium
Chocolated Medicinal Pieces as first addition	Medium	Patients/Caregivers	Medium
Mandatory consultation	Strong	Patients/Caregivers	Strong
Specific maximum THC milligram content	Strong	Patients/Caregivers	Strong
Patient access to informational materials on edibles	Low	Patients/Caregivers/Doctors /APRNs	Medium

*\* Impact Magnitude was considered Strong if it was a primary barrier to accessing item/educating patients, Medium if was a secondary barrier to accessing item/educating patients, and Low if it was a tertiary barrier OR post-access recommendation.*

### **Scientific Evidence:**

Research finds that Cannabis-infused edible products are especially popular with medicinal cannabis users<sup>1</sup>, as well as with the Baby Boomer generation.<sup>2</sup>

### **Patient Understanding:**

Even if accurate THC dosing and proper content labeling for edibles can be achieved, this information is only useful if it is used and understood by Medical Cannabis patients. A national representative survey of adults conducted by the US FDA found that **50%** of US adults reported that they often read the label on food products when buying a product for the first time, and **29%** sometimes read the label.<sup>3</sup> Among the respondents who attested that they never read labels, **59%** agreed that they do not use the information on food labels because it is too hard to understand.

Similar concerns have been found when evaluating consumer understanding of label information on prescription medications. Research has found that patients with lower literacy levels and those taking a greater number of medications were less able to understand the meaning of the labels.<sup>4</sup> Further, among patients who understood the labels, only a minority could demonstrate how to take the medication properly. These findings suggest that consumers of edible Cannabis-infused products may not fully understand information provided on  $\Delta^9$ -THC content and dosing.

The potential negative actions of those Medical Cannabis patients who possess this lack of understanding are those that we would like to mitigate. Patients in other states reported that, having eaten the suggested serving size initially and not feeling any effects, continued to consume the entire Cannabis-infused edible product. They also reported that it was practical to consume the entire edible product in one sitting, just as they would a normal baked good<sup>5</sup>, suggesting a lack of consumer understanding, even among daily cannabis users.

The Colorado Department of Revenue commissioned an independent report of which utilized data from Colorado's Cannabis market and clinical research findings to develop one such metric for calculating dose equivalency across methods of cannabis delivery.<sup>6</sup> Application of this metric to laboratory analysis of edibles and smokable Cannabis available in Colorado suggests that **1 mg** of  $\Delta^9$ -THC contained in an edible produces a behavioral effect similar to **5.71 mg** of  $\Delta^9$ -THC contained in smokable cannabis. The current regulations in Colorado and Washington define a single serving of an edible as a unit containing no more than **10 mg** of  $\Delta^9$ -THC. In order to reduce the risk of accidental overdose, it is recommended that patients who consume of Cannabis-infused edibles gradually up-titrate their dose until they find an effective dose for their personal medicinal need.

### **Potential Youth Use:**

Both cognitive and developmental psychologists generally agree that 8-24 months is the approximate age at which a child understands object permanence (he/she knows an object is there without seeing it) and 2-7 years of age is the time when thinking is centered on a single aspect of a situation, i.e. drinking a toxic substance without noticing other aspects of the situation, such as a warning label.<sup>7</sup> Furthermore, marketing research has found that one of the best ways to increase food appeal to adolescents is to present the product in packaging that allows them to view the item.<sup>8</sup> These findings helped to develop the scientific basis for our recommendation that all child-resistant packages should be opaque.

The Cannabis industry isn't alone in trying to anticipate what will catch a curious toddler's eye. People call Colorado's poison control hotline thousands of times each year when children swallow household cleaners and prescription medications — far more often than they call about Cannabis products, said Larry Wolk, the Colorado state health agency's executive director.<sup>9</sup>

Despite this evidence, states with regulated Cannabis programs have been implementing stricter regulations to help mitigate potential accidental youth ingestion. Colorado lawmakers approved the ban on edible Cannabis products shaped like animals, people and fruit in 2016. At one hearing on the issue, lawmakers who were shown packages of gummy candies that contained Cannabis and typical gummy bears couldn't tell the difference, said Mike Hartman, director of Colorado's Department of Revenue.<sup>9</sup>

At Colorado Harvest Company, a Denver dispensary, CEO Tim Cullen displays the result: a chocolate bar wrapped in a paper sleeve that's difficult for even an adult to slide off; cookies stamped with "T-H-C" in edible dye; and gem-shaped lozenges sold in a white vial capped with a childproof top.<sup>9</sup>

"The same rules that apply to alcohol or prescription medication have to apply to marijuana," Cullen said. "Realizing that you have an adult product in your house and making sure your children can't get it is the ultimate line of defense."<sup>9</sup>

### **Comparative State Policies:**

Dependent upon the state, Cannabis-infused edibles must be labeled with specific warnings about potential harmful aspects of edible Cannabis consumption, and/or labels that provide nutritional information. Warning labels or accompanying material in the states of Alaska, Colorado, and Washington must state that cannabis has intoxicating effects (1 Colo. Code Regs. § 212-2, 2016; Wash. Admin. Code § 314-55-105, 2016; Alaska Admin. Code tit. 3, § 306.345, 2016).

In Colorado and Oregon, Cannabis-infused edibles' labels must include the state-designated universal symbol for cannabis, (1 Colo. Code Regs. § 212-2; Or. Admin. R. 333-007-0070, 2016) and must state that their intoxicating effects may not be felt for up to 2 hours after consumption (1 Colo. Code Regs. § 212-2; Or. Admin. R. 333-007-0070).

Washington and Oregon regulations also require, or will require, that additional informational material be distributed to buyers of Cannabis-infused edibles with each sale or displayed on posters in the dispensary (Wash. Admin. Code § 314-55-105; Or. Admin. R. 333-008-1500, 2016).

Washington State's additional material must include warning statements pertaining to potential health risks, keeping out of reach of children, impaired judgment, delayed activation, disclosures of pesticides, and extraction methods (Wash. Admin. Code § 314-55-105).

## **Recommendations**

We introduce the following recommendations to provide mitigation of the unintended negative impacts discussed above. We have separated them into two categories: Youth Use & Patient Understanding.

### **YOUTH USE:**

#### **1. Require Certified Child-Resistant Packaging -**

Packaging for Cannabis-infused Edibles should adhere to Title 16 of the Code of Federal Regulations Part 1700 of the Poison Prevention Packaging Act of 1970 (PPPA). This packaging should be opaque, re-closable and non-attractive to children. Here are a few options of Certified Child Resistant Edibles Packaging Products:



#### **2. Implement Accurate and Proper Labeling Requirements.**

As proposed by the Working Group, labeling requirements should include information applicable to consumption, such as estimated activation time, serving size, number of servings per container, cannabinoid content per serving, and ingredients. Clear directions for use and storage should be present on the label, as well as a universal warning symbol.



**25 MG**  
STRENGTH

**30**  
MINUTE  
ACTIVATION TIME

\* The intoxicating effects of this product may be delayed by two or more hours. Learn more at [DosisEdibles.com](http://DosisEdibles.com)

**Ingredients:** Powdered sugar, corn syrup (light corn syrup, high fructose corn syrup), skim milk powder, semisweet chocolate (chocolate liquor, sugar, cocoa butter), soy lecithin, pure vanilla, vanilla, butters, cocoa (processed with potassium carbonate), vanilla extract (alcohol, sugar), salt, THC (tetrahydrocannabinol), CO<sub>2</sub> oil

The standardized serving size for this product is 10 milligrams of active THC. This container includes 10 servings.

**Warning:** There may be health risks associated with the consumption of this product. This product is unlawful outside the State of Colorado. This product is infused with marijuana. This product was produced without regulatory oversight for health, safety or efficacy. There may be additional health risks associated with the consumption of this product for women who are pregnant, breastfeeding, or planning on becoming pregnant. Do not drive a motor vehicle or operate heavy machinery while using marijuana. This product was tested for metals, mold, mildew, pH, microbial, pesticides, opiates, terpenes and harmful chemicals. KEEP OUT OF REACH OF CHILDREN. This package is child-resistant.

**Nutrition Facts**  
Serving Size: 0.125 oz (4 grams)  
Servings Per Container: 10

Amount Per Serving		Calories from Fat: 0	% Daily Value*
Calories:	15		
Total Fat:	0g		0%
Saturated Fat:	0g		0%
Trans Fat:	0g		0%
Cholesterol:	0mg		0%
Sodium:	5mg		0%
Total Carbohydrate:	3g		1%
Dietary Fiber:	0g		0%
Sugars:	2g		
Protein:	0g		
Vitamin A:	0%	Vitamin C:	0%
Calcium:	0%	Iron:	0%

\*Percent Daily Values are based on a 2,000 calorie diet.

This item is perishable. Keep refrigerated. Please recycle.

### 3. The systematic addition of types of edible cannabis products beginning with Chocolated Medicinal Pieces.

These could be aesthetically similar to Ex-Lax Medicated Laxative Pieces, a medicinal edible product that is non-appealing to children currently offered in our pharmaceutical market.



### PATIENT UNDERSTANDING:

#### 4. Mandatory Consultation with an edibles safety specialist.

All patients who purchase Cannabis-infused edibles should be required to have a mandatory consultation with a Cannabis-infused edibles specialist before they leave the dispensary premises. This consultation should encompass the directions for use and safety of storage of their purchased edible product(s). (Not the dosage that is recommended for them, as the latter should be discussed with their Doctor or APRN)

#### 5. Specify a maximum milligram/container content for edible cannabis products.

#### 6. Educational material should be provided to all patients regarding consumption of edible cannabis products.

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As further reference, here is a list of links to other states' packaging and labeling regulations:

ALASKA: <https://www.mpp.org/states/alaska/a-summary-of-measure-2-an-act-to-tax-and-regulate-the-production-sale-and-use-of-marijuana/>

ARIZONA: <http://azdhs.net/director/administrative-counsel-rules/rules/index.php#adhs-rules>

CALIFORNIA:

<https://www.cdph.ca.gov/Programs/CEH/DFDCS/MCSB/Pages/MCSB.aspx>

COLORADO: <https://www.colorado.gov/pacific/aginspection/labeling-requirements>

CONNECTICUT: <https://portal.ct.gov/DCP/Medical-Marijuana-Program/Law-and-Regulations>

DELAWARE:

[https://regulations.delaware.gov/AdminCode/title16/Department%20of%20Health%20and%20Social%20Services/Division%20of%20Public%20Health/Health%20Systems%20Protection%20\(HSP\)/4470.shtml](https://regulations.delaware.gov/AdminCode/title16/Department%20of%20Health%20and%20Social%20Services/Division%20of%20Public%20Health/Health%20Systems%20Protection%20(HSP)/4470.shtml)

DISTRICT OF COLUMBIA: <https://www.dcregs.dc.gov/>

FLORIDA: <https://www.flsenate.gov/Session/Bill/2017A/00008A>

HAWAII: <https://law.justia.com/codes/hawaii/2018/title-19/chapter-329d/section-329d-11/>

ILLINOIS:

<http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3503&ChapterID=35>

MAINE: <https://www.maine.gov/dafs/omp/medical-use>

MARYLAND:

[http://www.dsd.state.md.us/COMAR/SubtitleSearch.aspx?search=10.62.23.\\*](http://www.dsd.state.md.us/COMAR/SubtitleSearch.aspx?search=10.62.23.*)

MASSACHUSETTS:

<https://malegislature.gov/Laws/SessionLaws/Acts/2012/Chapter369>

MICHIGAN: [https://www.michigan.gov/lara/0,4601,7-154-89334\\_79571\\_79575---,00.html](https://www.michigan.gov/lara/0,4601,7-154-89334_79571_79575---,00.html)

MINNESOTA: <https://www.revisor.mn.gov/rules/4770.0850/?format=pdf>

MONTANA: <https://dphhs.mt.gov/marijuana/rulesandregulations>

NEVADA: <https://www.leg.state.nv.us/nac/nac-453a.html>

NEW HAMPSHIRE: <https://legiscan.com/NH/text/HB573/id/709869>

NEW JERSEY: <https://www.nj.gov/health/medicalmarijuana/>

NEW MEXICO: <http://164.64.110.239/nmac/parts/title07/07.034.0004.htm>

NEW YORK: <https://regs.health.ny.gov/content/section-100411-manufacturing-requirements-approved-medical-marihuana-products>

OREGON:

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1222>

RHODE ISLAND: <https://health.ri.gov/healthcare/medicalmarijuana/>

VERMONT: <https://medicalmarijuana.vermont.gov/>

WASHINGTON: <https://app.leg.wa.gov/WAC/default.aspx?cite=314-55-105>

Thank you for this opportunity.



**HB-2097-HD-2**

Submitted on: 2/15/2020 6:23:59 AM

Testimony for FIN on 2/19/2020 4:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
dain retzlaff	Individual	Support	No

Comments:

**HB-2097-HD-2**

Submitted on: 2/16/2020 2:33:23 PM

Testimony for FIN on 2/19/2020 4:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Frances	Individual	Support	No

Comments:

I Highly Encourage our Elected Officials to Support the Measure of Offering Edibles to 329 Card Holders. Benefits would include an Alternative to Vape and Smoking,  
-Effective Treatment Option for Specific Qualifying Conditions (SEVERE PAIN, CACHEXIA, MS, PTSD)  
-Alternative option to smoking for those suffering from lung disease  
-Alternative Option for local and Out-Of-State Patients residing in "smoke-free" accommodations  
-THC dosing per serving  
-Lab Testing  
-Appropriate Labeling and Instructions for use  
-Certified Child-Resistant Packaging  
-Products Non-Appealing to Minors  
-Universal Warning Symbol  
-Mandatory Consultation with an EDIBLES Specialist  
-Access to Educational Materials

February 18, 2020

Aloha e Rep. Sylvia Luke, Chair; Rep. Ty J.K. Cullen, Vice Chair;  
and members of the Committee on Finance:

I am writing to express my **support** of HB 2097 as it relates to  
medical cannabis.

My interest in this issue is more than intellectual. Someone very close  
to me is a Metastatic Breast Cancer (MBC, or Stage 4) patient. Cancer  
has invaded her bones, and threatens her organs, and she lives with  
chronic pain. Yet she remains a committed and loving mother of  
three, a hardworking retail employee, and a first-class wife.

She does benefit from excellent industrial healthcare that provides for  
powerful daily painkillers – painkillers that bring relief, but which  
also make headlines every day for their dangerous and sometimes  
addictive properties. And for all the relief they provide, I can speak  
firsthand to the chemical and emotional turmoil that this dependence  
creates.

The one thing that has helped reduce this dependence, and brought  
additional relief, is the state's nascent medical marijuana program. We  
are glad to be able to patronize professional and well-regulated  
facilities for additional help in this lifelong battle. But it is time to take  
the next step, and that is to allow an additional and more convenient  
delivery method.

It's frustrating that delivery is currently limited to smoking, vaping,  
and tinctures, options that range from unhealthy to unappealing and  
certainly don't help with cancer-related nausea. Edibles are safe,  
unoffensive, and with the rules stipulated in HB 2097, well regulated.

HB 2097 also provides an opportunity for the medical cannabis  
industry to be more active in the community in education and  
outreach, efforts that I am confident will yield positive results for  
everyone.

Thank you for your consideration.

**HB-2097-HD-2**

Submitted on: 2/16/2020 8:28:17 AM

Testimony for FIN on 2/19/2020 4:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
John Gelert	Individual	Oppose	No

Comments:



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. Box 3378  
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**LATE**

**Testimony COMMENTING on H.B. 2097 H.D. 2  
RELATING TO MEDICAL CANNABIS**

REPRESENTATIVE SYLVIA LUKE, CHAIR  
HOUSE COMMITTEE ON FINANCE

Hearing Date: Wednesday, February 19, 2020 Room Number: 308

1 **Fiscal Implications:** Cannot be determined at this time.

2 **Department Testimony:** The Department of Health (DOH) appreciates the opportunity to offer  
3 COMMENTS on the following proposals:

4 (1) Allowing for the remediation of cannabis products;

5 (2) Authorizing dispensaries to sell edible cannabis products under certain conditions; and

6 (3) Allowing dispensaries to circulate, sponsor, and promote educational and scientific  
7 information and events related to cannabis.

8 DOH provides an H.D. 3 PROPOSED with all of DOH's suggested alternate language below.

9 **(1) Remediation – DOH offers COMMENTS and proposes alternate language.**

10 In 2015, the Hawaii Legislature established a regulated statewide dispensary system to  
11 ensure safe and legal access to medical cannabis for qualifying patients. In doing so, the  
12 Legislature authorized DOH to “establish and enforce standards for laboratory-based testing of  
13 cannabis and manufactured cannabis products for content, contamination, and consistency.” In  
14 2017, the Legislature amended the requirements for laboratory standards and testing to ensure  
15 product and patient safety at reasonable tolerance levels with reasonable cost implications,

1 providing that DOH “[r]eview and take guidance from the testing programs and standards  
2 utilized in other jurisdictions,” and “[c]onsider the impact of the standards on the retail cost of  
3 the product to qualifying patient.”

4 Cannabis plants, like other living things, are likely to be naturally contaminated with  
5 microorganisms, some of which pose a risk to patient safety. Therefore, DOH requires every  
6 batch of cannabis flower and manufactured product to meet laboratory standards for bacteria,  
7 yeast, and mold, as well as other contaminants before being allowed to be sold. All final products  
8 that fail even one standard are destroyed and cannot be sold.

9 While regulatory decisions should be based on scientific evidence, the fact remains that  
10 although scientific knowledge about cannabis is rapidly evolving, it remains limited. In such  
11 cases, decision-making should be based on a reasonable balance of risk analysis, a scientifically  
12 based process of evaluating hazards, the likelihood of exposure to those hazards, and an estimate  
13 of the resulting public health impact. Given the potential impact to patients of destroying whole  
14 batches of cannabis flower (e.g., cost and the unavailability of products) when methods already  
15 in use by other industries, such as pasteurization and concentrated ozone<sup>1</sup>, are available to  
16 address microbial contamination, it is reasonable to allow the remediation of cannabis under  
17 certain circumstances. It does not make sense to regulate based on potential risks that are not  
18 evidence-based. If this were the case, there would be no medical use of cannabis.

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<sup>1</sup> Prabha, Vithu & Barma, Deb & Singh, Ranjit & Madan, Aditya. (2015). Ozone Technology in Food Processing: A Review. Trends in Biosciences 0974-8. 6. 4031-4047, commenting that ozone is effective against various kinds of microorganisms; decomposes rapidly to produce oxygen, leaving no residues, and is used in water treatment, sanitising, washing and disinfection of equipment, odour removal, and fruit, vegetable, meat and seafood processing; and that ozone treatment retains the sensory, nutritional and physicochemical characteristics of food.

1 To keep abreast of standards used in other jurisdictions, as charged by the Legislature,  
2 Hawaii's dispensary program actively participates in a national regulators' workgroup comprised  
3 of the administrators, laboratorians, environmental health scientists, enforcement, medical, and  
4 legal advisors of the 33 states and District of Columbia with legalized medical use. This  
5 workgroup meets twice a year in-person and has monthly conference calls. The cannabis industry  
6 is not a part of this workgroup. 75% of participating states explicitly allow for remediation in  
7 limited circumstances, e.g., only for failed flower material and only for failed microbial  
8 standards, but not manufactured products, and not for failed pesticides and heavy metals. The  
9 practice of other jurisdictions also helps to inform the viewpoint that it is reasonable to allow  
10 remediation of cannabis under certain circumstances.

11 Should the committee be inclined to allow this amendment to move forward, DOH  
12 requests that any remediation of medical cannabis or manufactured medical cannabis products be  
13 subject to DOH review and approval, provided that any final product must pass all required  
14 quality assurance standards to be dispensed. This will allow DOH to properly assess each request  
15 and make a determination based appropriately on current scientific knowledge. This will also  
16 allow DOH to monitor the scope and volume of testing failures to promptly identify issues that  
17 could jeopardize patient safety. And, it will also allow DOH to more readily and appropriately  
18 respond to industry and technology innovations.

19 **DOH offers the following alternate language (underlined) for the proposed**  
20 **amendment under SECTION 3, amending subsection (a) of section 329D-8, HRS, to allow**  
21 **for remediation (page 3, lines 4-7):**

1           “(4) Consider processes that may allow cannabis or manufactured cannabis products that  
2           fail testing standards to be remediated.”

3   **(2) Edibles – DOH offers COMMENTS and proposes alternate language.**

4           DOH’s overwhelming concern related to edible cannabis products (“edibles”) is ensuring  
5   patient and product safety. As demonstrated by the recent nationwide outbreak of vaping-related  
6   lung illnesses, the addition of a single ingredient to a product can result in significant morbidity  
7   and mortality among previously healthy individuals, and medical cannabis patients are certified  
8   as having a debilitating medical condition. “Edibles” can comprise a myriad of products from  
9   confections to baked goods to savory items to beverages. To ensure product safety, any approval  
10   for edible products should be made on a case-by-case basis and based on a thorough assessment  
11   which considers good manufacturing practices, dosing, serving size and homogeneity, labelling  
12   and packaging, food safety training of employees, and of course, laboratory testing, among other  
13   things.<sup>2</sup> Towards this end, over half of state cannabis programs require the pre-approval of all  
14   products, including requirements or limits related to ingredients or flavorings. One-third of  
15   medical-use only states explicitly prohibit edibles. Hawaii is not alone.

16           When dispensary facilities first began opening in 2017 and the types of manufactured  
17   products were limited, the program focused heavily on security concerns related to the 2013 Cole  
18   Memorandum.<sup>3</sup> However, in 2019, to prepare for potential expansion of the types of authorized  
19   products, the dispensary program augmented its attention to quality control, health, safety, and

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<sup>2</sup> Nat’l Environmental Hlth Assn. (March 2018). Food Safety Guidance for Cannabis-Infused Products. Retrieved from <https://www.neha.org/sites/default/files/eh-topics/food-safety/Food-Safety-Guidance-Cannabis-Infused-Products.pdf>.

<sup>3</sup> Memorandum for All United States Attorneys: Guidance Regarding Federal Marijuana Enforcement, Office of the Deputy Attorney General (August 29, 2013).



1 sanitation standards by incorporating the elements of section 11-850-75, HAR, into routine  
2 inspections. In 2019, the program conducted 151 facility inspections, over 100 of which were  
3 unannounced. The only inspections that are scheduled are record reviews and inspections  
4 pertaining to approvals for new facilities. Also in 2019, DOH administratively re-assigned  
5 environmental health support functions for the dispensary program from the DOH Food Safety  
6 Program (formerly the Sanitation Branch) to the DOH Food and Drug Program to align with its  
7 role of ensuring that food, drugs, cosmetics, medical devices and related consumer products are  
8 safe.

9 Another major DOH concern related to edibles remains the risk of accidental poisoning  
10 of children. Studies continue to show that changes in laws which made edible products more  
11 accessible to children have resulted in increased child exposures.<sup>4, 5, 6, 7, 8</sup> Hawaii Poison Control  
12 Center data from 2010-2019 shows a growing trend of edibles-related exposures in Hawaii.  
13 While non-existent prior to 2013, edibles comprised 68% of cannabis exposures reported to the  
14 Hawaii Poison Control Center in 2019. Two-thirds of these edibles exposures were in youth aged  
15 19 years and younger and over half were children under the age of 6 years. Unintentional

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<sup>4</sup> Wang GS, Roosevelt G, Heard K. Pediatric Marijuana Exposures in a Medical Marijuana State. *JAMA Pediatr.* 2013;167(7):630–633. doi:10.1001/jamapediatrics.2013.140

<sup>5</sup> Wang, George S. et al. Association of Unintentional Pediatric Exposures With Decriminalization of Marijuana in the United States. *Annals of Emergency Medicine*, Volume 63, Issue 6, 684 - 689

<sup>6</sup> Wang GS, Le Lait M, Deakyne SJ, Bronstein AC, Bajaj L, Roosevelt G. Unintentional Pediatric Exposures to Marijuana in Colorado, 2009-2015. *JAMA Pediatr.* 2016;170(9):e160971. doi:10.1001/jamapediatrics.2016.0971

<sup>7</sup> Dazhe Cao, Sahaphume Srisuma, Alvin C. Bronstein & Christopher O. Hoyte (2016) Characterization of edible marijuana product exposures reported to United States poison centers, *Clinical Toxicology*, 54:9, 840-846, DOI: 10.1080/15563650.2016.1209761

<sup>8</sup> Whitehill JM, Harrington C, Lang CJ, Chary M, Bhutta WA, Burns MM. Incidence of Pediatric Cannabis Exposure Among Children and Teenagers Aged 0 to 19 Years Before and After Medical Marijuana Legalization in Massachusetts. *JAMA Netw Open.* 2019;2(8):e199456. doi:10.1001/jamanetworkopen.2019.9456.

1 exposure in children and adult intoxications must be considered when proposing to authorize  
2 edibles.

3 Should the committee be inclined to allow this amendment to move forward, DOH  
4 requests authority to pre-approve all manufactured cannabis products, including edibles, as well  
5 as the authority to establish and modify, as appropriate, requirements or limits to ingredients,  
6 flavorings, or additives, dosing, product packaging and labelling, employee training, and  
7 requirements for patient education on safe usage and safe storage.

8 **DOH offers the following alternate language (underlined) for the proposed**  
9 **amendment under SECTION 4, amending section 329D-10, HRS, to authorize edibles**  
10 **(page 6, lines 1-21; page 7, lines 1-4):**

11 “(c) As used in this section, “edible cannabis products” means manufactured cannabis  
12 products intended for gastrointestinal administration of any cannabinoid extracted from  
13 the cannabis plant and regulated as manufactured cannabis products and not as “food” as  
14 defined and regulated in chapter 328, HRS.

15 (d) Provided further, that any medical cannabis products manufactured pursuant to this  
16 chapter shall be regulated and approved by the department and meet all requirements of  
17 rules adopted pursuant to this chapter.”

18 **(3) Education – DOH offers COMMENTS and proposes alternate language.**

19 Preventing youth use is a key objective of Hawaii’s medical cannabis program and  
20 exposure to advertising has been shown to significantly impact youth perception of cannabis. A  
21 2018 RAND Corporation study found that the proportion of adolescents in Southern California  
22 who reported viewing medical marijuana advertising increased sharply from 25% in 2010 to

1 70% by 2017 and that higher average exposure to advertising was associated with higher average  
2 use.<sup>9</sup> Accordingly, at least two-thirds of state cannabis programs have some form of restriction  
3 on advertising including prohibitions on event sponsorship, radio, television, and print media,  
4 and branded apparel; over half have restrictions specific to youth appeal. Despite these concerns,  
5 DOH supports the circulation of science- and evidence-based educational information. DOH  
6 opposes the circulation of materials that would otherwise be construed as advertising or self-  
7 serving by the medical cannabis industry.

8         Should the committee be inclined to allow this amendment to move forward, DOH  
9 requests adequate controls to prevent youth exposure, ensure safe access to medical cannabis  
10 retail locations, and prevent broad advertising,

11         **DOH offers the following alternate language (underlined) for the proposed**  
12 **amendment under SECTION 5, amending section 329D-11, HRS, to allow dissemination of**  
13 **educational materials and event sponsorship (page 9, lines 10-14):**

14         “(d) The department is authorized to allow dispensaries to provide, disseminate, and  
15 publish educational and scientific materials relating to medical cannabis and its approved  
16 products, and sponsor events about medical cannabis.”

17         Thank you for the opportunity to testify on this measure.

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<sup>9</sup> D’Amico Elizabeth J. et al. Planting the seed for marijuana use: Changes in exposure to medical marijuana advertising and subsequent adolescent marijuana use, cognitions, and consequences over seven years. Drug and Alcohol Dependence, Volume 188, 2018, 385-391. doi.org/10.1016/j.drugalcdep.2018.03.031.

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# A BILL FOR AN ACT

RELATING TO MEDICAL CANNABIS.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that amendments to  
2 chapter 329D, Hawaii Revised Statutes, are warranted to clarify  
3 legislative intent, ensure smooth administration of the medical  
4 cannabis dispensary system law, allow for adequate patient  
5 access based on experiences in other states that have a  
6 reasonable medical cannabis program, and resolve other issues  
7 that have arisen under the existing law.

8           The purpose of this Act is to:

9           (1) Allow for a process to remediate any batch of cannabis  
10           or manufactured cannabis product that fails laboratory  
11           testing standards so long as any final product passes all  
12           the laboratory standards;

13           (2) Authorize licensed dispensaries to manufacture and  
14           distribute edible cannabis products under certain  
15           conditions; and

16           (3) Authorize licensed dispensaries to circulate, sponsor,  
17           and promote educational and scientific information and

1 events related to cannabis.

2 SECTION 2. Section 329D-1, Hawaii Revised Statutes, is  
3 amended by amending the definition of "manufactured cannabis  
4 products" to read as follows:

5 "Manufactured cannabis product" means any capsule,  
6 lozenge, oil or oil extract, tincture, ointment or skin lotion,  
7 pill, transdermal patch, or pre-filled and sealed container used  
8 to aerosolize and deliver cannabis orally, such as an inhaler or  
9 nebulizer, that has been manufactured using cannabis, or any  
10 other products as specified by the department pursuant to  
11 section [~~329D-10(a)(10).~~] 329D-10(a)(11)."

12 SECTION 3. Section 329D-8, Hawaii Revised Statutes, is  
13 amended by amending subsection (a) to read as follows:

14 "(a) The department shall establish and enforce standards  
15 for laboratory-based testing of cannabis and manufactured  
16 cannabis products for content, contamination, and consistency;  
17 provided that in establishing these standards, the department  
18 shall:

19 (1) Review and take guidance from the testing programs and  
20 standards utilized in other jurisdictions;

21 (2) Consider the impact of the standards on the retail  
22 cost of the product to the qualifying patient;

23 (3) Review and take guidance from the testing programs and

1 standards for pesticides under the regulations of the  
2 United States Environmental Protection Agency;

3 (4) Consider processes that may allow cannabis or  
4 manufactured cannabis products that fail testing  
5 standards to be remediated;

6 [~~4~~] (5) For the testing for microbiological impurities,  
7 consider the benefits of organically grown cannabis that  
8 features the use of bacteria in lieu of pesticides; and

9 [~~5~~] (6) Include permission for qualifying patients and  
10 primary caregivers to obtain testing services directly from  
11 certified laboratories on the island where the qualifying  
12 patient and primary caregiver reside."

13 SECTION 4. Section 329D-10, Hawaii Revised Statutes, is  
14 amended to read as follows:

15 **"§329D-10 Types of manufactured cannabis products. (a)**

16 The types of medical cannabis products that may be manufactured  
17 and distributed pursuant to this chapter shall be limited to:

- 18 (1) Capsules;
- 19 (2) Lozenges;
- 20 (3) Pills;
- 21 (4) Oils and oil extracts;
- 22 (5) Tinctures;
- 23 (6) Ointments and skin lotions;

- 1           (7) Transdermal patches;
- 2           (8) Pre-filled and sealed containers used to aerosolize  
3           and deliver cannabis orally, such as with an inhaler  
4           or nebulizer; provided that containers need not be  
5           manufactured by the licensed dispensary but shall be  
6           filled with cannabis, cannabis oils, or cannabis  
7           extracts manufactured by the licensed dispensary;  
8           shall not contain nicotine, tobacco-related products,  
9           or any other non-cannabis derived products; and shall  
10          be designed to be used with devices used to provide  
11          safe pulmonary administration of manufactured cannabis  
12          products;
- 13          (9) Devices that provide safe pulmonary administration;  
14          provided that:
- 15            (A) The heating element of the device, if any, is  
16            made of inert materials such as glass, ceramic,  
17            or stainless steel, and not of plastic or rubber;
- 18            (B) The device is distributed solely for use with  
19            single-use, pre-filled, tamper-resistant, sealed  
20            containers that do not contain nicotine or other  
21            tobacco products;
- 22            (C) The device is used to aerosolize and deliver  
23            cannabis by inhalation, such as an inhaler,

1 medical-grade nebulizer, or other similar medical  
2 grade volitization device;

3 (D) There is a temperature control on the device that  
4 is regulated to prevent the combustion of  
5 cannabis oil; and

6 (E) The device need not be manufactured by the  
7 licensed dispensary; ~~and~~

8 (10) Edible cannabis products; and

9 [~~(10)~~] (11) Other products as specified by the department.

10 (b) As used in this section, "lozenge" means a small  
11 tablet manufactured in a manner to allow for the  
12 dissolving of its medicinal or therapeutic component  
13 slowly in the mouth.

14 (c) As used in this section, "edible cannabis products"  
15 means manufactured cannabis products intended for  
16 gastrointestinal administration of any cannabinoid  
17 extracted from the cannabis plant and regulated as  
18 manufactured cannabis products and not as "food" as  
19 defined and regulated in chapter 328, HRS.

20 (d) Provided further, that any medical cannabis products  
21 manufactured pursuant to this chapter shall be  
22 regulated and approved by the department and meet all



1           requirements of rules adopted pursuant to this  
2           chapter.

3           SECTION 5. Section 329D-11, Hawaii Revised Statutes, is  
4 amended to read as follows:

5           **"§329D-11 Advertising and packaging.**       (a) The department  
6 shall establish standards regarding the advertising and  
7 packaging of cannabis and manufactured cannabis products;  
8 provided that the standards, at a minimum, shall require the use  
9 of packaging that:

- 10           (1) Is child-resistant and opaque to that the product  
11           cannot be seen from outside the packaging;
- 12           (2) Uses only black lettering on a white background with  
13           no pictures or graphics;
- 14           (3) Is clearly labeled with the phrase "For medical use  
15           only";
- 16           (4) Is clearly labeled with the phrase "Not for resale or  
17           transfer to another person";
- 18           (5) Includes instructions for use and "use by date";
- 19           (6) Contains information about the contents and potency of  
20           the product;
- 21           (7) Includes the name of the production center where  
22           cannabis in the product was produced, including the  
23           batch number and date of packaging;

1 (8) Includes a barcode generated by tracking software; and

2 (9) In the case of a manufactured cannabis product,  
3 includes a:

4 (A) Listing of the equivalent physical weight of the  
5 cannabis used to manufacture the amount of the  
6 product that is within the packaging, pursuant to  
7 section 329D-9(c);

8 (B) Clearly labeled warning stating that the product:

9 (i) Is a medication that contains cannabis, and  
10 is not a food; and

11 (ii) Should be kept away from children; and

12 (C) Date of manufacture.

13 (b) Any capsule, lozenge, or pill containing cannabis or  
14 its principal psychoactive constituent tetrahydrocannabinol  
15 shall be packaged so that one dose, serving, or single wrapped  
16 item contains no more than ten milligrams of  
17 tetrahydrocannabinol; provided that no manufactured cannabis  
18 product that is sold in a pack of multiple doses, servings, or  
19 single wrapped items, nor any containers of oils, shall contain  
20 more than a total of one thousand milligrams of  
21 tetrahydrocannabinol per pack or container; provided further  
22 that no dispensary shall exceed the dispensing limits imposed by  
23 section 329D-7.

1           (c) All manufactured cannabis products shall be  
2 individually wrapped at the original point of manufacture.

3           (d) The department is authorized to allow dispensaries to  
4 provide, disseminate, and publish educational and scientific  
5 materials relating to medical cannabis and its approved  
6 products, and sponsor events about medical cannabis."

7           SECTION 6. Statutory material to be repealed is bracketed  
8 and stricken. New statutory material is underscored.

9           SECTION 7. This Act shall take effect upon its approval.